Coconut hispid
*Brontispa longissima* (Gestro)

Florida red scale
*Chrysomphalus aonidum* (Linnaeus)

Migratory locust
*Locusta migratoria* (Linn.)

Sorghum midge
*Contarinia sorghicola* (Coq)

Mole cricket
*Gryllotalpa africana* (Beauv)

Cacao false looper
*Achaea janata* (Linnaeus)

Sorghum midge
*Contarinia sorghicola* (Coq)

Coconut spathe bug
*Axiagastus campbelli* (Dist)

**Insect Pests**
**of**
**Food Plants**
**of**
**Papua New Guinea**

**A compendium**

**Bruce R French**
Acknowledgements

The kind assistance of Bob Macfarlane in checking an earlier draft of this work is greatly appreciated. Many farmers have allowed me to wander around their subsistence food gardens and this privilege is gratefully acknowledged. The warm assistance of many specialists and those caring for insect collections in Papua New Guinea as been of great assistance to a non-specialist like myself.

It is strongly recommended that use be made of the information system for plant health available at www.pestnet.org for current recommendations and contact with research workers.

Dedication

This book is dedicated to the Creator of the world, including Creator of the fascinating world of insects of which about 900 species amongst many thousands like to share the food plants that people also eat in Papua New Guinea.

Publication

This book is published as a Computer based pdf file made available 2006 but compiled over several previous years.

You are free to copy the CD or print out all or part of the information as you please.

The author

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Preamble

The insects mentioned in this book have all been reported as damaging to food crops in Papua New Guinea. Some are serious pests that must be controlled, other insects do little damage and do not need any action by the farmer to control them. In fact as much care is needed to recognise insects that are not going be pests as it is to recognise those that might. If farmers spend time, energy and money trying to kill the wrong insects this is not only wasteful but the controls (especially chemical controls) could actually cause some of these harmless insects to become pests. This happens especially where parasites and predators (beneficial insects) are working naturally to keep the insect under control (biological control). Killing parasites or predators allows insects to breed without control and therefore to become pests. Because it is important to be able to tell the difference between the different insects that might be on a plant this book puts a great deal of effort into describing each insect and all its stages.

All insects have a scientific name and some insects have a common name as well. In the lists at the end of this book both names are used whenever they are available. Do not to be scared of a list like this, with a little bit of thought you can easily work out the name of the insect that is causing the damage. The first thing to do is to look under the particular crop that you are interested in. Then try to decide which of the insects is the one you are interested in.

In Papua New Guinea there are only 7 groups (Orders) of insects that commonly damage food crops. They are:

1. **Heteroptera** - these feed by sucking plant sap with a needle like mouth; e.g. *bugs* have leathery wings that cover over half their body
2. **Homoptera** - these also feed by sucking plant sap with a needle like mouth; e.g. *leafhoppers* are small and jump very quickly when disturbed; *aphids* are small very soft-bodied and move slowly; *scale insects* appear to have no legs or wings, some look like fish scales others like small cotton wool balls.
3. **Lepidoptera** (*moths and butterflies*)
4. **Coleoptera** (*beetles*) - these have a hard cover over all their body.
5. **Orthoptera** (*grasshoppers*)
6. **Diptera** (*flies*) - they have only 2 wings (one pair).
7. **Thrips** - tiny narrow insects with hairy strap-like wings.

Mites also damage crops. These are tiny creatures often found under leaves. They can easily be confused for insects but are quite different.

The first thing to do is to decide what group (order) your pest belongs to. Is it a bug, butterfly, beetle, grasshopper, or fly?

One problem that you may have found is that the creature you are looking at may be the larval (young) stage of the insect’s life cycle. There are several things you can do to get around this problem.

1. Maybe you can ask the gardener what the creature develops into. Some Papua New Guinea gardeners have a great deal of knowledge about the insects on their crops.
2. You could keep the larva and let it develop through its life-cycle until it becomes an adult. (But don’t forget it will need food and air.)
3. Or you can send it to an entomologist. Preferably send it alive and put a warning on the container saying “live insect inside”.

After a while you will learn to recognise some of the common larvae or grubs yourself.
You can sometimes make an intelligent guess at the identification of an insect by looking at the common names and comparing them to the type of damage seen on the crop. e.g. Aibika shoot boring grub.

In another list at the back of the book I have listed the insect names under their Orders and Families with a little bit of information about each insect. That may help. Of course, the insect you are looking at may not be on the list because it may not have been reported before. There are several crops such as pitpits, greens, pandanus etc. that still haven’t had the insects which damage them properly listed or described yet.

Once you have some possible names for the insect you are examining, you can look up further information in this or other books and journals to get a closer identification.

**What are Insects**

There are millions of different insects in the world. In Papua New Guinea they estimate that there are at least 10,000 different kinds of moths and butterflies, 25,000 different kinds of beetles and very large numbers of all other kinds of insects. Many insects are useful. Only a very small number of insect types do serious damage to plants.

People in villages often know a lot about larger insects and insects which eat plants. But, they don’t usually have names or much information about small insects especially the ones which suck sap. However, for many insects, the more observant village people can tell you the whole life cycle and where the insect lives and breeds. They also know which insects are edible.

Most adult insects have six legs (3 pairs). Many adult insects also have wings of various shapes and sizes, usually two pairs (4) (except for flies which only have one pair (2)). When an insect has wings it is adult and is fully grown. Young insects can either look similar to the adult but with short wings that don’t work or look quite different to the adult such as caterpillars, larvae and grubs.
HEMIPTERA (Bugs) They have hard cover over half of their body

ORTHOPTERA (Grasshoppers) They have large hind legs for jumping

COLEOPTERA (Beetles) They have a hard cover over whole of body

LEPIDOPTERA (Moths & Butterflies) They have scales on their wings

DIPTERA (Flies) Only have 2 wings

HOMOPTERA Normally very small and often soft bodied

Insect life cycles

Bugs have piercing sucking mouthparts and suck sap causing plants to wilt

Adults feed on nectar or flowers but don’t cause damage and caterpillars chew and damage plants

Often they give birth to live young.

Both adults and grubs of beetles can damage plants
Insect life cycles

Insects grow by changing into different forms and by completing a life cycle. For some insects it is only the adult that damages plants but for others both adult and young do damage. For example, for moths and butterflies only the caterpillars chew or bore in plants; and for flies only the young (larvae/maggots) attack plants by burrowing into soft plant parts. While both the adult and larvae of beetles can attack plants; both adult and young of bugs suck sap; and adult and the young stages of grasshoppers and crickets chew leaves.

Thrips, leaf cutter bees, sawflies, termites, earwigs and cockroaches occasionally also damage plants or plant parts.

Insects can damage plants in several ways.

1. They can chew leaves.
2. They can bore in stems, leaves and fruit.
3. They can eat underground parts of plants.
4. They can suck sap, causing plants to wilt or become twisted.
5. They can spread diseases.

Control of insect pests

It is not necessary to try and kill every insect that might cause a little bit of damage to a food plant. It is more important to understand how to stop the insects that will seriously damage the food we want to harvest.

Insects vary in how much and how often they damage plants. Lots of things such as weather, other insects, birds, lack of food and so on affect how many insects occur and how much damage they do.

- Some insects are always a bad problem.
- Some insects are only sometimes a bad problem.
- Some insects are often a minor problem, but never a bad problem.
- Some insects eat many types of plants while others eat only one or two specific kinds of plants.
- Some insects can complete their life cycles very quickly (2 or 3 weeks), while others take over a year to complete one life cycle.
- Some insects lay lots of eggs and produce very large numbers of young. Other insects only lay a few eggs and produce a few young.
- Some insects like hot places or dry places, while other insect pests are suited to cold or wet places.

Control methods

Many methods are used to kill or control insect pests, the most common are:

- **Cultural methods**: where the farmer does something to the crop to reduce the effects of the pests. For example, hilling up potatoes to hide the tubers from weevils, or physically picking the caterpillars from leaves, or cutting off the tassels from most (two thirds) corn plants to reduce pollen food supplies for young corn borers.
- **Resistance methods**: where the farmers uses crop varieties that he knows are not heavily damaged by the pest because they don’t like its taste, sometimes the farmer can select these from amongst his own crops but other times he buys the special varieties from the seed store.
• **Chemical methods**: where the farmer uses poisonous chemicals to control the pests. Many of these chemicals are dangerous to humans as well and should be used carefully.

• **Biological control**: where the farmer uses other insects to control the pests.

**Integrated Pest Management**

This method of insect control is becoming most popular as it tries to use as many types of control method as possible to kill the pest. By using a wide range of methods the farmer stands the best chance of all of controlling the pest with minimum cost and by using as few poisonous chemicals as possible. For example, a farmer will first prepare a field with as few weeds and old crop plants as possible; the soil will be prepared so that it has few stones and drains freely; the correct crop variety will be chosen that experience has shown that the pest does not damage much; and whenever possible the farmer will do things to help parasites or predators multiply and attack the pest, e.g. leave some flowering plants such as Coleus around the garden to provide nectar for the adult parasites. Chemicals will only be used when these methods have failed. This book recommends that non chemical methods are tried first before chemical methods are used. It tries to give as many examples of non chemical control methods as possible.

**Chemicals for killing insects**

There are a very large number of chemicals that can be bought and used to kill insects. All of them are poisonous; some are very poisonous - even the smell of them or a little spilt on the skin can make people sick or even kill them.

People in villages would very much like to have chemicals to kill insects. But there are some very big risks involved. Chemicals have a lot of important instructions on the label and people have to be able to read these details before they can safely use the chemical. As well, special containers and measuring equipment have to be used and it is very important that this same equipment is never used for food or to eat with. Chemicals need safe, strong, locking, cupboards in a building where people or animals do not live and into which other people or children or animals cannot get. Often people using sprays have to wear safety clothes and face masks.

As well, in gardens, many people, but especially children walk through and pick and eat the edible leaves and fruit without cooking or washing the food first. People also eat quite a few of the insects that are pests in food crops. This could be dangerous if chemicals have been sprayed on these. Until people know a lot more about how to use chemicals they should not be used in village gardens unless they are used for a special insect outbreak where insects occur in large numbers and then a taboo should be put on the garden so that everyone knows not to harvest or go in their until the chemical ‘withholding period’ written on the packet has expired.
Moths and butterflies
Name: African armyworm  
(Also called lawn armyworm)

Scientific name: *Spodoptera exempta* (Walker)
Synonyms: *Agrotis exempta* (Walker), *Laphygma exempta* (Walker), *Prodenia exempta* (Walker)
Family: Noctuidae
Order: LEPIDOPTERA

The insect

The caterpillars of this moth occasionally occur in large numbers near highland towns. The moths are attracted by lights. The caterpillars move in bands (swarms) and eat grasses. They mostly move greater distances at night. The moth has pale fore-wings and white hind-wings with darker veins. The wing-span is 20-25 mm. The larvae start pale green with grey stripes and become dark green with yellow stripes. They are up to 40 mm long. The larvae do not curl up when touched like other caterpillars on grasses such as *Mythimna*.

Life cycle

- **Adults**
  - Pupae: are found in soil. 17 mm long smooth skin gets darker. (10-15 days)
  - Eggs: small 0.55 mm and slightly flattened. Laid on leaves in masses 1-3 layers thick. (3-7 days)

- **Larvae**: Start pale and become darker. (10-20 days)

A life cycle can take 23 to 82 days depending on temperature.

Damage

Larvae eat rice, pitpits, sugarcane, corn, Job’s tears, sorghum and occasionally peas, sunflower and kohl rabi. They mostly eat young short grasses. They eat the leaves leaving the veins.

For unknown often reasons large numbers of these caterpillars will suddenly appear in one place and do serious damage to grasses.

Control

1. Most plagues of these caterpillars die out after one generation.
2. If it necessary spray pastures etc., with carbaryl.

References

Hill p 303;
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 336;
Kranz, p 494; PNG Ag J 29(1-4), 1978 p 11
Name: Aibika leaf miner

Scientific name: *Acrocercops sp.*
Family: Gracillariidae
Order: LEPIDOPTERA

The insect

Life cycle

- **Adult**: 4mm long. Front wings dark yellow. Head covered scales.
- **Pupae**: brown in white oval shaped cocoon in fold of grass near aibika.
- **Eggs**:
- **Larvae**: yellow then change to red. 5 mm long. Mine inside the leaf tissue leaving an obvious track on the surface.

Damage

An important pest of aibika. Also damages taro, okra, soybean and cacao (or similar species of insects) *Acrocercops homalacta* mines sweet potato leaves in the highlands.

Control

1. Leaves with obvious mines can be cut off.

References

Possibly other species
CSIRO Insects of Australia p 807
Swain, Ag Zoology in Fiji p 126
Name: **Aibika shoot boring grub**  
(Also called cotton spotted bollworm; and spiny bollworm)

**Scientific name**  *Earias vitella* (F.)  
**[Synonyms]**  
*Earias fabia* Stoll  
and  
*Earias huegeli* Rogenhofer  
**Family:**  Noctuidae  
**Order:**  LEPIDOPTERA

**The insect**  
The adult is a moth 12 mm long, its wings are very pale brown in colour with a green wedge shape. Eggs are small spherical and green with ridges. Larvae are brownish white with a dark head. Pupae are dark brown, 13 mm long, in a light brown cocoon.

**Life cycle**

**Adults**-lay eggs at night  
**Pupae** found in soil  
2-3 cm deep. (8-14 days).  
**Eggs**- laid singly in hairy parts of plant and lower surface of leaves.  
60-700 eggs per female. (3-7 days)  
**Larvae** Dark purple  
with white & orange marks.  
(10-16 days)

A life cycle takes 22-35 days. There may be 8-12 generations each year.

**Damage**  
Larvae attack aibika, hibiscus, okra, cotton and other related plants. The larvae feed in and damage the young growing shoots. Temperature, rainfall and humidity affect the numbers of insects. It can cause widespread and serious damage to aibika by boring into the stems.

**Control**  
1. Remove stalks when aibika plants are finished.  
2. Choose varieties that are less damaged.  
3. Insecticides such as carbaryl can give some control.

**References**  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 350  
Kranz, 1977, Diseases, Pests and Weeds of Tropical crops p 478  
Swain, Ag Zoology in Fiji p 127
Name: **Banana scab moth**

**Scientific name:** *Nacoleia octasema* (Meyrick)

**Synonyms:**
- *Lamprosema octasema* (Meyrick)
- *Notarcha octasema* (Meyrick)
- *Omiodes octasema* (Meyrick) [and *Lamprosema charesalis* (Walker) [Syn. *Nacoleia charesalis* Walker]]

**Family:** Pyralidae

**Order:** LEPIDOPTERA

**The insect:** The adult moth is rarely seen. It is creamy yellow with a black spot on the front of each fore wing. The caterpillars are pinkish grey to brown and up to 25 mm long. They have rows of dark spots.

**Life cycle:**

- **Adults**
- **Pupae** (10-12 days)
- **Eggs** - 80-120 eggs laid near the flower or the base of the uppermost leaves
- **Larvae** - feed on flowers and cause cracked or scabbed fruit (12-21 days)

**Damage:**
This moth only damages bananas on some of the islands, for example, on New Britain it ruins many bananas. The fruit are scarred and cracked due to the larvae feeding on the flowers and young fruit. It also occurs on pandanus, Heliconia and Nypa palm. The insect occurs on the mainland of Papua New Guinea but does not do serious damage to bananas there.

**Control:**
1. Remove the dead leaves hanging from bananas. (Moths hide under these during the day.)
2. Choose banana varieties that have widely separated fingers that get less damage.
3. Remove flowers from the end of young fruit to reduce the damage.
4. Remove the bract from over the fruit bunch to also reduce the damage.

**References:**
- Hill, D.S., 1975, Agricultural Insect Pests of the Tropics & their control. CUP p 279
- PANS manual No.1 Pest Control in Bananas London. p 103
- SPC Technical Paper No 145. The Banana Scab Moth
- Waterhouse & Norris, 1987, Biological Control - Pacific Prospects p 219
Name: **Banana skipper**

Scientific name: *Erionota thrax* (L.)

[Synonyms:] *Hidara thrax* (L.) and *Pelopides thrax* L]

Family: Hesperiidae

Order: LEPIDOPTERA

**The insect**

A case building caterpillar that cuts the edges of the banana leaf then uses the pieces to spin a case that it lives in hanging from the leaf.

**Life cycle**

- **Adults** fly in the evening and feed on nectar from banana flowers.
- **Pupae** suspended in a case from the leaf.
- **Eggs** laid in groups of 25 per leaf.
- **Larvae**

Life cycle takes about 5-6 weeks.

**Damage**

Larvae damage banana, manilla hemp, coconut, oil palm and nipa palm. The pest occurs in the Markhum Valley and other areas and roll leaves of bananas until only the mid vein remains with lots of insect cases attached. Outbreaks of the pest can occur in sheltered banana gardens. Drought may help outbreaks.

**Control**

A parasite has been introduced and released on PNG. It is giving good control in most outbreak regions.

**References**

CIE Distribution map No 426
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 382
PANS Manual No 1 Pest Control in Bananas p 107, 108
Waterhouse Supplement 1 p 88
Waterhouse & Norris, Biological Control 1989 - Pacific Prospects Supplement 1, p 88
Name  **Bean leaf rollers**  
(Also called leaf skeletoniser)

Scientific names:  *Omiodes indicata* Fabricius  
[Synonyms:  *Lamprosema indicata* Fabricius;  
and  *Hedylepta indicata* (F.);  
and  *Nacoleia indicata* Fabricius]

Scientific names: And  *Omiodes diemenalis* Guenee  
[Synonyms:  *Asopia diemenalis* Guenee,  
and  *Hedylepta diemenalis* Guenee,  
and  *Lamprosema diemenalis* (Guenee),  
and  *Nacoleia diemenalis* Guenee]

Family:  Pyralidae  
Order:  LEPIDOPTERA

**The insect**

Adult moths are about 6 mm long with a golden yellow body, with white bands. The wings are golden yellow with brown bands and a dark outer border. Mature larvae are 20 mm long and grey-green with a yellow head. The pupa is 8 mm long, brown and rolled in the leaf.

**Life cycle**

Adults

- **Pupae** are in rolled the leaf (16 days)
- **Eggs** are laid on upper surface of leaves 165-466 per female (5-7 days)

Larvae feed on leaves leaving only the skin looking like a window. 5 instars over 14-15 days.

**Damage**

Larvae tie leaves of beans together with silken threads. Then they eat away the leaf tissue leaving only the skin. They damage peas, peanut, soybean, winged bean, cowpea, snake bean, mung bean, velvet bean, pigeon pea and other beans. They feed on most species of grain and vegetable legumes in Papua New Guinea. From a distance leaves look silver to yellow. The damage is mostly done while beans are young (4-6 weeks) and is worse in dry seasons and with low growing types of beans.

**Control**

In the lowlands it is controlled by parasites and is therefore rarely a problem.

**References**

Bean Production problems p 378  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 268  
Singh, (ed), 1987, Soybeans for the tropics Wiley p 36  
Swain, Ag Zoology in Fiji. p 176  
Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera. CABI
**Name**  
Bean pod borer  
(Also called pod borer and spotted borer)

**Scientific name**  
*Maruca vitrata* Fabricius

**Synonyms**  
*Maruca testulalis* (Geyer)

**Family:**  
Pyralidae

**Order:**  
LEPIDOPTERA

The insect

The moth has brown front wings with a black edge and white marks. The rear wings are light coloured with brown bands at the tip and are mostly free of scales. The wing-span is 25 mm. They shelter among the leaves during the day.

The larvae (caterpillars) are yellow with brown or black spots along the body. The head is light brown. They are thin and up to 25 mm long.

Eggs are laid singly on the young flowers.

Life cycle

- **Adults**- (5-7 days)
- **Pupae** are found in leaf debris in a double walled cell. (5-15 days)
- **Eggs**- laid all over the host plant. (about 3 days)
- **Larvae** live mostly in the pod but come outside at night.

Damage

These insects can cause serious damage to the pods and seeds of most beans. They damage lima, snake, mung, adzuki, rice bean, snake bean, cowpea, winged bean, soybean, velvet bean, and pigeon pea.

The larvae bore into the young pods and can enter the stems. The hole where they enter the plant is normally filled with chewed up plant material (frass). They also eat other plant parts. The insect is most active during the wet season.

Control

1. Use kinds of beans that are less damaged than others.
2. Grow beans in mixed plots with maize to reduce damage.
3. The chemicals that will control these insects are too poisonous for village use. (Especially as people eat bean flowers, leaves and beans.)
4. Allow a fallow period of at least six months after each crop during which when beans are not grown.

References

Hick, Rural Development Handbook No 17 p 39
Kranz, p 457
Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera. CABI
Waterhouse & Norris, 1987, Biological Control - Pacific Prospects p 204
Name: **Beet webworm**

**Scientific name**: *Spoladea recurvalis* Fabricius  
**[Synonyms]** *Hymenia recurvalis* (Fab.)  
**Family**: Pyralidae  
**Order**: LEPIDOPTERA

**The insect**
The moth has a wingspan of about 20 mm. They are brown with two incomplete white bands across the front wings and one white band across the rear wings. The moths are attracted to lights. The larva is light green and resembles a leaf vein. Larvae develop a dark line down their backs as they grow larger. They tend to feed in large numbers under the leaf. They eat clear patches in the leaves with the top skin still intact.

**Life cycle**

- **Adults** have brown wings with white stripes.  
  Females live 18-21 days.

- **Pupae** are in a cocoon and covered with soil. (10-15 days)

- **Eggs** 50-400 eggs laid on the back of leaves. (3-5 days)

- **Larvae** are smooth and pale green up to 20 mm long. (10-15 days)

A life cycle can be 3 to 4 weeks.

**Damage**
The caterpillars roll up and eat the underside of leaves of a number of plants and form a web. Plants damaged include beetroot, spinach, silver beet, Chinese cabbage and amaranthus.

**Control**
1. The caterpillars can be killed with a number of chemicals such as carbaryl and malathion.
2. Removing host weeds nearby can reduce the insect numbers.

**References**
Insects of Hawaii Vol 8 p 52
Name  Black cutworm
(Also called greasy cutworm)
Scientific name  *Agrotis ipsilon* (Hufnagel)
[There are also several other names]
Family:  Noctuidae
Order:  LEPIDOPTERA

The insect
The front wings are brown and the hind wings are yellow/brown. Larvae are grey or green in colour with a shiny skin, they curl up when touched.

Life cycle

**Adults** are a large moth, 40-50 mm wing-span.

**Pupae** dark brown 20 mm long. (10-30 days)

**Eggs** white globular and ribbed. 0.5 mm across. (2-9 days)
Each female can lay 1800 eggs.

**Larvae**- hide in soil or leaf litter coiled in a ball. They are brown on top with green sides 30 mm long. (28-34 days)

A life cycle can take 32 to 67 days depending on temperature.

Damage
The caterpillars cut off seedlings at ground level at night.
Damage occurs in a range of plants grown from seed including coffee, maize, onion, tomato, carrot, *Rorippa sp.*, cabbage. Cutworms have been reported damaging potato tubers and cassava sprouting sticks.
Damage tends to be worse in low-lying damp areas especially where many weeds have been growing.

Control
1. Deep digging of the soil can expose eggs and pupae.
2. Collars made of tin cans with the ends removed, or of bamboo, or stiff cardboard pushed at least 3 cm into the soil and sticking 5 cm above the ground will protect young seedlings.
3. Soil treatment with contact insecticides can be used. See Ag Dept. bulletins.
4. Birds and other predators attack the larvae.
5. Soil that has been dug and kept free of weeds for a while is less likely to have cutworms.

References
CIE Distribution maps No 261
DAL Entomology Bulletin No. 7 and Harvest 8(2). p 131
Hick, Rural Development Handbook Series no 17 p 42
Hill, p 302
Name: Cabbage cluster caterpillar

Scientific name: Crocidolomia binotalis
Family: Pyralidae
Order: LEPIDOPTERA

The insect
The moth has a wingspan of 22 mm. The fore wings are brownish grey with irregular markings. The hind wings are pale yellow. There are two small white spots on the fore wings and a dark brown spot on top of the body.

Life cycle

1. Adult
2. Pupae - in ground in a cell. 9 days
3. Eggs - Yellowish green laid in a mass in the leaves and leaf stalks. 4 days
4. Larvae - have orange head and green body with 3 white lines on top and 2 more on each side. Up to 2 cm long. 14 days

A life cycle is 3-4 weeks.

Damage
These caterpillars eat holes in the leaves of a number of plants in the cabbage family. They leave dark chewed-up lumps of frass on the leaves. They can regularly cause 90% damage to the more leafy types. The hearts of cabbage can often be completely destroyed. Plants damaged include cabbage, Chinese cabbage, kohl rabi, broccoli, turnip, radish and Nasturtium schlechteri. The larvae avoid light so eat on the underside of leaves.

Control
1. Natural methods of control such as predators seem to have no effect at all.
2. Spraying only when needed.

References
DAL Entomology Bulletin No 49 or Harvest 12(4) p 12-14
Hick, Rural Development Series Handbook No 17
Swain, Ag Zoology in Fiji. p 135
Waterhouse & Norris, Biological Control Pacific prospects p 199
Name: **Cacao armyworm**  
(Also known as banana fruit caterpillar)

**Scientific name**  
*Tiracola plagiata* Walker

**Synonyms**  
Artilasisa plagiata Walker

**Family:** Noctuidae  
**Order:** LEPIDOPTERA

**The insect**

This is an armyworm that attacks many different plants. It is a semi looper, which means it has less than the usual 5 pairs of legs on the abdomen of the caterpillar. The adult is a light grey moth with a “V” mark on the front wings. Caterpillars feed on leaves at night. They gather together in groups and are therefore called armyworms.

**Life cycle**

- **Adults** fly at night. Wingspan of 50 mm. Grey brown in colour.
- **Pupae** reddish brown and 2 cm long (16-18 days)
- **Eggs**- 200 to 1200 laid at night on leaves. White with a faint green tinge. 0.8 mm across. Hatch in 4 days.
- **Larvae**- caterpillars are dark in colour with a yellowish stripe on either side of the body. They drop on threads when disturbed. (15-17 days)

Life cycle 35-40 days

**Damage**

They attack many crops including eggplant, tea, banana, lima beans, common beans, winged bean, cassava, castor oil, cacao, tobacco, maize, pumpkin, watermelon, cabbage, cauliflower, tomato, cape gooseberry, passion fruit, beetroot, pawpaw, pigweed, amaranths, spinach, rubber, crotalaria, leucaena, bitter cucumber, fig, taro, sweet potato, mulberry.

The larvae eat young soft growing parts of the plants and can also eat weeds and bush trees. The insect tends to build up on trees like leucaena shade or other large areas of one crop then spread in plague numbers into surrounding gardens.

**Control**

1. Mixed cropping helps keep a balance of insects and their predators.
2. Outbreaks can be predicted by trapping moths in light traps.
3. Some predators and parasites operate but they do not exert enough control to stop a strong outbreak.
4. Carbaryl insecticide will control them.

**References**

Hick, Rural Development Handbook No 17  
Lamb, Insect Pests of PNG. p 27  
PNG Ag J 15(1 & 2) p 15; 15 (3 & 4) p 105 and PNG Ag J 19(2) p 68
Name: Cacao false looper
(Also called castor semi-looper)

Scientific name: *Achaea janata* (Linnaeus)

[Synonyms: *Ophiusa janata*.
and *Achaea melicerta* Drury
and *Phalaea melicerta* Linnaeus]

Family: Noctuidae
Order: LEPIDOPTERA

The insect:
The mature larva is grey with a spotted head and a coloured stripe along the side. It is 60 mm long.

Life cycle

- **Adults** - 7 cm wingspan
  Can fly long distances.
  (10-20 days)

- **Pupae** in leaves
  or on surface of soil. (10-16 days)

- **Eggs** - about 600 laid
  on upper surface of leaves. (3 days)

- **Larvae** move in loops
  (11-17 days)

Life cycle 32-38 days

Damage
Caterpillars eat a range of young soft leaves especially castor, sweet potato, peanuts, citrus, cacao, rubber, pumpkins etc.
Occurs up to 1900 m altitude.

Control
1. Some parasites are known, especially tachinid egg parasites

References
PNG Ag J 14(4) Mar ’62 p 163
PNG Ag J 19(2) p 68
Lamb, Insect Pests of PNG p 27
**Name**    
_Cacao looper_  
(Also called the cocoa armyworm)

**Scientific name:** *Ectropis bhurmitra* Walker  
**Synonyms:** *Ectropis sabulosa* Warr.

**Family:** Geometridae  
**Order:** LEPIDOPTERA

**The insect**  
The larvae of this moth move by forming a loop. They can build up into large numbers given the right conditions.

**Life cycle**

```
Adults
   /   
Pupae    Eggs
   |   |
Larvae
```

**Damage**  
Caterpillars eat young leaves during the flush of growth of cacao.  
They also damage sweet potato, cassava, taro, peanuts and coffee by eating the leaves.

**Control**  
Large outbreaks of these insects normally die out naturally following a build-up of predators.

**References**  
Lamb, Insect Pests of PNG p 25  
PNG Ag J 19(2) 1967  
Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera. CABI
Name: Cape gooseberry budworm
Scientific name: Helicoverpa assulta assulta Guenee
[Synonyms: Heliothis assulta (Guenee)]
Family: Noctuidae
Order: LEPIDOPTERA

The insect
Most larvae are green with stripes along the body but several other colours are known.

Life cycle

- **Adults** feed on flower nectar
- **Pupae**
- **Eggs** laid singly on upper leaflets or hearts. 500 to 2000 eggs laid per female.
- **Larvae** kill each other until often only one per plant. (2-3 weeks)

Damage
Larvae damage corn, cape gooseberry, tobacco, tomato and other plants in the tomato family. They attack the fruit and the flowers.

Control
Hand picking is not particularly effective and often chemicals have to be used on commercial tobacco plants. Trap crops have also been used.

References
CIE Distribution maps No 262
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia p 341
Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera. CABI
**Name**  
Citrus butterfly  
(Also called the orchard butterfly)

**Scientific name**  
*Papilio aegeus ormenus* Guerin

**Synonyms**  
*Papilio erechtheus* Donovan

and  
*Papilio ormenus* Guerin-Meneville

and  
*Princeps aegeus* Dovovan

**Scientific name**  
Also *Papilio aeacus* Donovan

**Family:**  
Papilionidae

**Order:**  
LEPIDOPTERA

**The insect**

These butterflies are called swallowtails because they have points on the wings. The male and female butterflies are different in size and colour. Females are larger. The wingspan is about 10 cm. The wings have yellow and blue spots as well as white patches. The larvae give off a strong smell and push out a fleshy organ on the head when attacked.

**Life cycle**

- **Adults** fly rapidly and keep wings in motion while feeding on flowers.
- **Pupae** are green or brown. Attached by tail & central silken thread.
- **Eggs** are spherical, large, yellow and laid singly on leaves.
- **Larvae** are dark green with white marks. There are also rows of short fleshy spines along the side.

**Damage**

The larvae eat citrus leaves and can occasionally eat all the leaves off one tree.

**Control**

1. Not normally necessary.
2. Some parasites are known which become effective when pest numbers are high.

**References**

PNG Ag J. 18(3) 1966 p 11
Name: Citrus leaf miner
Scientific name: *Phyllocnistis citrella* Staint
Family: Phyllocnistidae/Lyonetiidae
Order: LEPIDOPTERA

The insect
Adults are very small silvery white moths with pale yellow markings and a black spot at the tip of each forewing. They are about 2 mm long and with a wingspan of 4.5 mm. Moths fly at night. Larvae are narrow and up to about 3 mm long.

Life cycle

```
Adult

Pupae - in mines in the leaf. Stage lasts 6 hours.

Eggs - are flat, 0.27 mm long. 2 or 3 on a leaf. (2-3 days)

Larvae - dull yellow with a small head. Burrow into leaf. Feed for 5-6 days.
```

A life cycle takes about 14-17 days.

Damage
The larvae burrow into the leaf leaving winding marks of the mine within. They prefer young leaves. Infested leaves become distorted. They are a serious pest of newly established citrus orchards.

Control
1. They can be controlled by spraying with malathion. It is the young growth that needs to be sprayed and it needs to be repeated at 10-day intervals.
2. Elsewhere parasites have been found which control the pest.

References
O’Connor, SPC Exotic Pests and Diseases. Section on Citrus
Name: Cluster caterpillar
(Also called common cutworm)
Scientific name: *Spodoptera litura* (Fab)
[Synonyms: *Noctua litura* (Fab) and *Prodenia litura* Fab.]
Family: Noctuidae
Order: LEPIDOPTERA

The insect: The adult moth is 18 mm long with a brown body. The wingspan is about 40 mm. The front wings have silvery marks and the hind wings are silvery white; you can almost see through them. This moth is attracted to lights at night. The larvae are dark brown above and green beneath with a light band along the side. Larvae are 45 mm long and cluster together in the first few days after hatching.

Life cycle:

- **Adults** - female can lay 200 to 300 eggs.
- **Pupae** - in soil or plant refuse. Sometimes a very short stage. (7-12 days)
- **Eggs** - laid in batches and covered with “wool”, on leaves. (3-7 days)
- **Larvae** - caterpillars in groups initially light green. They skeletonize leaves then chew holes and bore in. Moult 4 times (14-21 days)

Can have 8-10 generations per year.

Damage: They damage a range of crops - lettuce, taro, cabbage, tomato, beans including winged bean, maize, cassava, citrus, rice, sweet potato, sunflower, peas, peanuts, brussels sprouts, kohlrabi, aibika, okra, kiwi fruit, leek and tobacco. Quite often the damage is only slight but in some seasons they can do extensive damage. They move between crops and the numbers depend on the climatic conditions.

Control:
1. Sometimes control can be achieved by removing and destroying leaves that have large numbers of caterpillars. On taro, the young caterpillars can be collected and burned.
2. Control can be achieved with contact insecticides such as carbaryl.

References
Hick, S., 1980, Rural Development Handbook No 17 DPI p 87
Hill, S., 1975, Agricultural Insect Pests of the Tropics and their control. CUP p 308
Swain, G., 1971, Ag. Zoology in Fiji HMSO pp 44, 67, 147, 154, 182, 278
Waterhouse and Norris, Biological Control Pacific Prospects p 250
Name | Coconut cup moth
---|---
Scientific name: | *Thosea sinensis* (Walker)
Family: | Limacodidae
Order: | LEPIDOPTERA

The insect
The larva is a broad oval in shape and has a grey or green stripe along the back with coloured spots along the side.

Life cycle
A life cycle takes about 3 months.

Damage
Damage to young coconut palms is widespread and serious in Central Province. Also recorded on citrus. It is known to attack pomegranate, coffee, tea, and other crops.

Control
A predator was introduced to PNG but was not successful.

References
Cock, M.J.W., et al, Slug and Nettle caterpillars CIE CAB
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia p 294
Name  Coconut spathe moth
(Also called coconut spike moth)
Scientific name:  *Tirathaba rufivena* Walker
[See  *Melissoblaptes rufovenalis* Snellen]
Also  *Tirathaba ignevena* Hmps.
Family:  Pyralidae
Order:  LEPIDOPTERA

The insect
This is a small light brown coloured moth. The veins in the wings are clearly marked in a reddish colour. Larvae up to 22 mm long.

Life cycle

- **Adult**
- **Pupae** - in cocoon near flowers. (7-14 days)
- **Eggs** - on coconut flower. (4-5 days)
- **Larvae** - feed on newly opened buds. 12-30 days.

A life cycle can take 20-50 days.

Damage
The larvae attack coconut, nipa palm, oil palm, betel nut, bananas and beans. With coconuts they cause some nuts to fall. When populations of crazy ant (*Anplolepis longipes* Jerd.) occur on the palm, nut fall can be serious. The larvae bore mostly into male flowers. Male flowers can be webbed together. *Batrachedra arenosella* (Walker) or the Lesser Coconut spike moth, gnaws male and female flowers and can cause slight damage.

Control
1. Some parasites and predators help control.

References
Hick, S., Rural Development Series Handbook No 17
Waterhouse and Norris, Biological Control Pacific Prospects. p. 211
Name: Coffee leaf roller  
*Also called tea tortrix*

**Scientific name:** *Homona coffearia* Nietn.  
**[Synonyms:**  
*Capua coffearia* Nietn.  
and  
*Tortrix coffearia* Nietn.]

**Family:** Tortricidae  
**Order:** LEPIDOPTERA

The insect  
Moths fly at night and lay hundreds of eggs. The larvae spin leaves together.

Life cycle:

- **Adults** - female pale brown  
  male darker brown

- **Pupae** in web of leaves (14 days)

- **Eggs** 20-40 in mass on leaves. Flat.

- **Larvae** - wander to find soft tissue  
  Up to 2 cm long. Dull green bluish with scattered hairs

Life cycle about 2 months

Damage  
Larvae damage coffee and tea by eating and rolling up leaves.  
Also damage soybean, pea, snake bean, velvet bean, peanut, mung bean, parsley, okra, eggplant, cucumber, sunflower, citrus, soursop, and the tree legumes crotalaria and albizzia.  
More serious in the highlands.

Control  
1. Often numbers are naturally controlled by two wasps.  
2. Chemical control is rarely necessary.

References  
PNG Ag J. 18(3) Dec 1966 p 95
**Name**

**Common grass blue butterfly**

**Scientific name:**  
*Zizina otis* (F.)

**Synonyms:**  
*Zizera otis* Fabricius

**Family:**  
Lycaenidae

**Order:**  
LEPIDOPTERA

---

**The insect**

The adult male is dull blue and the female has some brown areas. The larvae are green with darker markings. It has a darker line along the back and a white line along the side.

**Life cycle**

- **Adults**
  
- **Pupae** - attached to underside of leaves.
- **Eggs** - white or pale blue & slightly flattened. Laid singly on food plants.

- **Larvae**

**Damage**

The larvae feed on the leaves of a range of beans including pigeon pea, snake bean, soybean and winged bean.

**Control**

Not commonly needed.

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**References**

- Child, Butterflies of Australia.
- Smithies
**Name**  
Corn earworm  
(Also called tomato grub; tobacco budworm and cotton bollworm & American bollworm)

**Scientific name:** Helicoverpa armigera (Hubner)  
**[Synonyms:** Heliothis armigera (Huebner) and Heliothis armiger and others]**  
**Family:** Noctuidae  
**Order:** LEPIDOPTERA

**The insect:** The adult moths vary in colour but are generally brown to grey with dark irregular markings across the front wings. They are darker towards the tip with a pale band near the edge and with a dark spot almost near the centre. Moths have a wingspan of 35 mm. They fly at night and lay up to 1550 eggs.

**Life cycle:**

- **Adults** - yellowish brown in colour but it can vary. The hind wings are pale at the base and dark towards the edges.
- **Pupae** are brown and are found in plant debris on the ground.
- **Eggs** - laid singly under leaves. They are small and white. (7-10 days)
- **Larvae** are rough in appearance and green to reddish brown. Feed for 4-6 weeks. They have a dark stripe down each side.

A life cycle takes about 35 days.

**Damage**
The larvae feed on leaves and fruit. They damage a range of plants, especially corn, tomatoes, capsicum, but also lettuce, rice, taro, pigeon pea, garden peas, beans, sweet potato, cabbage, sunflower, okra, tobacco, cacao, and coffee. They can cause serious damage to corncobs and tomato fruit. Rain helps the pupae develop and warm moist weather makes the pest worse. In the highlands the occurrence is probably seasonal with a lull early in the year and again in Aug/Sept.

**Control**
Several parasites and predators are known therefore it is important to spray as little as possible so as to help these to build up and control the insect. A fungus disease grows on the insects in the highlands and is favoured by wet conditions. The larvae become dark and move slowly. White fungal threads turn green and become powdery. The larvae can also be shaken off the plants and then killed.

**References**
DAL Entomology Bulletins 34 & 35 or Harvest 10(4) p 159-166  
Hick, Rural Development Handbook 17  
Hill, p 294; Kranz, p 479-481  
PNG Ag J 19(2), 1967, p 61  
Waterhouse and Norris, Biological Control Pacific Prospects. p 228
Name: Cotton leaf roller

Scientific name: *Syllepte derogata* Fabricius

[Synonyms: *Phalaena derogata* F.
and *Pleuroptya derogata* F.
and *Sylepta derogata* F.
and *Sylepta multilinealis* Guenee]

Family: Pyralidae
Order: LEPIDOPTERA

The insect:
Larvae are light green in colour, with dark brown heads, they are very lively when disturbed and escape from their leaf cases.

Life cycle

- **Adults**: have cream coloured wings with irregular brown lines
- **Pupae**: in rolled leaf
- **Eggs**: laid on under surface of leaves. Light yellow.
- **Larvae**: young larvae feed on leaves, then cut the blade near the stem and roll the leaf downwards. Length 20 mm

A life cycle takes about 22-26 days.

Damage
Larvae rolls up and eats leaves. Damages aibika, okra (and cotton). Larvae are very common on aibika and at times can eat all the leaves.

Control:
1. The caterpillars can be picked off the leaf.
3. Use crop rotations or have gaps between crops.

References
Epenhuijsen, Growing native vegetables in Nigeria p 66
Hill, p 273
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia, p 268, 269
Swain, Ag Zoology in Fiji p 124
Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera CABI
**Name**  
*Cotton semi-looper*  
(also called Cotton looper)

**Scientific name:** *Anomis flava* F.  
*Synonyms:*  
*Anomis indica* Guenee  
and  
*Cosmophila flava* F. and others

**Family:** Noctuidae  
**Order:** LEPIDOPTERA

The insect  
Larvae are green with lighter short lines and spots along the sides.

**Life cycle**

- **Adults** live for about 28 days.
- **Pupae** in cocoon in downward folded piece of leaf.
- **Eggs** about 350 laid per female.
- **Larvae**

Life cycle takes about 21 days.

**Damage**  
The larvae can often damage aibika, okra, black velvet bean and hibiscus foliage throughout the year. They eat the tissue of leaves leaving only the veins.

**Control**

**References**

See Holloway, J.D. *et al*, Lepidoptera p 158  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 352  
CIE Distribution map 379
Name: Cup moths

Scientific name: Scopelodes nitens B.Bak
and Scopelodes dinawa B.Bak
Family: Limacocidae
Order: LEPIDOPTERA

The insect
The larvae are yellow-green with glass like lines and rows of spiny hairs along the back and sides. The hairs will sting the skin. The cocoons are round and light brown.

Life cycle

Damage
They are reported to completely eat the leaves off mango and cashew trees. The larvae eat in groups on the leaves. They also damage banana. These butterflies have stinging hairs that can make harvesting of crops such as tea unpleasant.

Control
1. Caterpillars and cocoons can be collected and destroyed.

References
Name: Diamond back moth
(Also called cabbage moth)
Scientific name: *Plutella xylostella* (L.)
[Synonyms: *Plutella maculipennis* (Curt.) and others]
Family: Plutellidae/Yponomeutidae
Order: LEPIDOPTERA

The insect
This moth is brown with diamond shapes down its back. It is about 7-12 mm long. The hind wings have a fringe of long grey hairs. The moths are active fliers.

Life cycle

**Adults** - about 7 mm long and brown in colour with a light coloured diamond shape down the back.

**Pupae** - on the plant in a silken cocoon.
(5-10 days)

**Eggs** - small, yellow and laid singly under leaves near veins. (3-8 days)

**Larvae** - burrow into leaves then later eat holes. They stay underneath the leaf.
They are up to 8 mm long and green. (14-28 days)

They have a 27-day life cycle in the highlands that will be faster in the lowlands.

Damage
The caterpillars eat irregular shaped holes in the leaves of cabbage family plants.
The larvae drop from the plant on silken threads when they are disturbed.
They damage cabbage, turnip, broccoli, kohlrabi, brussels sprouts, Chinese cabbage, *Nasturtium schlechteri*, and possibly other plants in the cabbage family.
The moth tolerates a wide range of climates but damage is worse in hot dry areas.

Control
IPM methods have been introduced to highlands farmers and these should be used whenever possible. Biological control methods are being used successfully in the highlands.
Overhead irrigation has been claimed to control the pest.
Chemicals can be used but it is important to only use those that do not kill the parasites. It is important to spray the underside of leaves.
The insects develop resistance to some chemicals quickly so the chemicals need to be changed regularly. For information on chemicals see Entomology Bulletin No 8

References:
DPI Entomology Bulletin No 8 or Harvest 12(3) 1987 p 87
Hick, Rural Development series Handbook 17
Hill, p 247; Swain, Ag Zoology in Fiji p 132
Waterhouse and Norris, Biological Control Pacific Prospects. p 177
Name: Evening brown butterfly
Scientific name: *Melanitis ledabankia* F.
Family: Nymphalidae
Order: LEPIDOPTERA

The insect
This butterfly has different shapes and colours for male and female and in different seasons. They fly at morning or evening. The average wingspan is 70 mm. The caterpillars have red to purple lines along the side. They are up to 55 mm long.

Life cycle

- **Adults** - often enter houses.
- **Pupae** - smooth and light green.
- **Eggs** - almost round, pale green and laid singly on leaves.
- **Larvae** - light green with short hairs from white spots; head green with hairy brown horns.

A life cycle takes about 6 weeks.

Damage
Reported causing slight damage to rice leaves in both wetland and dryland areas. They feed during the day.
In other places it also damages sugarcane, maize, sorghum and other coarse grains.
*Melanitis constantia* is also reported damaging sugarcane and maize by eating leaves.

Control

References
Burns, Australian Butterflies in Colour (Reed) p 60
Common, Butterflies of Australia p 234
Lamb, Insect Pests of PNG p 27
Name: Fruit piercing moth

Scientific name: *Eudocima fullonia* Clerck

[Synonyms: *Othreis fullonia* Clerck
[Often as *Othreis fullonica* (Cl.)]

[Synonym: *Ophideres fullonia* Clerck]

Family: Noctuidae

Order: LEPIDOPTERA

The insect

Moths with a wingspan of about 75 mm. They are brownish in colour. The hind wings have darker brown edges with orange-yellow. On the rear wings there is a dark brown quarter moon shaped spot. Caterpillars rest in the form of an “S”. The full grown larvae are 85 mm long.

Life cycle

A life cycle takes 28-39 days.

Damage

The adult moth uses its rigid tongue to pierce the skin of the mature fruit and introduce fungi that cause the fruit to rot and drop off. They feed on the fruits of citrus. The fruit loses sap and a discoloration appears. Rots and vinegar flies can enter through these damage sites.

The larvae live on Erythrina shade trees.

Control

1. Removing Erythrina shade trees helps control the insect where these trees are used as shade.
2. Fruit on smaller trees can be ‘bagged’ by covering the young fruit with paper bags.
3. Parasites have been introduced in several countries to control the eggs and larvae but results have been mixed.

References

Citrus Production in the South Pacific 1976, SPC Handbook No 14 p 38
Holloway, J.D. et al, 1984, Lepidoptera CIE Guides to Insects of Importance to Man CABI p 158
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 355
Waterhouse and Norris, Biological Control Pacific Prospects p 240
Name: Gold-fringed rice borer

Scientific name: *Chilo auricilius* (Dudg.)

[Synonyms: *Chilo auricilia* (Dudg.)
and *Chilotraea auricilia* (Dudg.)
and *Diatraea auricilia* (Dudg.)
and *Proceras auricilius* (Dudg.)]

Family: Pyralidae

Order: LEPIDOPTERA

The insect

Life cycle

Adult

![Diagram of life cycle]

Pupa

Eggs

Larvae

Damage

Larvae damage rice, sugarcane and sorghum. They are reported to attack rice stems causing white heads. They also attack sugarcane and sorghum.

Control

References

CIE Distribution map No 300
**Name**  
Green looper  
(Also called vegetable looper and green semi looper)

**Scientific name:** Chrysodeixis eriosoma Doubleday  
Wrongly as Chrysodeixis chalcites (Esp.)  
and Phytometra chalcites Doubleday  
**[Synonyms:** Plusia chalcites Doubleday  
and Phytometra eriosoma Doubleday]**  
**Family:** Noctuidae  
**Order:** LEPIDOPTERA

**The insect**  
A light brown moth with bronze fore wings which have two white marks. The larvae are pale green with faint white wavy lines along the body.

**Life cycle**

- **Adults:** 15 mm long  
- **Pupae:** inside folded leaves.  
- **Eggs:** 0.5 mm across, white, flat and laid singly under the leaf. (3-4 days)  
- **Larvae:** 35 mm long pale green. Faint white wavy lines on back. (13-24 days)

Life cycle lasts about 5 weeks.

**Damage**  
Larvae commonly attack cabbage leaves and also damages beans, pumpkin family plants and cacao, tobacco, tomato, cotton, cabbage family plants and legumes.  
Reported to eat leaves of khol rabi, snake bean, aibika, basil and lesser yam.  
They can completely eat the soft tissue of leaves of soybean.  
Another semi looper, Phytometra orichalcea (F.) (LEP.) [Probably syn. Plusia orichalcea L.] is reported on dill, parsley, coriander, sunflower, lettuce, tomato, Chinese cabbage, celery, turnip and brussels sprouts. It is an attractive golden-coloured moth.

**Control**  
1. Control is not normally needed but carbaryl is effective.

**References**  
CIE Distribution maps No 376  
See Holloway, D.J. Lepidoptera CABI p 159, 160  
Swain, Ag Zoology in Fiji p 68, 194, 281
**Name**: Green spotted triangle  
Scientific name: Graphium agamemnon L.  
[Synonym: Papilio agamemnon L.]  
**Family:** Papilionidae  
**Order:** LEPIDOPTERA

The insect  
The adult is a beautiful butterfly with black-brown wings with bright green spots and yellow stripes. It flies very quickly making it hard to catch. It keeps its wings in motion when visiting flowers. Caterpillars are green and up to 40 mm long.

**Life cycle**

```
  Adults  
   Pupae - green with yellow head and dark spots  
   Eggs - pale yellow and laid singly on upper surface of leaves.  

  Larvae - have long black spines on each section of thorax
```

**Damage**
The larvae feed on the leaves of custard apple, cherimoya, avocado and soursop. They also eat durian leaves. They move erratically because they attach themselves to the smooth leaves by a silken thread. When they are disturbed they give off a bad smell.

**Control**
1. Not normally necessary or appropriate.

**References**
Common, Butterflies of Australia p 174  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 376  
Mayflower, Illus. Encycl. Moths & Butterflies p 84
**Name** | **Large mango tip borer**
---|---
**Scientific name:** | *Penicillaria jocosatrix* Guenee
**[Synonym:** | *Bombotelia jocosatrix* (Guen.)]
**Family:** | Noctuidae
**Order:** | LEPIDOPTERA

The insect

**Life cycle**

- **Adults**
- **Pupae**
- **Eggs** very small and laid scattered over young leaves.
- **Larvae**

**Damage**
The larvae bore in the young shoots of mango. They tend to feed on young leaves and live in the tops of trees.

**Control**
1. Not normally necessary or appropriate.

**References**
CSIRO Insects of Australia p 865, 863
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia p 349
Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera CABI
**Name**  
Leaf miner of sweet potato

**Scientific name:** *Acrocercops homolacta* Meyr

**Family:** Gracillaridae

**Order:** LEPIDOPTERA

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**The insect**

It is a very small moth. It spreads its wings at an angle and has light and dark brown stripes across the wings.

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**Life cycle**

![Life cycle diagram]

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**Damage:** Larvae tunnel in the leaves of sweet potato leaving a twisting white trail on the surface.

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**Control**

1. Not normally necessary or appropriate.
2. Sweet potato leaf can withstand very high levels of damage before yield losses are noticed.

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**References**

see Thistleton survey. Bulletin 36 p 5
**Name**  
Maize stem borer  
(Also called Asian corn borer;  
and Asian maize borer)

**Scientific name:**  
*Ostrinia furnacalis* (Guen.)

**Synonyms:**  
*Pyrausta damoalis* Walker,  
and  
*Pyrausta vastatrix* Schulte  
and others

**Family:**  
Pyralidae

**Order:**  
LEPIDOPTERA

**The insect**

The light brown adult moth emerges from the pupa late at night. Larvae are spotted and striped. They drop on silk threads if disturbed and can spread in the wind.

**Life cycle**

- **Adults:** Moths can fly long distances at night.
- **Pupae:** In a cocoon in the soil or stem. (6 days)
- **Eggs:** In clusters of 10-40 under leaves. One female can lay 500-1500 eggs. (3-10 days)
- **Larvae:** Young larvae eat leaves then bore into stems.

A life cycle takes 22-45 days in the lowlands.

**Damage**

Corn plants can break off where the larvae have tunneled into the stem or where they have bored the joints along the stem. There is a large amount of brown pulpy powder (frass) left by the insect boring. It is common and serious in maize/corn. Cobs can also be damaged. This insect can also damage rice.

**Control**

De-tasseling of more than two thirds of all plants has been shown to effectively control this pest.
1. Remove corn stubble after harvest.
2. Resistant varieties of maize/corn can be used.
3. Chemicals can be used to kill young larvae before they have burrowed into the stems.
4. Using crop rotations with crops other than maize helps control. (2 months with no maize.)

**References**

Frohlich, p 156; Hick, Rural Development Series Handbook 17 p 41  
Hill, 1975, Ag Insect Pests of the Tropics and their control p 270  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 278-280  
Kranz, 1977, Diseases, Pests & Weeds of Tropical crops p 459  
PNG Ag J. 30(1-3): 21-24
Name: Myops owl butterfly
(Also called banana butterfly)
Scientific name: Taenaris myops kirschi Stgr.
Also Taenaris dimona Hew
Family: Amathusidae
Order: LEPIDOPTERA

The insect
The adult is a large greyish-black and white butterfly with 4 “eyes” on the underside of the hind wings. The larvae can be up to 5 cm long, they are a dull yellow colour with 3 lines and 2 bunches of hairs along the back of each segment. The heads are brown.

Life cycle

Adult
Pupae
Eggs
Larvae-yellowish green; fairly dense pale secondary holes. Light brown head with clubbed and spiny horn.

Damage
The larvae of this butterfly occasionally eat all the leaves of both cultivated and wild bananas. They group together and eat in a line.
They are more common near monsoon forest areas.

Control.
1. Not normally necessary or appropriate.

References
Hick, Rural Development Series Handbook No 17
Lamb, Some Insect Pests of PNG p 29
**Name**  
Paddy armyworm  
(Also called rice swarming caterpillar;  
paddy swarming caterpillar & rice moth)

**Scientific name:**  
*Spodoptera mauritia* (Boisduval)

**Synonyms:**  
*Hadena mauritia* (Boisduval)  
and others

**Family:**  
Noctuidae

**Order:**  
LEPIDOPTERA

**The insect**

The adult is a grey brown moth. There is a distinct black spot on the front wings. The hind wings are light brown with a dark edge. Larvae are light green when young but become brown. The head is darker and there are 3 lines along the side. Larvae grow to 4 cm long. Adult moths lay about 1500 eggs.

**Life cycle**

- **Adults** 15-20 mm long and 30-40 mm wingspan.
- **Eggs** 100-300 at tip of young leaves. (3-9 days)
- **Pupae** in soil (7-14 days)
- **Larvae** (15-24 days)

A life cycle takes 37-40 days.

**Damage**

Larvae mainly attack rice but also sugarcane, corn and some other grasses at night. Occasionally outbreaks of large numbers of larvae can occur when the damage can be serious.

**Control**

1. Larvae can be floated off newly planted rice and collected in flooded rice fields.

**References**

Hill, D.S, 1975, Ag Insect Pests of the Tropics p 306
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia p 334, 335
**Name**

Pea Blue butterfly

(Also called bean butterfly & Crotalaria blue)

**Scientific name:** Lampides boeticus L.

**Synonym:** Papilio boeticus L.

and others

**Family:** Lycaenidae

**Order:** LEPIDOPTERA

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**The insect**

A purplish-blue butterfly, with brown near the edges of the wings. On the hind wings there are two small black spots with white rings. There is a slender black tail at the rear of the hind wings. It is a strong flier. (*Zizina otis*, a similar pest does not have tails.)

**Life cycle**

- **Adults** - 10 to 13 mm long
- **Pupae** - pale brown with darker marks. On ground, or suspended between leaves
- **Eggs** - white flattened with finely marked lines of spines. Laid singly on flower buds.
- **Larvae** - green or brown with a red-brown line down the back. 10 mm long.

A life cycle takes 5-7 weeks.

**Damage**

The larvae feed on flowers and bore in the pods of a number of legumes including snake beans, pigeon pea, mung bean, cowpea, peas, winged bean, pigeon pea and Crotalaria.

**Control**

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**References**

Common, Butterflies of Australia p 398
Swain, Ag Zoology in Fiji p 393
Young, Insect Pests of grain legumes 2nd PNG Food Crops Conference
Name: Potato tuber moth  
(Also called Potato moth)
Scientific name: Phthorimaea operculella (Zell.)
[Synonyms: Gnorimoschema operculella Zeller and others]
Family: Gelechiidae
Order: LEPIDOPTERA

The insect
This small moth is about 5 mm long and with a wingspan of 14 mm. It is greyish brown. There are tiny dark scattered markings on the front wings. The pale yellow hind wings have a fringe of hairs. The moths hide during the day and fly near sunset. Larvae crawl on leaves then burrow in. Larvae then eat into the stem and tubers. Moths can fly several hundred metres to new gardens especially down wind.

Life cycle

- **Adults**: live about 13 days.
- **Pupae**: 7 mm long brown and in a silken cocoon on the ground. (5-18 days)
- **Eggs**: white, oval laid on leaves stalks or tubers. 0.5 mm. (4-5 days)
- **Larvae**: 9 mm long with a slight pink colour on upper surface, otherwise white. (9-67 days)

A life cycle can be completed in a month allowing several generations per year.

Damage
Larvae mine in the leaves of plants. Some bore in stalks. With plants growing well this is normally not too much of a problem. However, larvae will bore into tubers if they are near the surface and where soils crack. Then they can seriously damage tubers. Damage can continue during storage. Damage is done to potatoes, tobacco and other plants in that family. Damage gets worse in hot dry seasons. The insects can occur on potato, tomato, tobacco, as well as cape gooseberry, & blackberried nightshade.

Control
1. Protect tubers from the moth by covering with soil and deeper planting.
2. Use clean pest-free potatoes for planting.
3. Keep potato tops away from tubers after harvest.
4. Remove old damaged tubers.
5. Moths blow down wind so isolate gardens for new crops.
6. Remove old potato tops after harvest.

References
Hick Rural Development Handbook No 17 p 79
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 220-221
Kranz, p 429; O’Connor, SPC Exotic Pests and Diseases. Section on potatoes.
Swain, Ag Zoology in Fiji p 189, 282
**Name**  
Purple lined rice stem borer  
(Also as rice stalk borer; & Asiatic rice borer)

**Scientific name:**  
*Chilo suppressalis* (Walker)

**Synonyms:**  
*Chilo oryzae* Fletcher

Also - **early shoot borer**

**Scientific name:**  
*Chilo infuscatus* Snellin

**Synonyms:**  
*Chilotraea infuscatus* Snellin  
and  
*Diatraea infuscatus* Snellin

**Family:**  
Pyralidae

**Order:**  
LEPIDOPTERA

The insect

The moth is light brown and 13-16 mm long. There is a row of small spots along the tip of the fore wing. The larvae have 5 dark spots along a pale brown back.

**Life cycle**

- **Adults:** 13-16 mm long and active in early evening.
- **Pupae:** reddish brown 11-13 mm. in stem
- **Eggs:** white to yellow masses of overlapping rows of eggs on lower half of flowers. (100-550 eggs per female)
- **Larvae:** 5 stripes down pale brown back  
  Final stage 20-26 mm long.  
  All larvae enter via a common hole. (20-48 days)

A life cycle takes 35 to 60 days. There can be 1 to 5 generations per year.

**Damage**

Larvae bore into the stem causing the centre of rice tillers to die and the grains to dry up, producing white heads.  
Often it develops as a pest after a period of sudden warm weather.

**Control**

1. Damage is worse if high rates of nitrogen fertiliser have been used.
2. Several parasites occur.
3. Spiders act as predators along with some bugs.
4. Removing straw by digging it in or flooding helps control.
5. Isolating crops and avoiding sequential planting reduces the pest build up.
6. Some rice varieties are more resistant.
7. Insecticides should only be used as a last resort as these can kill off parasites and predators.

**References**

Grist, & Lever, 1969, Pests of Rice Longmans p 62-70  
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia p 236  
Kranz, Diseases, Pests and Weeds of Tropical Crops p 452
**Name**  
**Rice armyworms**  
(Also called rice ear cutting caterpillar; paddy army worm; Oriental army worm)

**Scientific name:** *Mythimna loreyi* (Dup.)

**Synonym:** *Cirphis loreyi* (Dup.) and others

**Scientific name:** *Mythimna separata* (Walk.)

**Synonym:** *Pseudaletia separata* Walker

**Family:** Noctuidae

**Order:** COLEOPTERA

**The insect**

Two noctuid armyworm moths whose larvae damage rice. The larvae stay together and during the day hide near the base of the plant. At night they come out and feed. The moth is like *Heliothis* but does not have a distinct dark brown band on the hind wing. They are reddish to grey. The larvae curl up when touched.

**Life cycle**

- **Adults**- 18 mm long wingspan 38-40 mm.
- **Pupa**- shiny dark brown in cocoon in soil. 15-19 mm long (18 days)
- **Eggs**- in groups on leaves. 100+ in groups. Green to yellow. (4-13 days)
- **Larvae**- 40 mm long and fine white stripes on back. Two pairs of prolegs so called semi-loopers. (24 days)

Life cycles take 30 to 40 days.

**Damage**

They can do serious damage to dryland rice. Most of the leaf can be eaten away and chop off the rice ear. In other places they are also recorded damaging maize, sorghum, sugarcane and grasses. They chew the edges of maize leaves. *M. separata* is a common armyworm on corn in the highlands. They are also reported damaging winged bean leaves. They are worse in wet weather. Sugarcane is only susceptible to *M. loreyi* during the first 4 months of growth.

**Control**

1. Birds and the giant toad help control numbers.

**References**

CIE distribution maps No 230(revised)  
Hill, p 288  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 333, 334; Kranz, p 511  
Lamb, Insect Pests of PNG p 27  
Sands, Rice Pests of PNG in Ag in the Tropics p 312  
Swain, Ag Zoology in Fiji p 111, 121, 260
The insect
A light brown moth. The wings have darker edges and two narrow wavy lines. The wingspan is 17-19 mm. They are attracted by light.

Life cycle

**Adults** Moths light brown.

**Pupae** inside rolled leaf. Dark brown with 6 pairs of extended processes. (spiracles)

**Eggs** laid singly or in rows on lower surface of leaf of young rice (4-7 days)

**Larvae** Last about 20 days.

A life cycle can be completed in 4-6 weeks.

Damage
Larvae feed on the leaves of rice, corn, wheat, sorghum and sugarcane. Damage tends to be worse in flooded rice but on maize in the dry season.

Control
1. Keep edges around rice paddies clear of long grass.
2. Applying excess nitrogen fertiliser can make the insect damage worse.
3. Remove old rice stalks.
4. Parasites are known which help control these insects.

References
CIE Distribution maps No 212 (Revised)
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 264
Name: Rice leaf rollers

Scientific names: Marasmia spp.
Marasmia bilinealis Hampson
Marasmia hexagona
Cnaphalocrocis poeyalis Boisduval

[Synonym: Marasmia poeyalis Boisduval]
Family: Pyralidae
Order: LEPIDOPTERA

The insect
The moths are small brown moths. Larvae bind two edges of the leaf together with silk then feed on the leaf inside the fold.

Life cycle

Adults

Pupae-in rolled leaves

Eggs-laid near tips of leaves
One or two eggs together.

Larvae-

Damage
The leaf tips of rice are rolled. Plants can be stunted and rice heads poorly developed following extensive leaf damage.
It has at times been a pest in East Sepik Province.

Control
1. Control is often not necessary.
2. Some rice varieties are more susceptible to damage than others.
3. Several parasites are known to keep it under control.

References
Hick, Rural Development Series Handbook No 17 p 53
Hill, D.S., 1975, Ag Insect Pests of the Tropics and their control CUP. p 275 (other species).
Swain, Ag Zoology in Fiji p 109
Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera CABI
Name: **Sorghum head caterpillar**
(Also called webworm)
Scientific name: *Mampava bipunctella* Rag.
Family: Pyralidae
Order: LEPIDOPTERA

The insect

Life cycle

- **Adults**

- **Pupae**

- **Eggs** laid while sorghum is in flower.

- **Larvae** small and hard to see
  - Feed on pollen and parts of flower
  - Spin webs tying flowers together

Damage

It is an important pest of sorghum.

Control

1. Use open headed varieties of sorghum that get less damage.

References

Hick, S., Rural Development series handbook No 17, p 59
Name: Sugarcane borer
(See also other sugarcane borers)
Scientific name: *Chilo terenellus* Pag.
Family: Pyralidae
Order: LEPIDOPTERA

**The insect**

**Life cycle**

- **Adults**
- **Pupae**
- **Eggs**
- **Larvae**

**Damage**
Larvae bore into stems. Young plants can die and the tops can be killed. Stems can break and cane for chewing is spoilt.
This is an important pest causing widespread damage.

**Control**
1. Remove old sugarcane stalks and rubbish
2. Avoid sites near pitpit and other grasses where the pest can live.
3. Use sugarcane varieties that get less damage.
4. Stripping old leaves reduces the damage.
5. Some parasites are known to help control.

**References**
Hick, S., Rural Development Series Handbook No 17 p 81
Name  
_Sweet potato hawkmoth_  
(Also as sweet potato hornworm; sphinx moth and convolvulus hawkmoth)

**Scientific name:** *Agrius convoluli* L.  
**Synonyms:** *Herse convoluli*. (L.) and *Sphinx convoluli* L. and others

**Family:** Sphingidae  
**Order:** LEPIDOPTERA

The insect

The adult is a large hawkmoth with grey wings and pink and black banded body. The wingspan is 75-120 mm and the body 45 mm long. The wings have irregular light and dark patterns. The adults fly at sunset. They are strongly attracted to lights and can fly long distances (Thousands of kilometres). The adults hover at flowers to suck nectar from them at sunset.

Life cycle

**Adults**- hawkmoth. Green with black lines on wings. Abdomen has pink bands.

**Pupae**- in soil 8-10 cm down. (3 weeks) but can over winter as pupae.

**Eggs**- laid singly on top surface of leaves and stems. They are green, oval & 1 mm long.

**Larvae**- are green to reddish brown with yellow stripes on the side. It has a brown horn (tail). Grow to 100-110 mm long. (3-4 weeks)

Damage

They eat the leaves of sweet potato. The larvae feed on the underside of the leaves. It is also known to damage legumes and sunflower. It is more serious in coastal areas and mainly below 1500 m. It is also worse in dry weather.

Control

1. There are natural parasites and predators that help control.  
2. Digging the ground to expose pupae reduces numbers.  
3. Larvae can be picked off leaves by hand.  
4. Chemical control is rarely needed but carbaryl insecticide is effective. (This should rarely be used as people eat sweet potato leaves. The young larvae that need to be sprayed are on young leaves that are the ones people eat.)

References

Hick, Rural Development Series Handbook No 17  
Hill, p 291  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 366-368  
PANS Manual No 4. Pest control in tropical root crops p 235
**Name:** Sweet potato leaf miner

**Scientific name:** *Bedellia sommulentella* (Zeller)

**[Synonym: Bedellia ipomoeae Bradley]**

**Family:** Lyontiidae

**Order:** LEPIDOPTERA

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**The insect**

The larvae of this very small moth mine into sweet potato leaves. The larvae are small green caterpillars.

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**Life cycle**

- **Adults:** 3 mm long. Brown to grey colour

- **Pupae:** on a web of silken threads among the leaves

- **Eggs:** laid on leaves usually near veins 0.2 mm across

- **Larvae:** light yellowish grey. Move by looping when not inside leaf.

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A life cycle takes 3-4 weeks, so pest numbers can build up quickly.

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**Damage**

The larvae can be up to 7 mm long and at first make straight mines in the leaves but later they mine out blotches in the tissue.

Only occasionally do large outbreaks of these caterpillars occur. Mostly, they are controlled by parasites and predators.

*Acrocercops homalacta* Meyr also mines sweet potato leaves in the highlands.

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**Control**

1. Care with chemicals is important as they can upset the balance of predators and parasites.
2. If it is necessary to spray, a range of chemicals will kill the larvae but not the pupae. Therefore it is necessary to spray twice about a week apart.

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**References**

Hick, Rural Development series Handbook 17
Swain, Ag Zoology in Fiji
**Name**  
Sweet potato vine borer  
(Also called sweet potato stem borer)

**Scientific name:** *Omphisa anastomosalis* Guenee  
**[Synonyms:** *Omphisa illisalis* Walker]  
**Family:** Pyraustidae/Pyralidae  
**Order:** LEPIDOPTERA

**The insect**
Larvae are yellowish with brown hard plates. Up to 3 cm long.

**Life cycle**

- **Adults** lay about 300 eggs
- **Eggs** on underside of leaf
- **Pupae** in tuber in a cocoon
- **Larvae** burrow into leaf stalks then burrow downwards.

Life cycle takes about 55 days.

**Damage**
The larvae bore into vines. It is claimed that the tubers are reduced in size. Infested sweet potato start to wilt in dry weather.

**Control**
1. Crop rotation is important.

**References**
DAL Entomology Bulletin No 18 or Harvest 8(2) p 95  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 274  
PANS Manual No 4 Pest Control in Tropical root crops p 92-93
Name  
**Taro hawkmoth**
(Also as taro hornworm &
grapevine hawkmoth)

Scientific name:  *Hippotion celerio* (L.)

*Synonyms:*  *Chaerocampa celerio* (L.)
and  *Deilephila celerio* (L.)
and  *Sphinx celerio* (L.)

Family:  Sphingidae

Order:  LEPIDOPTERA

The insect
The adults have small silvery markings on light brown torpedo-shaped bodies. They fly at night with a whirring sound. The front wings are brown with a silvery stripe and the rear wings are brown with a black central patch and bright pink near the body. The larvae are up to 60 mm long and are green or brown with a large eyespot on the fourth body segment and a small yellow eyespot on the fifth segment. The horn (tail) on the rear end is straight and black.

Life cycle

**Adults**-brown with grey patch
Hind wings have red tinge.
40 mm long and wingspan 70 mm.

**Pupae**- in soil. 45 mm x 10 mm
Have dark brown spots
(15-18 days)

**Eggs**- laid on upper surface
of leaves and stems. Oval
and bright green. (3-4 days)

**Larvae**- pink to black curved horn
Colour is green to brown.
With false eyespots. (10-15 day)

Damage
The larvae eat leaves and can do serious damage. They are normally found under the leaf and eat the edges of the leaf.
They eat leaves of taro and sweet potato and grapevine.
The loss of some of the leaves does not necessarily reduce the yield of corms.

Control
1. It is possible to pick the larvae off by hand.
2. Carbaryl insecticide can be used but is rarely needed.
3. Some parasites and predators are known which help control.

References
Hick, S., Rural Development Series Handbook No 17 p 86
PANS Manual No 4 Pest Control in tropical root crops p 235
Rangai, S., Taro Rural Development Series Handbook No 12 p 12
**Name**  
Vine hawkmoth

**Scientific name:** *Theretra oldenlandiae* Fabricius  
**Synonyms:**  
- *Chaerocampa oldenlandiae* Fabricius  
- *Hippotion oldenlandiae* Fabricius  
**Family:** Sphingidae  
**Order:** LEPIDOPTERA

**The insect**  
These moths are similar to sweet potato hawkmoth but have no pink areas on the hind wings. The moth has a wingspan of 60 to 75 mm.

**Life cycle**

```
  Adults
   \     /
   \   /  
Pupae   Eggs
   /   
  /     
Larvae
```

**Damage**  
The larvae feed on grapevines, sweet potato and taro.  
*Theretra pinastrina intersecta* is also reported eating taro leaves.

**Control**  
Not normally necessary.

**References**  
Kalshoven, Book 2 p 368, 635 (Dutch edition) Not in English edition
**Name**  
Violet rice stem borer  
(Also called pink stem borer and purple stem borer)

**Scientific name:** Sesamia inferens (Walker)  
**[Synonyms:** Nonagria inferens (Walker)]  
**Family:** Noctuidae  
**Order:** LEPIDOPTERA

**The insect**

The insect is a light brown moth with a dark brown streak on the front wings and white back wings. The body is about 14-17 mm long. The larvae are purple on the back and white underneath. The head is orange-red. The processes (spiracles) on the larvae are dark unlike pyralid borers. In corn they bore through the internodes unlike *Ostrinia*.

**Life cycle**

- **Adults** fly at night  
- **Pupae**- brown  
  (10 days)  
- **Eggs**- laid in rows in the leaf sheath (About 7 days)  
- **Larvae**- Feed on leaf sheath then tunnel into stem (About 35 days)

A life cycle takes 46-83 days.

**Damage**

Larvae bore into the stems of rice cutting off the sap supply causing pale unfilled heads of grain to develop. Leaf sheaths also die. Mostly it is not important but occasionally does damage. They also bore into sugarcane, corn and a number of other grasses. It is more common in the Markum Valley. They tend to get worse where there is a distinct dry season. It breeds all year round.

**Control**

1. Rotate crops.
2. Get rid of old stubble and flood paddy fields.
3. Rice seedlings can be dipped in insecticide before transplanting.

**References**

Frohlich, 1970, Pests, Diseases of Tropical Crops and their control p 144  
Hick, Rural Development Series Handbook No 17  
Hill, 1975, Ag Insect Pests of the Tropics p 299  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 348  
Kranz, 1977, Diseases, Pests and Weeds of Tropical crops p 491
Name: **White rice borer**  
(Also called white stem borer)  
Scientific name: *Scirpophaga innotata* (Walker)  
[Synonyms: *Scirpophaga sericea* Snellen  
and *Tryporyza innotata* (Walker)]  
Family: Pyralidae  
Order: LEPIDOPTERA

The insect
Moths hatch and fly at night. They are attracted to lights. There can be a resting stage in the life cycle during periods of drought.

Life cycle

- **Adults**: females lay about 160 eggs over 4 days.
- **Eggs**: laid in clusters on the underside of top leaves of rice plant. They are flat and covered with brown scales and hairs.
- **Pupae**: in lowest part of stem. (6-9 days)
- **Larvae**: bore into leaf sheath.

Life cycle about 39-46 days

Damage
The pest occurs in regions with a pronounced dry season. It only occurs in the lowlands to an altitude of 200 m.
Eggs are only laid in established rice crops around the edges of the field.

Control
1. Some control can be achieved by planting rice before the wet season. (Moths hatching is influenced by rains.)

References
CMI distribution maps No 253 (revised)  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 244-249
Name  White stem borer  
(Also called white rice stem borer)
Scientific name:  *Maliarpha separatella* Ragonot

| Synonyms: | *Ampyodes pallidicosta* Hampson,  
| and | *Anerastia pallidicosta* Hampson,  
| and | *Maliarpha pallidicosta* Hampson  
| and | *Maliarpha vectiferella* Ragonot |

Family:  Pyralidae  
Order:  LEPIDOPTERA  

The insect
This moth has long wings that overlap when at rest. The paler fore wings have a marked reddish brown line. The hind wings are white with a metallic shine.

Life cycle

- **Adults**: 15-18 mm long and wingspan 23-29 mm. Long pale yellow wings.
- **Pupae**: in loose cocoon in rice stem. Brown with red spot on the back.
- **Eggs**: laid together in clumps of 50 attached to leaf. These dry and twist the leaf around the eggs.
- **Larvae**: clear white with dark brown head. 18 mm when mature. Can enter resting stage in droughts.

Can be 3-4 generations per year.

Damage
The most common stem borer of sugarcane in wetter lowland areas. It bores into rice stems. This results in white heads. It can be a problem where continuous rice cropping is practised.

Control
For rice plough in stubble and flood the land for 2-3 months.

References
Hill, p 267
Name: Winged bean blotch miner
(Also called winged bean leaf miner)

Scientific name: *Leucoptera psophocarpella* Bradley & Carter
Family: Lyonetiidae/Elachistidae
Order: LEPIDOPTERA

The insect

Life cycle

Adults

Pupa

Eggs

Larvae

Damage
Larvae damage the underside of winged bean leaves.

Control

References
DAL Entomology Bulletin No 20 or Harvest 8(3) p 138-140
Holloway, Bradley et al CIE Guides, 1984, Lepidoptera p 87
The insect

Life cycle

- **Adults** - at rest resemble a dead leaf.
- **Pupa** - in cocoon on ground in fallen leaves, Head raised like helmet.
- **Eggs**
- **Larvae** - fat large and grey-green. 9 cm long. It has a brown horn like a hook and bent downwards.

Damage

Larvae eat the leaves of yam. Occasionally they can cause severe damage.

Control

Not usually necessary.

References

Kalshoven, 1951, De Plagen van de cultuur-Gewassen in Indonesia p 629,635 In Dutch edition but not English edition
Beetles and weevils
**Name**  
Agrilus beetles

**Scientific name:**  
*Agrilus spp.*  
and  
*Agrilus occipitalis* Esch.

**Family:**  
Buprestidae

**Order:**  
COLEOPTERA

---

**The insect**

The larvae of *A. occipitalis* are white and 2 cm long. The adults have a blue abdomen.

---

**Life cycle**

![Life cycle diagram]

**Damage**

They bore under the bark of trees including lime trees and Okari nut trees.

---

**Control**

Not normally necessary.

---

**References**

DAL Entomology Bulletin No 45  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 414
Name: Asiatic rhinoceros beetle
(Also called Coconut black beetle)
Scientific name: Oryctes rhinoceros (L.)
Family: Scarabaeidae
Order: COLEOPTERA

The insect
Adults are 35-50 mm long the male has a horn on the head that curves over backwards. They mostly fly at night to the crowns of palms. The larvae live in moist rotting vegetable matter particularly dead rotting palms.

Life cycle

- **Adults** - 40 mm long
- **Pupae** - in soil or rotting palm. 5-9 cm long. (20 days)
- **Eggs** - approx. 35 laid in rotting palms. White 3 mm. (11-13 days)
- **Larvae** - creamy white ‘C’ shaped. 60 mm long.

Life cycle about 5-9 months.

Damage
The adults of these beetles attack coconuts, pandanus, sago palms, nipa palms, oil palms, taro, sugarcane and banana. They bore into the crown of the palm and can kill young palms. Often after the adult bores a hole diseases and other insects like the palm weevil can get entry into the palm to cause rots. This insect is confined to the islands particularly the Gazelle peninsula.

Control
1. Destroy breeding places such as old decaying palm logs.
2. Collect and kill the adult beetles.
3. Creeping cover crops can hide potential breeding sites.
4. A virus disease is available to spread in areas where this insect is a problem.
5. Some insect predators and diseases help control this insect.
6. Chemicals are not of much use.

References
Frohlich, Pests and Diseases of Tropics p 203
Gorick, B.D., Using a virus against Rhinoceros beetles. Harvest 5(2) 84-91
Hick, Rural Development Handbook No 17 p 22
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 463
O’Connor SPC Exotic Pests and Diseases. Coconut pests.
PNG Ag J 17(2) 1965 p 51
Stride, G. 1977, Coconut palm rhinoceros beetle. Pest Advisory Leaflet No. 4 South Pacific Commission, Noumea, New Caledonia; Swain, Ag Zoology in Fiji p 75
Waterhouse & Norris, 1987, Biological control - Pacific Prospects p 101
Name: **Banana weevil borer**

**Scientific name:** *Cosmopolites sordidus* (Germar)

**Family:** Curculionidae  
**Order:** COLEOPTERA

---

**The insect**

The adults are brown when young and change to black. They have a hard shell and a pronounced long nose (snout). There are fine indentations over the wing cover. They move by walking, as they do not fly well. During the day they hide near the base of the plants.

**Life cycle**

**Adults** - can live for up to 2 years  
About 12 mm long with long nose.

**Pupae** - in mines  
in stems. White and  
12 mm long (1 week)

**Eggs** - 10-50 laid singly in  
leaf base White 1 mm.  
(5-8 days)

**Larvae** - White & legless 12 mm long  
(3-6 weeks)

An average life cycle is 29 to 47 days.

**Damage**

The larvae tunnel into the stem of bananas and the plants become weak and fall over. Young plants can wilt. Tunnels can be 8 mm wide and 30 cm long. It has also been recorded damaging yams. It is not a serious problem in PNG. A warm moist environment suits the insect best to allow year round breeding.

**Control**

1. Bananas with “B” group genes have some resistance.  
2. Use clean planting material, as insects are mostly spread in corms.  
3. Keep the garden free from weeds.  
4. Don’t leave old corms on top of the ground. They should be chopped up and allowed to dry out.  
5. Practice crop rotation in gardens where bananas are not growing.  
6. Be careful to not carry the insect in planting material to a new garden.  
7. Healthy growing bananas get less damage.

**References**

Feakin, Pest Control in Bananas. PANS Manual 1 p 87-93  
Frohlich, Pests and Diseases in Tropical Crops p 35  
Hick Rural Development Series No 17  
Hill, p 399; Kranz, p 406; Swain, Ag Zoology in Fiji p 43  
Waterhouse & Norris, 1987, Biological control - Pacific Prospects p 152
### Name
**Bean weevil**

**Scientific name:** *Acanthoscelides obtectus* (Say.)  
**Family:** Bruchidae  
**Order:** COLEOPTERA

### The insect
The adults are small fat oval weevils about 3 mm long. They have white grey, brown or black patches on the top. The legs and antennae are red. The young larvae have legs and later ones are legless.

### Life cycle

<table>
<thead>
<tr>
<th>Adults</th>
<th>Larvae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupae-inside the bean seed.</td>
<td>Eggs-several hundred laid on pods or seeds.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There can be up to 6 generations per year.

### Damage
Adults and larvae damage the seeds of all beans both in the field and in storage. The larvae feed and pupate inside the seeds, adults cur round holes in the seed as they emerge. In the field the damage by larvae is scarcely noticed, the main damage is done after harvest during storage. They are favoured by warm dry conditions.

### Control
1. Harvest crops as soon as mature.
2. Destroy old crop remains.
3. Plant beans away from stored or infected seed.
4. If seed are clean, store them in a sealed container.

### References
Name: **Black flea beetle**

**Scientific name:** *Arsipoda tenimberensis* Jacoby  
**Family:** Chrysomelidae  
**Order:** COLEOPTERA

The insect  
The insect is a very small black beetle.

Life cycle

![Life cycle diagram]

**Damage**  
The adult causes characteristic damage (small holes) to sweet potato leaves, corn, common bean and soybean and probably some other plants. The same or a similar insect has been reported on rice. It is widespread but the damage is normally not important.

**Control**  
Not normally necessary.

**References**  
DAL Entomology Bulletin No 18 or Harvest 8(2) p 97  
See Thistleton Survey Bulletin 36 p 9
**Name**  
Cane weevil borer

(Also called New Guinea sugarcane weevil)

**Scientific name:**  *Rhabdoscelus obscurus* Boisduval

**Family:** Curculionidae

**Order:** COLEOPTERA

**The insect**
A brown coloured weevil with a long nose (snout) curved under the body.

**Life cycle**

**Adults** 12 mm long, dark brown with black patches on the wings.

Pupae- in a cocoon of fibres in stalk.

Eggs-white, oval laid in stalk behind leaf sheath.

**Larvae** 12 mm long legless and with wrinkled grey body and red head.

Life cycle about 2 months.

**Damage**

Adults can cause serious damage to sugarcane by burrowing into the stem near the ground. It makes chewing cane unpleasant and allows other disease organisms into the plant. It also burrows into pawpaw, coconut, banana, sago palm and oil palm.

**Control**

1. Use resistant varieties of sugarcane.
2. Use clean planting material.
3. Get rid of old sugarcane stubble.
4. Rotate sugarcane crops.
5. Some insect parasites help keep it under control.

**References**
Swain, Ag Zoology in Fiji p 269
Name: Citrus leaf eating weevil

Scientific name: *Rhinascpha thomsoni* Waterh
Family: Curculionidae
Order: Coleoptera

The insect

Life cycle

- **Adults**
- **Pupae** in soil
- **Eggs**
- **Larvae** in soil

Damage

Adults feed on the leaves of lemons and probably other citrus. Mostly only young leaves are attacked.
Larvae attack the roots. They can be 1 m deep in the soil.

Control

1. Not normally necessary.

References

Other species.
Swain, Ag Zoology in Fiji p 59
**Name**  
**Coconut bole weevil**

**Scientific name:**  
*Sparganobasis subcruciatus* Marsh

**Family:**  
Curculionidae

**Order:**  
COLEOPTERA

---

**The insect**

**Life cycle**

- **Adults**
- **Pupae**
- **Eggs**
- **Larvae**

**Damage**

Adults and larvae severely damage palms, often occurring with the palm weevil. The bole weevil attacks the lower bole region of coconuts. Palms eventually fall over. Their eggs are laid within about 25 cm of the ground and in the trunk of the palm.

---

**Control**

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**References**
**Name**  
*Coconut hispid*  
(Also called coconut leaf hispine)

**Scientific name:** *Brontispa longissima* Gestro  
[Synonym: *Brontispa froggatti* Sharp]  
Also *Brontispa palmivora* Gres  
and *Brontispa simmondsi* Mlk.  
**Family:** Chrysomelidae  
**Order:** COLEOPTERA

**The insect**  
A small, flat, orange and black beetle. The adult is 10 mm long and 4 mm wide. The head and antennae are black and a small part of the wing cover is yellow-brown. The remainder of the wing cover is black.

**Life cycle**

- **Adults**
- **Pupae** in unopened young leaves  
  6 days
- **Eggs** laid between tightly folded young leaves. (5 days)
- **Larvae** feed inside and on unopened leaf. (36 days)

Life cycle takes about 121 days.

**Damage**  
Larvae and adults severely damage young coconut palms. They feed amongst and on the unopened leaflets. The adults chew narrow lines parallel to the midrib causing the leaf to look striped. The insect is mainly only a problem in coconut nurseries and is not normally a problem in the field. Eight other palm species are also attacked by these insects. Betel nut palms can be severely attacked when the palms are young. Some other species of insects such as *B. palmivora* damage coconuts and other palms.

**Control**  
These are usually kept under control by an introduced parasite. In nurseries if parasites do not give enough control the chemicals should be used with care.

**References**  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 447  
Lamb Insect Pests of PNG  
O’Connor Exotic Pests and Diseases SPC under coconuts; PNG J Ag. 17(2) 1965  
Waterhouse & Norris, Biological Control Pacific Prospects p 134
Name: Coconut leaf miner

Scientific name: *Promecotheca papuana* Csiki
[Synonym: *Promecotheca antiqua* Weise]
Family: Hispidae
Order: COLEOPTERA

The insect
Golden brown in colour with the tail end of the wing cover. The adult is about 8 mm long. All stages occur on the crown of coconuts.

Life cycle

**Adults**-female chews a slit in leaves then lays eggs. Can live for 5 months.

**Pupa**- in leaf (10 days)

**Eggs**- usually about 5 in a light brown egg case on underside of opened leaf. Adult can lay 80 to 100 eggs per female. (15 days)

**Larvae**- mine into leaf (17-30 days)

There could be up to 5 generations per year.

Damage
It mostly damages coconut palm but can also attack nipa palm, sago palm, betel nut palm and oil palm. They may not be able to complete their life cycle on these other palms. Adults and larvae chew the opened fronds. Mature palms are preferred.

It is normally only a problem in some parts of New Britain and Manus. Palms can take up to 2 years to resume nut production.

When all the different stages of the insect are present at the same time the insect is not a problem but when only one stage is present numbers can become large and cause problems.

Control
1. It is often controlled by predators and parasites, but sometimes these are not effective enough.
2. Chemicals are not normally used.
3. Lizards and birds probably help control.

References
Lamb, Insect Pests of PNG p 35
PNG Ag J 17(2) 1965; PNG Ag J 23(1&2) 1972, p 28;
Other species. Swain, Ag Zoology in Fiji p 74
O’Connor, SPC Exotic Pest and Diseases. Coconut section.
Name: **Dermolepida beetles**
(Or chafer beetles)

**Scientific name:** *Dermolepida nigrum* (Non f.)
*Dermolepida noxium* Britton

**Family:** Scarabaeidae
**Order:** COLEOPTERA

**The insect**
Brown or black beetles a little over 25 mm long. They do not have distinctly modified legs for digging. Often they fly at dusk and come to lights at night.

**Life cycle**

```
        Adults
           v
          Pupae
           ^
          Eggs
           v
         Larvae
```

**Damage**
The adults of *D. nigrum* have been reported chewing banana shoots.
The adults of *D. noxium* have been reported damaging taro.
On bananas, serious leaf damage has been caused in some areas on a regular yearly basis.

**Control**
Not normally necessary.

**References**
Gressitt, J.L. 1977 NG Beetles Wau Ecology Institute Handbook No 2 plate 66
Lamb, Insects of PNG p 18
**Name**  
Elephant beetle  
(Also called Unicorn beetle)

**Scientific name:** *Dynastes gideon* (L.)  
**Synonym:** *Xylotrupes gideon* (L.)  
**Family:** Scarabaeidae  
**Order:** COLEOPTERA

**The insect:** Only the male beetle has long protuberences one on the head and one on the thorax that look like enormous jaws but are really harmless. Larvae are covered with coarse red hairs and live in soil with decaying plant matter. The ‘C’ shaped larvae are up to 7 cm long.

**Life cycle**

![Life cycle diagram]

A life cycle takes about 8 to 11 months.

**Damage**

Adults feed on the underneath surface of the midrib of coconut fronds. They also attack oil palm, sugarcane, banana, bamboo, litchi and potato. Adults are also often found feeding on the young bark of flame trees (*Poinciana*)  
The females bore into the centre leaf of coconuts in a similar way to *Oryctes* beetles. Males are often found on the newly opened flowers.

**Control**

**References**

CIE distribution maps No 474.  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 468  
Lamb, Insect Pests of PNG p 17  
PNG Ag J 17(2) p 51
**Name**  
**Eupholus weevils**

**Scientific names:**  
*Eupholus* spp.  
*Eupholus cinnamoneus* Pasc.  
*Eupholus schonherri* Guer  
*Eupholus nickerli* Hlr.

**Family:**  
Curculionidae

**Order:**  
COLEOPTERA

**The insects:** These are quite large and often brightly coloured weevils that occur on the coast. Sometimes they occur up to 900 m but are more common below 450 m altitude. The colours are bright metallic colours. They chew the leaves of a range of plants.

**Life cycle**

- **Adults**  
- **Pupae**  
- **Eggs**  
- **Larvae**  

**Damage**  
Adults chew the leaves of cassava, kaukau and yams. Also reported on cashew and avocado.

**Control**  
Not normally necessary.

**References**  
New Guinea Beetles plate 4 d
**Name**

False wireworm

---

**Scientific name:**  *Gonocephalum ochthebioides* Ful.  
**[Synonym:** *Opatrum* sp.]  
**Family:** Tenebrionidae  
**Order:** COLEOPTERA

---

**The insect**

These beetles have a firm wing cover. They live in the soil. During the day they collect in shady sites. The larvae resemble wireworms being long, thin and round. Both larvae and adults live on partly decayed plant material.

---

**Life cycle**

- **Adults** - live 6 months.

- **Pupae**

- **Eggs**

- **Larvae**

A life cycle takes 4-5 months.

---

**Damage**

Reported damaging radish  
Mostly these live under stones and logs or in rotten wood. They can damage cuttings of sugarcane, cassava, as well as rice and corn. Attacks occur usually just after gardens have been cleared.

---

**Control**

Not normally necessary.

---

**References**

Other species.  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, 423
**Name**  
Horned weevil  
(Also called spiny weevil;  
leaf eating weevil and shot hole weevil)

**Scientific name:**  
*Apirocalus cornutus* (Pascoe)  
*Apirocalus ebrius* Faust  
*Apirocalus terrestris* Thompson  
**Family:** Curculionidae  
**Order:** COLEOPTERA

**The insect**

**Life cycle**

Similar to Oribius weevils

**Adults**

**Pupae**

**Eggs**

**Larvae**

**Damage**

Occur up to about 1600 m altitude  
Adult weevil damage bananas, cassava, taro, aibika, chilli, cabbage, choko, lettuce, beetroot, carrot,  
sweet potato, coffee, bamboo, apple, citrus, soursop, guava, cashew, peanut, mung bean, strawberry.  
They can cause severe damage in cacao and coffee  
It mainly attacks growing points and soft shoots. It chews the leaves eating holes and this is often  
called shot hole damage. Other insects do similar damage. The damage is often not serious.  
On bananas it eats the leaves off young plants and feeds on flowers of older plants.

**Control**

1. The weevils can be picked off plants and drowned in a tin of water that has a little kerosene  
on the surface.  
2. Chemical control is not easy.

**References**

DAL Entomology Bulletin No 18 Harvest 8(2) p 97  
Encyclopaedia of PNG p 560  
Hick, Rural Development Series Handbook 17  
Lamb, Economic entomology in the tropics p 116
Name  Island pinhole borers

(Also called coconut shot-hole borer)

Scientific names:  
- *Xyleborus exiguus* Walk.
- *Xyleborus perforans* (Wollastan)
  - **Coconut shot-hole borer**  
    - *Xyleborus potens* Schedl.

Family:  Scolytidae
Order:  COLEOPTERA

The insect

These bark beetles bore into trees. They are about 2 mm long and reddish brown.

Life cycle

- **Adults**- fly and bore into trees.
- **Pupae**
- **Eggs**- laid in tunnels
- **Larvae**- bore outwards from the tunnel where they are born.

Damage

They bore into trees and carry fungal disease spores from one tree to another.  
The damage from boring can affect timber quality. They are pests of coffee and rubber.  
*X. perforans* has been recorded damaging sugarcane, coconut, citrus, breadfruit. With sugarcane, adults and larvae bore into the stems at ground level. They form a branching system of tunnels that are often infected by fungal diseases.  
*X. potens* has been recorded damaging avocado.  
*X. exiguus* has been recorded damaging coconut.

Control

Not normally possible.

References

- CIE distribution maps No 320.
- Frohlich, Pests and Diseases of Tropical crops p 99 plate 17
- Handbook No2 New Guinea Beetles Wau Ecology Institute p 70
- Hick, Rural Development Handbook No 17
- O’Connor, SPC Exotic Pests and Diseases Section on tea
**Name**  
Leaf beetles

**Scientific names:** Cassena spp and Psylliodes spp.

**Family:** Chrysomelidae

**Order:** COLEOPTERA

---

The insect

---

**Life cycle**

- **Adults**
- **Pupae**
- **Eggs**
- **Larvae**

---

**Damage**

*Cassena intermedia* Jac.  
Chrysomelidae/Galerucidae (COL.)

*Cassena papuana* (Jac.)  
Chrysomelidae/Galerucidae (COL.)

Leaf beetles attack aibika, beans including common bean, mung bean, soybean, snake bean, broad bean, peas, corn. Important occasionally. New Guinea beetles p 63 Also reported causing shot hole damage to apple. See Thistleton survey Bulletin 36 p 44

*Psylliodes loriae* Jac.  
Chrysomelidae (COL.)

Reported damaging spinach and eggplant.

*Psylliodes* sp.  
Chrysomelidae (COL.)

Reported damaging young tomato leaves.

*Psylliodes* sp nr *fulvipes* Jacoby,  
Chrysomelidae (COL.)

Feeding on pumpkin leaves, snake bean and sweet potato. Cause minor damage to leaf epidermis.

**Control**

Not normally necessary.

---

**References**

Other species.  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 444
**Name**  Leaf eating ladybird

**Scientific names:**  *Henosepilachna signatipennis* Boisd.
and  *Henosepilachna haemorrhoea* (Biel)

[*Epilachna signatipennis* Boisduval also eats bean leaves.]

[and *Epilachna cucurbitae* Richards eating cucumber leaves.]

**Family:**  Coccinellidae

**Order:**  COLEOPTERA

---

**The insect**

This small round beetle is yellow with black spots. The number of spots on *Epilachna* species varies. The larvae are found on the underside of leaves.

---

**Life cycle**

![Life cycle diagram](image)

**Damage**

Both the larvae and adults eat the leaves, young fruit and flowers of plants. They eat pumpkin and cucumber flowers and leaves, beetroot, spinach, common bean, winged bean, mung bean, soybean, eggplant, tomato and potato, ginger and a number of other legumes. *Epilachna signatipennis* eats aibika leaves. They tend to eat the fleshy parts underneath the leaf. They tend to prefer higher humidity.

Other ladybird beetles look similar to this pest but are in fact good insects because they feed on aphids. The pest *Epilachna* species have a covering of fine hairs that helps you to tell them from the good species.

**Control**

1. Parasites seem to be of little assistance in control.
2. Larvae can be controlled with carbaryl insecticide.
3. Remove old crop residues after harvest.

---

**References**

Hick, Rural Development Series Handbook No 17
Young, 2nd PNG Food Crops Conference
Waterhouse & Norris, 1987, Biological Control - Pacific Prospects p 127
**Name** Lesser coconut borer
(Also called Tahitian coconut borer)

**Scientific name:** Diocalandra taitense (Guer.)
[Possibly also Diocalandra frumenti (F.)]
**Family:** Curculionidae
**Order:** COLEOPTERA

The insect

Life cycle

```
   Adults
     ↘
     |                ↗
   Pupae  ➔  Eggs
     |                ↘
     |                |
   Larvae ➔  Larvae
```

**Damage**

Larvae bore into all parts of the coconut palm. It is probably not a serious pest but can cause damage where other damage has already occurred.
It probably also attacks nipa palm.

**Control**

Not normally necessary.

**References**
CIE Distribution maps No 248
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 500, 501
Name: Monolepta beetles  
(See similar Pumpkin beetles)

Scientific names:  
- *Monolepta bifasciata* Hornstedt  
- *Monolepta nigroapicata* Bryant  
- *Monolepta semiviolacea* Fauvel

Family: Chrysomelidae  
Order: COLEOPTERA

The insect

Adult *M. bifasciata* is yellow-white with brown patches. It is about 4 mm long.

Life cycle

Damage

They feed on young shoots and flowers of cassava, corn, mung beans, pumpkins, cucumber, and sweet potato.

*Monolepta sp nr bifasciata* Hornstedt. Chrysomelidae (COL.) Feeds on leaves of cassava. See Kalshoven p 441. It is yellowish-white with brown patches. It is an occasional pest of cassava. It feeds on the shoots and young leaves.

*Monolepta nigroapicata* Bryant. Chrysomelidae (COL.) Monolepta beetle Reported feeding on corn tassels. Also feeding on mung bean leaves and young shoots. Also feeding on leaves and flowers of pumpkins.

*Monolepta semiviolacea* Fauvel. Chrysomelidae (COL.) Reported damaging cucumber. Feeding on leaves of potato. Also feeding on leaves and flowers of pumpkins. See Thistleton survey Bulletin 36 p 12

Control

Not normally necessary.

References

Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 441 and opposite p 492

Thistleton, survey. Bulletin 36 p 12
Name: New Guinea Rhinoceros beetle

Scientific names: *Scapanes australis grossepunctatus* Sternb. and *Scapanes australis australis* (Boisd.)

Family: Dynastidae

Order: COLEOPTERA

The insect

These are large black beetles similar to rhinoceros beetles. Males have a horn on the head and two horns of the thorax. Females have only a very small double horn on the head. Of these two very similar insects the first one occurs on New Britain and Bougainville and the other one occurs on the New Guinea mainland. The both tend to be coastal and are occasionally found up to 900 m altitude.

Life cycle

- **Adults**: live for about 100 days.
- **Pupae**: under fallen logs
- **Eggs**: laid under fallen logs
- **Larvae**: “C” shaped, live on rotting wood under fallen logs

A life cycle takes about one year.

Damage

Adults attack and can kill young coconut palms (2 - 5 years old), oil palms, pineapples, manila hemp and bananas. The larvae feed on decaying plant material and organic matter in the soil often beneath fallen logs. The entry holes of this beetle allow the black palm weevil and diseases to gain entry. Damage is often worse in plantations planted into newly felled forest. *Scapanes australis australis* on the New Guinea mainland is the worse pest.

Control

1. The adults can be removed by hand.
2. Creeping cover crops cover up possible breeding sites.
3. Remove old decaying logs from gardens.

References

Gressitt, Handbook of Common New Guinea Beetles p 34
Hick, Rural development Series Handbook No 17
Lamb, Insect Pests of PNG p 18
PNG Ag J 17(2) 1965.
Waterhouse & Norris, Biological Control Pacific Prospects p 122
Name  
Palm weevils  
(Also called black palm weevil & red palm weevil)

Scientific names:  
*Rhynchophorus bilineatus* (Montr.)  
Black palm weevil  
[Synonym] *Rhynchophorus papuanus* Kirsch  
Also *Rhynchophorus ferrugineus* (Oliv.)  
Red palm weevil

Family:  
Curculionidae

Order:  
COLEOPTERA

The insect
The adult weevil is black and 25 to 40 mm long. It has a typically elongated snout. Adults are strong fliers they fly in mornings and evenings and make a buzzing sound. They can fly up to 900 m. They keep laying eggs for 5-8 weeks and lay 400 eggs.

Life cycle

- **Adults**: 25-40 mm long. Live for 2-3 months.

- **Pupae**: in bark in cocoon (12-20 days)

- **Eggs**: eggs are laid in soft parts of the palms. Light yellow and 2.5 mm long. (2-5 days)

- **Larvae**: barrel like. (36-78 days)

A life cycle takes about 82 days and more as altitude increases.

Damage
*R. bilineatus* is the most serious pest. They are possibly the most damaging pests of young coconuts. They attack coconuts, sago, oil palm and fishtail palm and can kill them. Larvae can only live in soft sappy tissue. They can live in the refuse from processing sago. They are attracted to damaged palms, e.g. Sago palms are attractive for 2-13 days after cutting. Normally they gain entry where the palm has been damaged by cutting or where rhinoceros beetles have made entry. They can also attack the young unopened leaves causing them to collapse and drop off.

Control
1. Avoid damage to palms.
2. Repair or seal off holes from rhinoceros beetles with tar.
3. Cut do not tear the fronds off palms, about 25 cm from the base.
4. Keep roots of young palms covered with soil. (20 cm thick).
5. Control the *Oryctes* and *Scapanes* beetles.
6. Adults can be trapped in split sections of sago-palm trunk and destroyed.

References
DAL Entomology Bulletin No 36 or Harvest 11(1) p 33-35
Hick, Rural Development Series. No 17
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 487-491
Lamb, 1974, Economic Entomology in the tropics Academic p 104; PNG Ag J 17(2) 1965 p 54
Name  Pumpkin beetles  
(Also called red pumpkin beetles)

Scientific names:
* Aulacophora abdominalis* (Fabricius)  
* Aulacophora coffeae* Hornstedt  
* Aulacophora culcullata* Blackburn  
* Aulacophora femoralis* (Mots.)  
* Aulacophora melanopus* Blanchard  
* Aulacophora pallidifasciata* Jacoby  
* Aulacophora papuana* Jac.  
* Aulacophora pygidialis* Baly  
* Aulacophora rigoensis* Jacoby  
* Aulacophora similis* Olivier  

Family:  Chrysomelidae  
Order:  COLEOPTERA  

The insect

They are yellow beetles that are often found on pumpkins. *A. similis* is about 7 mm long and has a pointed end. The front is black and the legs yellow.

Life cycle

![Life cycle diagram](image)

- **Adults**: about 6 mm long  
- **Pupae**: in the ground  
- **Eggs**  
- **Larvae**: in the ground

Damage

The adults feed on flowers and leaves. The larvae tunnel in stems and attack roots. They damage beans including common bean, mung bean, soybeans, peanuts, broad beans, and also cassava, pumpkin, spinach, sweet potato, and other pumpkin family plants such as rockmelon, zucchini. Also reported on corn.

Control

1. Possibly parasites  
2. Possibly mulches  
3. They can be killed with Derris dust or sprays of carbaryl.

References

- Insects of Micronesia Vol 17 No 1 p 28  
- Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 440 and opposite p 492  
- New Guinea beetles p 63  
- Swain, Ag Zoology in Fiji p 144  
- Waterhouse & Norris, 1987, Biological Control - Pacific Prospects p 142
Name: Ramu canegrub  
(Also called sugarcane white grub)

Scientific name: *Lepidiota reuleauxi* Brenske (Arrow?)
Family: Scarabaeidae
Order: COLEOPTERA

The insect
It is a dark brown beetle with digging legs at the front.

Life cycle

```
Adults

Pupae

Larvae

Eggs
```

Life cycle probably about 380 days.

Damage
Larvae feed on roots causing stunting and death of plants. Adults and pupae are found in soil. Probably damage is worse in sandy soil.

Control
Not normally necessary.

References
Other species.
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 478
**Name**  
Rhyparida coriacea

**Scientific name:** *Rhyparida coriacea* Jac.

**Family:** Chrysomelidae

**Order:** COLEOPTERA

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**The insect**
A leaf eating chrysomelid beetle.

**Life cycle**

![Life cycle diagram]

**Adults** → **Eggs** → **Larvae** → **Pupae** → **Adults**

**Damage**
The adult beetles feed on the leaves of legumes.
They have also been recorded eating the leaves of sunflower, eggplant, Macaranga, Elaeocarpus and Castanopsis.

**Control**
Not normally necessary.

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**References**
PNG Ag J 17(4) 1965 p 168
Name: Shot hole weevils

Scientific names:
- *Oribius cinereus* Mshl.
- *Oribius cruciatus* Fst.
- *Oribius destructor* Mshl.
- *Oribius inimicus* Mshl.

Family: Curculionidae
Order: COLEOPTERA

The insect

These are small hard long nosed weevils that are common on many plants. They chew small irregular holes.

Life cycle

A life cycle probably takes about a year.

Damage

They feed on a wide range of plants. Targets are one of the most commonly eaten plants. They also eat hibiscus, banana, cassava, taro, citrus, sunflower, avocado, cashew, macadamia, passion fruit, corn, pumpkin, asparagus, rhubarb, strawberry, silver beet, amaranth, *Rungia*, soursop, snake bean, mung bean, lima bean, and others.

They chew irregular shaped holes.

The last two species listed above are most common in the highlands.

Control

1. Clean weeding of gardens helps control these weevils although there can be a temporary increase in damage soon after weeding. Mulching also helps.
2. The weevils can be hand picked into a tin of water with a layer of kerosene on the surface.

References

PNG Ag J 15(1 & 2) p 33
Name: Small tortoise beetles

Scientific names:
- *Cassida diomma* Boisduval
- *Cassida papuana* Spaeth
- *Cassida sexguttata* Boisduval

Family: Chrysomelidae
Order: COLEOPTERA

The insect

Life cycle

Damage

Feed on sweet potato leaves as well as lettuce and potato. Damage normally minor.

Control

Not normally necessary.

References

DAL Entomology Bulletin No 18 or Harvest 8(2) p 96
Name: Sweet potato weevil

Scientific name: *Cylas formicarius elegantulus* (Summers)
Family: Curculionidae
Order: COLEOPTERA

The insect
This is a small shiny blue-black ant-like weevil. The adult rarely flies but they can fly up to 1.5 km and they are very poor at burrowing in the soil. It is about 5-6 mm long. Adults feed on leaves and stems.

Life cycle

- **Adults**: Can live for several months
- **Pupae**: In tubers or vines. (1 week)
- **Eggs**: In holes in vines tubers. (1 week)
- **Larvae**: White and legless 7-8 mm long. Burrow into vines and tubers. (14 days)

Life cycle about one month. Can be 8 generations per year.

Damage
They can cause serious damage in dry, cracking soils and in old gardens. Damage is worse in dry weather. The insect thrives under warm moist conditions. They burrow into sweet potato vines and tubers. Tubers get a bitter taste and bad smell. Insects can also live on other sweet potato family plants.

Control
1. Crop rotations prevent large numbers building up. A one-year break between crops and one kilometre between gardens is needed.
2. Mounding soil around sweet potatoes especially in places with dry, cracking soils.
3. Be careful not to take weevils to new gardens in planting material.
4. Deep rooting and fast maturing kinds of kaukau get less damage.
5. Get rid of old sweet potato vines after the crop is harvested. Pigs or other animals can be used to clean the gardens.
6. Insects can also breed in sweet potato family weeds e.g. morning glory, so remove these from near the garden.
7. Harvest the crop as soon as it matures or damage can still occur.
8. Planting material can be dipped in Malathion insecticide if severe damage is expected.

References
DAL Entomology Bulletin No 17 or Harvest 8(2) 90-93 & Harvest 11(1) 28
Hick, Rural Development Series Handbook No 17; Hill, p 408
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 521-524
Macfarlane, R. and Jackson, G.V.H. 1989. Sweet potato weevil Pest Advisory Leaflet No. 22 (ISSN 1017-6276) South Pacific Commission, Noumea New Caledonia
Kimber, 1972, Harvest 2(4) p 117-121.
PANS Manual No 4 Pest Control in tropical root crops p 235; Swain, Ag Zoology in Fiji p 160
Waterhouse & Norris, Biological Control Pacific Prospects p 148
Name: Taro beetles

Scientific names: Papuana aninodalis Prell  Papuana biroi End Prell
Papuana huebneri Fairm  Papuana japonensis Arrow
Papuana laevipennis Arrow  Papuana semistriata
Papuana szentivanyi Endrodi  Papuana trinodosa Prell.
Papuana uninodes Prell  Papuana woodlarkiana (Montr.)

11 of the 18 species of taro beetles have been recorded as pests of food plants.

Family: Scarabaeidae
Order: COLEOPTERA

The insect
The adult beetles are brown to black and with strong legs for digging. They are 15-25 mm long and the wing covers do not quite reach the end of the abdomen. There are one or more small horns on top of the thorax and head. They fly at night.

Life cycle

Adults- can live for 150 days

Pupae- 200 mm to 1 m deep in soil.

Eggs- in soil near grasses etc. 50-150 mm deep.

Larvae- feed on plant roots especially grasses. White ‘C’ shaped grubs

Life cycles: P huebneri - 122 days; P woodlarkiana - 215 days

Damage
Both the adults and larvae eat roots of plants. Larvae are usually found amongst the roots of grasses while adults feed on taro corms and other roots such as, Chinese taro, Giant taro, bananas, sweet potato, pitpit, coconut, sago, sugarcane and potato. They can also badly damage young betel nut palms. With bananas in dry areas the taro beetle can kill the growing point of young plants.

P. biroi, P trinodosa and P.woodlarkiana recorded as common in highlands on potato and taro. They also feed on peanuts below the ground. P. huebneri and P woodlarkiana are the most damaging in New Britain.

Control
This is very difficult.
1. Garden location influences damage, keep new gardens separate from old and far from grassy areas.
2. Barrier crops around the edges of gardens possibly helps control.
3. Only plant taro for one or possibly two years in the same area if possible.
4. Some varieties of taro get less damage.
5. Chemical control is not recommended.

References
Handbook of NG Beetles Wau Ecology Handbook No 2
Hick, Rural Development Handbook No 17 p 85; Lamb, Some Insect Pests of PNG p 17
PANS Manual No 4 Pest Control on root crops. p 202
Perry, in Enyi (ed), Ag in the Tropics UPNG p 319
PNG Ag J 17(3) p 99; Waterhouse & Norris, Biological Control Pacific Prospects p 118
**Name**  
Tortoise beetles  
(Also called tortoise shell beetles & large tortoise beetles)

**Scientific name**
Aspidomorpha adhearens Weber  
Aspidomorpha australasiae Jacoby  
Aspidomorpha miliaris (F.) Spotted tortoise beetle.  
Aspidomorpha ?punctum (Fabricius)  
Aspidomorpha quadriradiata Boh.  
Aspidomorpha socia Montr.  
Aspidomorpha testudinaria Montr.

**Family:** Cassididae  
**Order:** COLEOPTERA

**The insect**
The adults are round, tortoise shaped, insects often with bright colours.

**Life cycle**

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Adults: about 12 mm across  
Oval in shape.

Pupae  
Eggs: laid underneath leaves.

Larvae: flattened, spiny  
and often with old skins held over the back.
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A life cycle may take 4-6 weeks.

**Damage**
The adults and larvae eat holes in sweet potato leaves and eventually all the leaf between the veins can be eaten away. They also eat aibika. They are normally not a major pest.

**Control**
1. Old sweet potato plants and other plants in the same family can act as places for the insects to breed so these should be removed.
2. Spraying with carbaryl insecticide works (0.2% solution).
3. Often control is not necessary.

**References**
DAL Entomology Bulletin No 18 or Harvest 8(2) p 96  
Hill  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 445 and opposite p 492  
New Guinea Beetles plate 9f
Bugs, leafhoppers and aphids
Name **Amblypelta bugs**  
(Or tip wilt bugs; green coconut bug; Papuan tip wilt bug and coreid bugs)

**Scientific names**  
*Amblypelta cocophaga* China - Green coconut bug  
*Amblypelta costalis szentivanyi* Brown  
*Amblypelta gallegonis* Lever  
*Amblypelta lutescens papuensis* Br. - Papuan tip wilt bug  
*Amblypelta theobromae* Brown - Tip wilt bug  
**Family:** Coreidae  
**Order:** HEMIPTERA

**The insect**

The adults are about 20 mm long. They are a greenish brown with smoky wings. The colour varies with species. They fly short distances in warm times of day.

**Life cycle**

Adults mate frequently and lay 2-3 eggs, singly on leaves and shoots each day for several days. Eggs are oval, pale green and about 1.7 mm long. They hatch after 6-7 days. Nymphs remain on the same plant all their life. A life cycle takes about 50 days and 3-4 generations per year.

**Damage**

They suck sap and secrete a toxic saliva. A few insects can cause extensive damage. They can cause plant shoot tips to wilt and young coconuts and other fruit to drop off. They attack cacao, coconuts, rubber, cassava, pawpaw, mango, soursop, avocado, cashew, citrus, mung beans, winged bean, sweet potato, choko, rosella, aibika, sugarcane and other plants. They probably also attack bananas, guava, custard apple, citrus and macadamias. In cassava they have been reported as killing the growing tips. This is particularly for *A lutescens papuensis* and it occurs at low altitudes on the south side of PNG. In Bougainville an ant interferes with the natural enemies and allows this insect to become serious occasionally. (*A. gallegonis*)

**Control**

1. As these bugs often live on trees in the bush, attack is probably worse when fruit trees are in gardens near bush.  
2. In coconut and cocoa plantations the bug is controlled by the Kurukum ant *Oecophylla smargadina*. Everything should be done to encourage the development of these ant colonies.

**References**

Hick, Rural development Handbook Series No 17 p 17  
PNG Ag J 13(2) 1960 p 59  
Wood, Cocoa Tropical Agriculture Series Longmans p 173
Name: Banana aphid

Scientific name: Pentalonia nigronervosa Coq
Family: Aphididae
Order: HEMiptera

The insect
These small brown aphids occur near the tops of banana plants and around the false stem and under the leaf bases. They are 1 to 2 mm long. Both winged and wingless forms occur. The winged forms have dark brown wings. A closed cell on the forewing helps identify the species. The winged forms fly between plants.

Life cycle
A life cycle takes about 2 weeks. There can be 20-26 generations per year. Both winged and wingless females can produce 25-50 young each. Winged forms can produce 6-29 young.

Damage
Direct damage is rare but the winged forms can spread virus diseases such as bunchy top virus. This disease causes plants to be stunted, leaves to bunch together and produce small fruit. Bananas are the main plant attacked, but taro and ginger family plants can also be attacked. Honey dew secreted by the insects cause sooty moulds to grow. Ants also occur in association with these insects and they help reduce the affect of predators.

Control
1. Some varieties of bananas seem less attacked than others.
2. Control by chemicals is normally too expensive.
3. Be careful not to take aphid-infected plants to a new garden.
4. Controlling ants helps predators to build up and control the aphids.

References
Hill, 1975, Ag Insect Pests of the Tropics and their control p 164
Kranz, 1977, Diseases, Pests and Weeds in Tropical crops p 366
PANS Manual No 1 Pest Control in Bananas p 108
Swain, Ag Zoology in Fiji
Waterhouse & Norris, 1987, Biological Control - Pacific Prospects p 42
Name: Banana lace-bug

Scientific name: *Stephanitis typica* (Dist.)

[Synonym: *Cadamustus typicus* Dist.]

Family: Tingidae

Order: HEMIPTERA

The insect
These are small white bugs that are almost clear. They group together on the underside of leaves.

Life cycle

Damage
Damage is probably only slight. Patches of the leaves turn yellow then brown.

Control
Not normally necessary.

References
CMI distribution maps No 308
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 114
PANS Manual No 1 Pest Control in Bananas p 108
**Name**  
Black leaf-footed bug  
(Also called leaf-footed plant bug)

**Scientific name:** *Leptoglossus australis* (Fab.)  
[Synonym: *Leptoglossus membranicus*]  
**Family:** Coreidae  
**Order:** HEMIPTERA

The insect  
This bug is about 20 mm long and smoky black in colour. The body has several orange to red spots. The hind legs are long and flattened and toothed along the edge. The antennae have black and pale orange zones along their length.

Life cycle  
Eggs are pale brown & about 1.6 mm long and barrel shaped. They are laid in chains on underside of leaves and hatch after 8-10 days. There are 5 nymphal instars

Damage  
This bug damages at least 26 different species of plants. They are common on pumpkins and zucchini in highlands. They also get on cucumber, rockmelon, bitter cucumber, granadilla, cassava, sweet potato, taro, yams, passion fruit, tomato and on citrus.  
The insect occurs in most districts of PNG at most temperatures and localities, wet and dry, grassland and forest up to 1750 m altitude.  
The nymphs and adults suck the sap particularly of fruits causing plants to wilt, fruit to drop off and fruit to rot.  
It is common but not very serious.

Control:  
1. Control measures are not normally required.  
2. Malathion insecticide can control this insect. It needs to be sprayed 12 days apart.

References  
DAL Entomology Bulletin 41 or Harvest 11(4) p 156-157  
Hill, p 209  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 101  
PNG Ag J 13(2) Sep 1960 p 70  
Swain, Ag Zoology in Fiji p 145
Name: Brown backed rice planthopper  
(Also called brown planthopper)

Scientific name: *Nilaparvata lugens* Haseg
Family: Delphacidae
Order: HEMIPTERA

The insect
A small brown hopper 2-3 mm long. It has 3 stripes along the back.

Life cycle
Eggs are laid at base of rice stems. They hatch after about 7 days. There are 5 nymphal instars over 14 days.

Damage
This insect is mainly a pest of irrigated rice. The sap sucking of large numbers of the pest causes rice plants to dry out leaving large brown patches in the crop this is called hopper burn. Also it secretes honeydew on which sooty mould fungi grow leaving black stains at the base of the rice plants. It is a potential virus carrying insect.

Control
1. Insecticides can be used but insects become resistant to them.
2. Burn rice stubble after harvest.
3. Some varieties of rice are resistant.

References
Hale, Field notes on rice pests, 1st PNG Food crops conference
Hick, Rural Development Series Handbook 17 p 5
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 131 and plate D opposite p 69
Lamb, Insect Pests of PNG p 13
O’Connor SPC Exotic Pests and Diseases. Rice Section
Swain, Ag Zoology in Fiji p 250
**Name**  
Brown coffee scale  
*(Also called hemispherical scale and helmet scale and coffee scale)*

**Scientific name**: *Saisettia coffeae* Walker  
**Family**: Coccidae  
**Order**: HEMIPTERA

**The insect**  
The scale insect is green when young but dark brown when older. Immature females have an H-shaped mark on their bodies. Mature scales are about 2 mm long.

**Life cycle**  
A complete life cycle adult to egg takes about 6 months. Eggs are laid under females. Up to 600 eggs per female.

**Damage**  
It attacks coffee and other plants such as citrus, guava, mango etc.  
It clusters on the shoots, leaves and fruit.

**Control**

1. Keep trees well fertilised.  
2. White oil will control young scales.  
3. Controlling ants help control the scales.  
4. Pruning off heavily infected branches then leaving them on the ground allows the parasites that control the insect to emerge and then attach other insects.

**References**

Hill, D, S, 1975, Ag Insect Pests of the tropics p 183  
Swain, Ag Zoology in Fiji
Name: Cacao mirid
(Also called Helopeltis bugs)

Scientific name: *Helopeltis clavifer* (Walker)
Family: Miridae
Order: HEMIPTERA

The insect

These bugs have immature stages with soft bodies that are delicate and therefore they can easily dry out and die. They occur in warm humid areas. They are normally found only near the host plants. A distinctive feature of the adults and larvae is a pin-like process that arises vertically from the thorax.

Life cycle

Adults are 7-9 mm long and 2 mm wide, they have long legs and long antennae and live 6-10 weeks. They lay 50-300 long shaped eggs separately on shoots that hatch in 6-14 days. Nymphs are soft bodied and take 2-4 weeks to become adult.

Damage

Adults and nymphs have piercing mouthparts that secrete a toxic saliva which causes a dead spot on the plant. The poison can kill the terminal bud and growing shoot of plants. One insect can make 50 feeding punctures a day. Young fruits can die and older fruits can be deformed. They have been recorded damaging 25 species of plants in PNG. These include sweet potato, eggplant, snake bean, cashew, custard apple, mango, guava, passion fruit, Ficus sp., avocado, citrus, cacao and Leucaena. The insects occur from sea level up to 1670 m altitude. Infestation is often restricted to only to a section of a crop or tree.

Control

1. Collection of insects by hand is possible.
2. Try to keep susceptible crops separate from each other.
3. Reducing shade reduces the number of insects.
4. Use well-drained and fertile soils for crops.
5. Chemical insecticides can be used. They need to be sprayed on cool shady times of day. Only infested areas need to be sprayed.

References

Kranz, p 289
PNG Ag J 29(1-4) p 1
Wood, Cocoa, Tropical Agriculture Series p 167
Name: Cardamom mirid

Scientific name: Ragwelellus horvathi Poppius
Family: Miridae
Order: HEMIPTERA

The insect

A narrow insect 12 mm long with long antennae and big eyes

Life cycle

Adults fly easily and live for about 8 weeks, they lay 2 or 3 eggs in the midrib of leaves. The eggs hatch after about 20 days. There are 5 nymphal instars over 21 days. A life cycle takes about 50 days.

Damage

The adults and nymphs feed on leaves of cardamom leaving clear empty cells between the veins. They also damage ginger. Damage can be severe. The level of shade for cardamom does not seem to affect the likelihood of damage.

Control

1. Remove other wild ginger family plants from nearby.
2. Kill insects by hand on young plants.
3. Usually only young plants are at risk.
4. Few predators or parasites seem to occur.

References

DAL Entomology Bulletin No 10 or Harvest 7(1) p 47
Hick, Rural Development Series Handbook No 17 p 61
PNG Ag J 28(2,3 & 4) 1977 p 97-101
The insect

These are very small insects. When fully grown they are about 3 mm long. Young bugs are about the size of a pin head and are red with black markings. The adults are black with silver wings.

Life cycle

Damage

They live under ground and eat the roots of wild grasses then move into rice. They suck the moisture out of the roots of young rice plants. They only attack upland rice. Rice that has been damaged looks as if the seedling is dying of drought.

Control

1. Flooded rice is not damaged.
2. Planting rice near bush gets less damaged than in grassland.

References

Hale, P.R., Check the roots of the problem in rice. Harvest. 5(2), 1979, p 92, 93
Name: Citrus aphids

Scientific name:

Brown citrus aphid _Toxoptera citricidus_ (Kirk.)

[Synonym: _Toxoptera citricida_ Kirk.]

Black citrus aphid _Toxoptera aurantii_. (B.d.F.)

(Also called Tropical citrus aphid and Oriental black citrus aphid)

Family: Aphididae

Order: HEMIPTERA

The insect

These small black and brown aphids can cluster in large numbers on young plant shoots. Normally the aphid colonies are visited by ants. The two species are distinguished by different veins in the front wings. The brown citrus aphid is more tropical.

Life cycle

Adults are shiny black and winged or wingless. Only females are present and they produce live young.

One life cycle can occur in 6-8 days in warm weather.

Damage

The brown citrus aphid _Toxoptera citricidus_ is smaller and often more common than the Black citrus aphid. It mainly attacks citrus but can occur on fig, persimmon and loquat. It produces honeydew that causes sooty mould fungi to grow. Sucking of sap can reduce the quality of the fruit. Leaves are rolled upwards and turn brittle. They can spread viruses.

Control

1. Many natural enemies occur.
2. Early colonies should be treated to stop distortion of leaves.
3. They can be controlled by spraying with white oil.
4. They are less common in wet weather.
5. Spraying should be done carefully so as not to kill aphid enemies.

References

Hill, p 150
Kranz, p 342, 343
Swain, Ag Zoology in Fiji p 47, 64
**Name**  
Citrus mealy bug

**Scientific name:**  
*Planococcus citri* (Risso)

**Synonym:**  
*Pseudococcus citri*

**Family:**  
Pseudococcidae

**Order:**  
HEMIPTERA

The insect

This mealy bug attacks a wide range of plants. The adults are 1.5-2 mm long and covered with a white wax. The fringe of wax threads is longer at the tail end. There is a dark separation of these threads in the middle. Normally ants attend colonies of mealy bugs.

**Life cycle**

Adults are oval and pale yellow, males are smaller than females. Eggs are small, yellow and in egg sacs which look like cotton wool. A female can lay 50-600 eggs that hatch in 3-10 days. There are several instars and the first instars “crawlers” feed on softer parts of plant. A life cycle takes about 30 days and there can be 3-10 generations per year.

**Damage**

It attacks a number of plants including citrus, cacao, coffee, Leucaena, Tephrosia, Crotalaria, passion fruit, fig trees and yams. They suck the sap causing the leaves to fall and fruit to fail to ripen. Damage is worse in hot dry areas. This mealybug has often been mixed up with *Planococcus pacificus*.

**Control**

1. It is normally controlled by a ladybird (*Cryptolaemus affinis* Crotch).
2. It can be controlled by spraying with white oil at 1 part oil in 40 parts of water every 21 days.

**References**

CIE Distribution maps No 43  
Hill, p  
Kranz, p 350  
Swain, Ag Zool in Fiji p 66,89, 238
Name  Coconut spathe bug  (Also called Coconut shield bug)

Scientific name:  *Axiagastus cambelli* Dist.
Family:  Pentatomidae
Order:  HEMIPTERA

**The insect**

Adults are 13 mm long and 7 mm wide. They are dark brown with yellow marks. They give off a bad smell when disturbed.

**Life cycle**

Adults lay eggs on dry coconut spathes, they hatch after 7 days. There are several nymphal instars. A life cycle takes about 8 weeks.

**Damage**

They feed on the flowers of coconuts that causes the flower to turn brown. It tends to damage male flowers and to cause nuts to fall. It can weaken palms and high numbers can cause flowers to die or can prevent the nuts from filling out ‘banana-shaped’.

It is more of a pest in the islands and mainly occurs there.

It has been recorded on wild betel nut.

**Control**

1. Some predators and parasites occur and can be introduced to coconut plantations.
2. Kurukum ants help control the pest.

**References**

Hick, Rural Development Series Handbook 17
PNG Ag J 17(2) 1965, p 61
PNG Ag J 24(3) p 79-86
**Name**  
Coconut scale  
(Also called “Aspidiotus”, transparent scale and circular scale)

**Scientific name:** *Aspidiotus destructor* Sign.

**Family:** Diaspididae  
**Order:** HEMIPTERA

The insect

A yellow scale insect with a grey, almost clear round scale over its body. They look like tiny bumps on the underside of coconut leaves. Young crawlers can spread in the wind.

Life cycle

Adults: female 2 mm with a yellow body and translucent scale.  
Males are fragile and winged. Eggs: 20-50 under the scale of the female. The first nymphal instars are about 0.2 mm long with legs and antennae. They are crawlers. A life cycle can take in about one month with 6-12 generations in one year.

Damage

On coconuts, the scales collect along the veins on the under-surface of the leaves and suck sap. The leaves turn yellow starting at the patch where the scales are feeding. In severe outbreaks the scales can completely cover leaves and nuts.  
They also attack bananas, guava, mango, golden apple, cherimoya, soursop, sweet sop, pawpaws, sugarcane, pandanus and *Barringtonia sp.* (Pao nuts), breadfruit, betel nut palm, and other plants. Damage can be bad until suitable predators are introduced.

Control

1. It is mostly controlled by ladybird beetles.
2. Spraying is not normally used. It could be used in nurseries.

References

Frohlich, Pests and Disease of Tropical crops p208
Hick, Rural Development Series Handbook No.17
Insects of Micronesia Vol 6 No 7 p 513
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 166
Kranz, p 353
O’ Conner, SPC Exotic Pests and Diseases Coconut section
Swain, Ag. Zoology in Fiji p 77
Waterhouse & Norris, 1987, Biological Control - Pacific Prospects p 62
**Name**  **Coconut white fly**

**Scientific name:** *Aleurodiscus destructor* (Mackie)

**[Synonym:** *A. albofloccosa]*

**Family:** Aleurodidae

**Order:** HEMIPTERA

---

**The insect**

This insect produces very long coiled wax threads. These form a woolly covering over the underside of infected leaves. The adult is small and white with wings and is 5 mm long.

**Life cycle**

Adults are a typical whitefly, they lay white, shiny 2 mm long eggs in concentric rings with waxy covers. These hatch in 4 days. Nymphs are covered with threads. A life cycle takes about 55-60 days.

**Damage**

Attacks coconut and other palms and bananas. It can also get on soursop. Reported in numbers on coconuts but damage is slight. They increase during the dry season. Infected leaves dry off and die. With coconuts, nuts fall early. In Australia it occurs on Banksia.

**Control**

1. Parasites and predators help control.

**References**

CIE Distribution maps No. 356
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 151-153
**Name**  
Coffee bugs  
(Also called variegated bugs)

**Scientific name:**  *Antestiopsis semiviridis* (Walker)  
**Family:**  Pentatomidae  
**Order:**  HEMIPTERA

The insect

**Life cycle**

A life cycle takes about 50-60 days.

**Damage**

They are recorded as damaging pepper, coffee and Tephrosia.  
They suck young fruit causing it to drop.  
Damage gets worse in wet weather.

**Control**

1. Decreasing the shade cover lessens the damage by this insect.  
2. Windy areas get less insect damage.

**References**

Kranz, p 288
**Name**  
Corn lanternfly  
(Also called corn leafhopper)

**Scientific name:** *Peregrinus maidis* (Ashmead)  
**Synonym:** *Delphax maidis* Ashm.  
and  
*Pundaluoya simplicia* Dist.]  
**Family:** Delphacidae  
**Order:** HEMIPTERA

---

**The insect**

A leaf hopper. There are both full winged and short winged adults. The larger form has spots on the wing tips and pale brown stripes on the back. The small form has wings reduced to scales which are transparent but have some dark spots.

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**Life cycle**

A life cycle takes about 25 days.

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**Damage**

It has been reported on corn in Papua New Guinea. In other countries it spreads virus diseases. (e.g. maize stripe virus). The damage where yellowing and stunting occurs is called “hopper burn”. It also gets on sugarcane and sorghum. They secrete honeydew that attracts ants.

---

**Control**

Not normally necessary.

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**References**

See CIE Distribution maps No 317.  
Hill, p 213, 316  
Kranz, Diseases, Pests and Weeds in tropical crops p 318, 22
**Name**  
Corn leaf aphid

**Scientific name:** Rhopalosiphum maidis (Fitch.)  
**Synonym:** Aphis maidis  
**Family:** Aphididae  
**Order:** HEMIPTERA

The insect:  
A bluish green insect with black legs and antennae. Adult about 2 mm long.

Life cycle  
Adults can be winged or wingless and can produce young from 6-15 days after they themselves are born. One female may give birth to 3-67 young at a rate of 1-9 a day. A life cycle takes about 8 days to complete. 45 generations per year can occur.

Damage  
They can develop into large numbers around the top of corn plants and cause plants to yellow and wilt. The formation of cobs on corn can be affected. This gets worse in dry periods. They can help spread sugarcane mosaic virus. This can spread to and from other grasses. It is known to attack corn, citrus, sugarcane, millets, sorghum, rice, and other grasses. Honeydew is secreted and sooty moulds can develop. It may also attract other insect pests.

Control  
1. Getting rid of crop stubble after harvest helps reduce numbers.  
2. With healthily growing crops natural predators mostly keep the aphids under control.  
3. Time of planting can be important in some places.  
4. Some varieties of crops are more resistant than others.  
5. Avoid planting successive crops near each other if the insect is a problem.  
6. Several predators are known to attack aphids to chemical sprays should be avoided.

References  
CIE Distribution maps No 67(revised)  
Hill, p 155  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 154  
Kranz, p 338  
Swain, Agricultural Zoology of Fiji p 120
Name: Cowpea aphid  
(Also called black bean aphid; groundnut aphid and common black aphid)

Scientific name: *Aphis craccivora* Koch  
Family: Aphididae.  
Order: HEMIPTERA

The insect

Winged and wingless forms occur and both usually have shiny black bodies with dark-red eyes. Winged adults spread between crops and wingless forms spread within crops.

Life cycle

Adults are dark brown, 1.5 to 2 mm long. Nymphs are wingless dark and rounded in shape.

Damage

These aphids are often found feeding on snake beans. They rarely cause much damage. Large numbers get on cowpea in the wet season. They can also attack other beans including winged bean, mung bean and lima bean.

They cluster in large numbers near the tips of stems and shoots and their feeding causes these parts to be deformed. Plants can be stunted and wilt.

Their importance for spreading viruses is not known. They can spread cowpea mosaic virus.

They also damage peanuts and tomatoes. Occasionally they get on sweet potato. They can be spread in the wind.

Control

1. Plant spacing is important in control.  
2. Natural enemies attack aphids.  
3. They can be controlled by acephate or pirimicarb insecticides.

References

- Feakin, Pest Control in Groundnuts PANS manual No 2  
- Hick, Rural development Series Handbook 17  
- Hill, p 161  
- Kranz, p 324  
- Young, Insect Pests of Grain Legumes 2nd PNG Food Crops Conference
The insect:

The adult bug is about 25 mm long. It is a dark brown colour. The bug has a distinctive yellow cross on the back. The underneath of the insect is brown and the legs are long. They fly easily and when disturbed give off a bad smell.

Life cycle

Eggs are long and brown and laid in rows on twigs or fruit. Nymphs look like adults and feed in leaves. There are 5 instars.

Damage:

It is a serious pest of pigeon pea in some areas. With pigeon pea both the nymphs and adults suck young shoots causing the plant to die back.
It probably also attacks citrus and pumpkin plants where it feeds on the stems.

Control

1. When numbers are small, they can be collected by hand and burned.
2. Many birds and other things eat the bugs.
3. Insecticides can be used with young trees or when large numbers of insects occur.

References

Swain, Ag Zoology in Fiji p 52
Young: Pests of grain legumes in PNG. 2nd PNG Food Crops Conference
Name: Florida red scale

Scientific name: Chrysomphalus aonidum (L.)
[Synonym: Chrysomphalus ficus Ashm.]
Family: Diaspididae
Order: HEMIPTERA

The insect

Life cycle

Damage

On citrus, breadfruit, coconut, Indian mulberry, banana, pandanus, cycads. Also can occur on candle nut, soursop, sweet sop, bullock’s heart, tamarind.

Control

References

CIE Distribution maps No 4
FAO Technical document No 135 p 18 Insect Pests of Economic Significance in Asia and the Pacific Region
Williams, D. J., and Watson, G.W., The Scale Insects of the Tropical South Pacific Region Part 1
The Armoured Scales CAB IIE p 93
**Name**  
Foxglove aphid  
(Also called the glasshouse aphid)

**Scientific name:** *Aulacorthum solani* Kaltenbach  
**Family:** Aphididae  
**Order:** HEMIPTERA

The insect

Life cycle

Damage

Reported on potatoes and beans. It attacks plants in the potato/tomato family spreading virus diseases.

Control

Not normally necessary except where virus diseases are a problem for example in growing certified seed potatoes.

References

CIE Distribution maps No 86 (revised)  
Hill, 1975, p151
**Name**  
Grass bug  
(Also called sweet potato mirid)

**Scientific names:**  
*Alticus tibialis* Reut  
[Synonym: *Halticus tibialis* Reut]  
*Also*  
*Halticus insularis* Usinger  
**Family:** Miridae  
**Order:** HEMIPTERA

**The insect**

This bug is about 20 mm long and black. It jumps like a flea beetle when disturbed.

**Life cycle**

Eggs are laid under leaf skin. Nymphs are narrow, and light green with long white antennae and legs.  
A life cycle takes about 3-5 weeks.

**Damage**

Nymphs and adults feed on sap on sweet potato, parsnip, Chinese cabbage, okra, mung bean and soybean.  
Can also feed on peanuts and pumpkin family plants. Usually abundant on pumpkin leaves.  
*Halticus minutus* is also recorded on sweet potato and peanut and other plants.  
It is considered a widespread and probably serious pest of cucumbers etc.

**Control**

Not normally necessary.

**References**

DAL Entomology Bulletin No 18 or Harvest 8(2) p 97  
Insects of Micronesia Vol 7(1) p 51  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 127,128
**Name**  
Green peach aphid  
(Also as peach aphid; tobacco aphid and peach-potato aphid)

**Scientific name:** *Myzus persicae* Sulzer  
**Family:** Aphididae  
**Order:** HEMIPTERA

The insect

A small green insect between 1.25 and 2.5 mm long. They have dark marks on the body. The nymphs are like adults but smaller and paler and without wings.

Life cycle

The development of the life cycle varies with the climate and the crop.

A life cycle can take as little as 6-7 days.

Damage

It does damage by direct feeding and by transmitting viruses. Often the insect is scarcely noticed and the main result is the diseases it spreads. The direct feeding damage cannot normally be seen. It attacks a very large number of plants and spreads a very large number of virus diseases. It is always present on cabbages in the highlands. It damages taro, chillies, potato, sugarcane, beans, citrus, tomato, tobacco. It normally produces little honeydew.

Control

1. Several predators and parasites are known to control this pest.
2. Insecticides are rarely useful in stopping this insect spreading virus diseases and can kill beneficial insects.
3. Crop rotation is important to stop virus disease spread in potatoes.
4. High temperatures and heavy rainfall help control the insect.
5. Some varieties of crops are more resistant.

References

Hick, Rural Development Series Handbook No 17 p  
Kranz, J., 1977, *Diseases, Pests and Weeds of Tropical Crops* p 333
**Name**  Green scale  
*(Also called Green coffee scale and soft green scale)*

**Scientific name**  *Coccus viridis* (Green)  
**Family:** Coccidae  
**Order:** HEMIPTERA

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**The insect**  

The scales are flat and light to dark green in colour. They are 4 mm long and 2.2 mm wide. There are a few black spots on the back. Only female insects have been found. They often live in association with ants. They mainly occur at altitudes below 1300 m. They are often found mixed with soft brown scale.

**Life cycle**  

Adults are found mostly along main leaf vein. Eggs are laid under the body of the female that can lay up to 500 eggs. There can be 3 nymphal instars. One generation takes 1-2 months.

**Damage**  

It attacks laulau (*Syzygium aqueum and S. malaccensis*). It also attacks coffee, citrus, tea, mango and other plants. Damage is caused by removing sap and can be serious on young plants. Because they secrete honeydew, sooty mould often develops.

**Control**  

1. Controlling the associated ants can help reduce the pest.  
2. Ladybirds help control the pest.

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**References**  

DAL Entomology Bulletin No 33 or Harvest 10(3) p 118-121  
Hick, Rural Development Handbook No 17 p 30  
Hill, p 181  
Kranz, p 352
Name  Green Vegetable bug  
(Also called green stink bug)

Scientific name:  *Nezara viridula* (Linnaeus)
Family:  Pentatomidae
Order:  HEMIPTERA

The insect

The adults are green shield shaped bugs 10-13 mm long. This bug lays eggs in groups on leaves then these hatch out to small nymphs which look like the adult but don’t have wings.

Life cycle

Adults live 3-6 weeks. Eggs are 1.3 mm long and laid in groups of 40-60 on underside leaves. They hatch in 10-20 days. There are 5 nymphal Instars. A life cycle can take 56-100 days with 3 or 4 generations per year.

Damage

Both the young nymphs and the adults suck sap. This causes plants to wilt and lumpy deformed fruit. They damage a number of vegetables and fruits. They damage beans, including winged bean, rice bean, soybean, broad bean, mung bean, snake bean, okra, tomatoes, rice, and also Tephrosia. The insects give off a smell that affects food to eat. A more serious pest in the lowlands.

Control

1. They are large enough to pick off.
2. They can be killed with contact insecticides such as pyrethroids.

References

Butcher, C.F. 1981, Green vegetable bug, Pest Advisory Leaflet No. 13 South Pacific Commission, Noumea, New Caledonia
DAL Entomology Bulletin No 16 or Harvest 8(1) p 36-38
Hill, p 221
Swain. Ag Zool in Fiji p 172
Name: Hibiscus mealy bug

Scientific name: *Maconellicoccus hirsutus* (Green)

[Synonyms: *Maconellicoccus perforatus* (De Lotto) and *Phenacoccus glomeratus* Green.]

Family: Pseudococcidae

Order: HEMIPTERA

The insect

Life cycle

Eggs are laid in batches. There are 4 nymphal stages for males and 3 for females.

Damage

Reported on hibiscus leaves in Rabaul where it caused serious damage. Also gets on mulberry, grapes, cotton, pineapple, cacao, aibika and breadfruit. Plant growth can be stunted, leaves curled and swellings produced. Normally attended by ants.

Control

1. Predators to control them have been introduced to Papua New Guinea.

References

CIE Distribution maps No 100 (revised)
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 188
Name: Longtailed mealybug

Scientific name: *Pseudococcus longispinus* Targioni

[Synonym: *Pseudococcus aonidum*]

Family: Pseudococcidae

Order: HEMIPTERA

The insect

Female mealybugs are up to 3 mm long, slow moving, wingless, flattened and oval in shape. Their bodies are covered with a white mealy wax. At the rear end there are a pair of wax threads that are longer than the body. Males are delicate winged insects that are rarely seen. Nymphs look like adults.

Life cycle

There can be many generations in a year.

Damage

They suck sap especially in protected places such as under leaves or near the leaf sheath. Therefore they are often not noticed until large numbers have developed. They also secrete honeydew that attracts ants. They get worse in warm humid conditions. They have been recorded damaging citrus - lemon, orange, pomelo; soursop, breadfruit, banana, cacao, cashew. They also get on some ferns.

Control

1. Try not to kill the others insects that keep these under control. (eg with sprays).
2. Keep plants well watered to reduce the damage.
3. Remove and destroy badly infected plant parts.

References

Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 184,185
**Name**  
**Mango hopper**

**Scientific names:**  
*Idioscopus niveosparsus* (Leth.)  
[Recorded as  
*Chunrocerus niveosparsus*]  
And  
*Idioscopus clypealis* (Leth.)  
[Synonym:  
*Idiocerus niveosparsus*]  
**Family:** Cicadellidae  
**Order:** HEMIPTERA

**The insect**

Adults are very small hoppers. Males are 3.4 to 3.7 mm and females 3.6 to 3.9 mm long. Young nymphs are white with red eyes. They move rapidly but only adults can jump.

**Life cycle**

Eggs are laid near flowers. Up to 200 eggs can be laid be each female. They hatch in 4-7 days. Nymphs live for 10-20 days and a life cycle takes about 12-16 days.

**Damage**

The insect is most active during the mango flowering season. The nymphs and adults suck the sap of flowers causing them to go black and thus affecting the number of fruit formed. They also secrete honeydew that helps sooty mould fungi to grow. Damage gets worse in damp shady places such as neglected waterlogged orchards.

**Control**

1. Keep areas near mangoes clear of rubbish and ensure good drainage.  
2. Systemic insecticides can be used but only if damage is severe.

**References**

Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 139  
Kranz,J. 1977, Diseases, Pests and Weeds of Tropical crops p 311
Name: Melon aphid  
(Also called cotton aphid)

Scientific name: *Aphis gossypii* Glover  
Family: Aphididae  
Order: HEMIPTERA

The insect

The insects are small (2 mm) and soft bodied and feed by sucking sap. The colour of them varies between green to black.

Life cycle

Typical aphid life cycle.

Damage

Large numbers can cause leaves to curl and this can stunt plant growth. It can reduce the numbers of flowers and fruit formed. The aphids also release honeydew that encourages the growth of sooty moulds.  
Aphids transmit disease. This aphid transmits dasheen mosaic virus in taro, cucumber mosaic virus and possibly sugarcane mosaic and maize mosaic virus.  
They damage aibika, taro, potato, lettuce, cucumber, winged bean, okra, eggplant, pumpkin, and a large number of others plants.

Control

1. They are eaten by birds and ladybirds beetles and these can give worthwhile control.  
2. If numbers are large and damage is important insecticides such pirimor and pyrethroids or dimethoate can be used.

References

Swain, Ag Zoology in Fiji p 141, 148  
Insect pests of PNG p 13
Name: Nigra scale  
(Also called black scale)

Scientific name: Parasaissetia nigra (Nietner)
[Synonym: Saissetia nigra (Nietner)]
Family: Coccidae
Order: HEMIPTERA

The insect

Female scales are black, oval, shiny and 5 mm long. These small scale insects can occur on a number of plants both food crops and other plants.

Life cycle

Eggs are laid in large numbers underneath the female scale, they are small and pink. Young nymphs ‘Crawlers’ move to a new site, insert their proboscis and suck sap, they are pink, flat and oval.

Damage

They suck sap weakening the plant. They are often on stems and secrete honeydew leading to the growth of sooty mould fungi. The honeydew attracts ants.
They damage cassava and aibika, as well as coffee, rubber, cotton, Crotalaria, Leucaena etc.

Control

1. Normally no control measures are necessary.
2. Avoid affected planting material.

References

CSIRO Insects of Australia. p 429
Frohlich, Pests and Diseases of Tropical Crops p 109
O’Connor, SPC Exotic Plant Pests and Diseases.
PANS Manual No 4 Pest Control in Tropical Root Crops. p 132
Swain, Ag Zoology in Fiji. p 138, 222
Williams, D.J. & Watson, G.W., 1990, The Scale Insects of the Tropical South Pacific Region Part 3
The Soft Scales CAB p 135
**Name**  Onion aphid

**Scientific name:** *Neotoxoptera formosana* (Takahashi)

**Family:** Aphididae

**Order:** HEMIPTERA

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**The insect**

**Life cycle**

**Damage**

It occurs on onion, shallot, garlic, chives, leek etc. and is common on onions in the highlands.

**Control**

Not normally necessary.

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**References**

See Carver, M., 1980, J Aust Ent Soc. 19:139-142
**Name**  
**Paddy bugs**  
(Also called rice stink bug)

**Scientific names:**  
- *Leptocorisa acuta* (Thunberg)  
- *Leptocorisa discoidalis*  
- *Leptocorisa oratorius* (Fab.)  
- *Leptocorisa palawanensis*  
- *Leptocorisa solomonensis* Ahmad

**Family:**  
Alydidae

**Order:**  
HEMIPTERA

**The insect**

These are long slender insects that are light brown on top and light green underneath. When disturbed they fly off quickly. Both the adults and nymphs give off a smell when disturbed. Adults can survive dry period in a resting state.

**Life cycle**

Adults are green in colour and 15 mm long, 3-4 mm wide. They can live for 114 days. Eggs are round flat brown and laid in rows on top of leaves. They hatch in 7 days. There are 5 nymphal instars over a 19 to 31 day period. They are more active near morning and evening. Life cycle takes about 1 month.

**Damage**

They suck the sap of both the flowers and the rice grains. Leaves and stalks go reddish-brown and empty white heads of rice can occur. Damage can be important in both dryland and irrigated rice. 40% to 90% loss of crop can occur. Damage is worse in East Sepik and Northern provinces. *L. acuta* and *L. solomonensis* are minor and mainly on dryland rice. They spread into rice crops from other grasses. Isolated and small rice fields often get worse damage. Bugs can feed on betel nuts, amaranths, beans, sugarcane etc.

**Control**

1. Damage is less in areas with a long dry season because natural enemies keep bug pest numbers down.
2. Cutting *Echinochloa colonum* annual grass in wet areas near rice helps control the insects that breed on this grass.
3. Some natural predators occur.
4. Early harvest helps control damage. Also quick maturing varieties.
5. Plant successive crops more than 3 weeks apart.

**References**

Frohlich, Pests and Diseases of Tropical crops p 146  
Hick, Rural Development Series Handbook 17  
Hill, p 210  
Kranz, p 296  
Lamb, Insect Pests of PNG p 14  
Sands, Rice insects in PNG in Ag in the Tropics p 309  
Swain, Ag Zoology in Fiji p 252
**Name** Pepper bug

**Scientific name** *Nesocypselas piperica*

**Family:** Tingidae  
**Order:** HEMIPITERA

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**The insect**

They are called lace bugs because they have a complex pattern of veins in their wings. It is grey in colour and about 3 mm long.

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**Life cycle**

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**Damage**

The adult feeds on the underside of pepper leaves causing small yellowish-brown spots.

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**Control**

Not normally necessary.

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**References**

Aburu, K & Kukup, B 1975, Pepper. Rural Development Series Handbook No 7 p 21  
Hick, Rural Development Handbook No 17
Name: Pineapple mealy bug

**Scientific name**: *Dysmicoccus brevipes* (Cockerell)

**[Synonym]**: *Pseudococcus brevipes* (Cockerell)

**Family**: Pseudococcidae

**Order**: HEMIPTERA

The insect

The female is large and oval, 3 mm x 2 mm. It lives near the base and on the roots of pineapples. Only small numbers live on the leaves.

Life cycle

**Adult**: pink bodied and oval shaped and covered with a white waxy ‘meal’. (Often give birth to live young without sexual reproduction). Small crawlers can be blown in the wind. There can be 6-7 generations per year.

Damage

It causes dark coloured spots on the leaves of pineapples. The fibre roots can be destroyed by sucking from the insect. In some countries it spreads Mealybug wilt virus of pineapples. It can cause fruit to appear unattractive. Large amounts of honey dew forms on plants attracting ants and sooty moulds. Numbers often increase at the end of the wet season and spread rapidly in the dry season. It can also attack bananas, peanuts, mangoes, sugarcane and oil palms, coconut, coffee and *Pandanus*.

Control

1. Pineapple slips for planting should be dipped in insecticide.
2. Control of ants can reduce the numbers of mealy bugs.
3. Some varieties of pineapple are more resistant.
4. Spraying the leaves is of little use.

References

Frohlich, Pests and Diseases of Tropical crops p 78
Hill, 1975, Ag Insect Pests of the tropics and their control. CUP p 173
Kranz, 1977, Diseases, Pests and Weeds of Tropical crops
Swain, Ag Zoology in Fiji p 186
**Name**  
Pink wax scale  
(Also called pink waxy scale)

**Scientific name**  
*Ceroplastes rubens* Mask.  
[Possibly *Gascardia rubens*]

**Family:**  
Coccidae

**Order:**  
HEMIPTERA

The insect

Life cycle

Damage

It feeds on hundreds of different plants especially shrubs and trees. It is known to occur on coconut, mango, avocado, citrus, coffee, tea, cycads, and breadfruit. It secretes lots of honeydew producing lots of sooty mould fungi.

Control

Not normally necessary.

References

CSIRO Insects of Australia p 114, 428, 430  
Hill, p 99, 139, 221, 268, 348
**Name**  
Pod sucking bug  
(Also called bean bug)

**Scientific name**  
*Riptortus annulicornis* Boisd.  
*Riptortus imperialis* Kirk  
*Riptortus obscuricornis* Dallas  
*Riptortus rubronotatus* Blote  
*Riptortus* spp.

**Family:**  
Coreidae

**Order:**  
HEMIPTERA

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**The insect**

A medium sized sap-sucking bug. They are slender in shape. Brown in colour. They are similar to *Leptocorisa* sp.

**Life cycle**

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**Damage**

It can cause severe damage to winged beans, snake beans, mung beans, soybeans, lima beans, peas, common bean and probably other beans. It sucks the pods. Also reported from strawberries. They occur throughout the year.

**Control**

Not normally necessary. If severe damage is expected then pesticides such as pyrethroids can be considered.

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**References**

Young, 2\textsuperscript{nd} PNG Food Crops Conference
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</table>

**The insect**

**Life cycle**

**Damage**

It attacks potato, tomato, capsicum, eggplant, sweet potato, pawpaw, pumpkin family, lettuce, and many other plants.

On potato they attack the leaves sucking sap and causing leaves to curl. They also transmit viruses.

**Control**

Not normally necessary unless certified potato seed is being grown.

**References**

Kranz, p 331
**Name**  
Red cotton bug  
(Often called cotton staines; red seed bug)

**Scientific names:**  
*Dysdercus cingulatus* (F.)  
*Also*  
*Dysdercus sidae* Montr.  
*[Synonym:*  
*Dysdercus insularis* Stal.]*

**Family:** Pyrrhocoridae  
**Order:** HEMIPTERA

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**The insect**

Red bugs which fall to the ground when plant shaken.

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**Life cycle**

Adults are 10-20 mm long and grey/ yellow/ brown in colour. They live for 5-14 days. Eggs are laid in groups of about 100 in ground or on the surface. They need moist soil and hatch in 5-8 days. There are 5 nymphal instars that last 21-35 days. Life cycle 20-40 days depending on temperature, humidity and feed.

**Damage**

They suck the pods of okra.  
(They also damage cotton and probably other plants in the same family like aibika, hibiscus, and rosella.) They can damage cowpea.  
They are an occasional pest probably due to seasonal conditions.  
They are normally worse in hot dry regions.  
*Disdercus sidae* is known to damage cotton, kapok and hibiscus. It is also reported on corn.

**Control**

1. Harvest crop early.  
2. Allowing chickens to roam in gardens helps to control these insects.

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**References**

*D.sidae* See CIE distribution maps No 267  
(Other species)  
Frohlich, Pests and Disease of Tropical Crops p 251  
Kranz, p 298  
Swain, Ag Zoology in Fiji p 93,94
Name: Red scale
(Often called California red scale)
(See also yellow scale)

Scientific name: *Aonidiella aurantii* Mask.
Family: Diaspididae
Order: HEMIPTERA

**The insect**

The scale is round and red with a nearly transparent edge. Female is about 2 mm across. Male is about half the size. It sucks sap. The body of the female insect is kidney shaped. The male insect is more oval and paler.

**Life cycle**

Both male and female are needed for fertilisation and the young develop inside the body of the female. The young crawlers can move up to 3 m before settling down. They can be blown in the wind. They often settle near the midrib or veins of the leaves. About 150 crawlers are produced by each female.

There can be up to 5 generations in a year.

**Damage**

This scale infests all parts of citrus trees. Damage is caused by the insect secreting toxic substances as it eats.
Leaves and twigs can be covered with red scales.
Leaves become spotted, turn yellow and may drop off.
Fruit can be deformed becoming rough and fall off.
Young trees are often more damaged.
It also attacks other ornamental plants and cycads.

**Control**

1. Sprays can be used when the insects are in the crawler stage and serious damage is expected.
2. They do worse damage in widely spaced trees and near the edges of orchards.
3. Dry areas and high temperatures reduce the insect numbers.
4. A number of natural predators and parasites occur.
5. Oil sprays can give control and these don’t greatly reduce parasites.

**References**

Frohlich, p
Hill, Ag Insect Pests of the Tropics CUP p 185
Kranz, Diseases, Pests and Weeds in Tropical Crops p 355
O’Connor Exotic Plants Pests and Diseases
SPC Handbook No. 14 on Citrus p 39
**Name**  
Soft brown scale  
(Also called citricola scale and soft scale)

**Scientific name**  
*Coccus hesperidium* L.

**Family:**  
Coccidae

**Order:**  
HEMIPTERA

**The insect**

Adults are mobile. They are flat, oval and brown to pale yellow and 2.5 to 4 mm in length. Females can produce young in about 60 days.

**Life cycle**

**Damage**

Reported on coconut palms. It also attacks citrus and ornamental trees. Often just some branches on a tree or one tree in an orchard are attacked.

**Control**

Not normally necessary.

**References**
Name: Soft wax scale

Scientific name: *Gascardia destructor* De Lotto
[Synonym: *Ceroplastes destructor* Newstead]
Family: Coccidae
Order: HEMIPTERA

The insect

These scale insects have a thick armour of wax. They are usually irregular in shape. The scale covers the shiny light-red to dark brown body of the mature female.

Life cycle

Eggs are reddish brown and underneath the body of the female. Nymphs are found on the upper surface of leaves and settle near midrib. They migrate back to twigs after 5-6 weeks.

Damage

They attack citrus, avocado.
They excrete honeydew that causes sooty moulds to grow.
Heavy attacks can kill trees.

Control

1. Summer oils are effective against crawlers.

References

DAL Entomology Bulletin No 37 or Harvest 11(2) p 75-77
Insect Pests of New Zealand p 54
Name: **Spiralling whitefly**

Scientific name: *Aleurodicus dispersus* Russel
Family: Aleyrodidae
Order: HEMIPTERA

The insect

Adults are a typical whitefly. It leaves a characteristic spiral of white wax on leaves.

Life cycle

Eggs are white and laid singly or in a loose spiral under leaf. They are 0.3 mm long and hatch in 7-10 days. Nymphs have a wax deposit over body.
A life cycle takes about 26-56 days.

Damage

Attack guava and mango trees but also other plants.

Control

Parasites have been introduced to control this pest so sprays should be avoided.

References

FAO Plant Protection Commission Quarterly Newsletter Asia Pacific Region Apr. - Jun 1990 p 22
Waterhouse & Norris, Biological Control 1989, - Pacific Prospects Supplement 1, p 12
The insect

They are shield shaped bugs about 8 mm long. They give off a bad smell when disturbed.

Life cycle

Damage

Reported sucking sap of snake bean, capsicum and sunflower. Also on the heads of sorghum.

Control

Not normally necessary.

References
**Name**  
Striped mealy bug  
(Also called cassava mealy bug and leucaena mealybug)

**Scientific name:**  *Ferrisia virgata* Cockerell  
**Synonym:**  *Ferrisiana virgata*  
**Family:**  Pseudococcidae  
**Order:**  HEMIPTERA

**The insect**  
The adult female has 2 dark stripes running along the body. They have glassy wax threads and a pronounced tail. A powdery wax secretion surrounds the mealybugs body. Both sexual and non sexual reproduction occur.

**Life cycle**  
The adult female lays 300-400 eggs, and lives for 1-2 months but males only live for 1-3 days. Eggs hatch in few hours after being laid. Nymphs are fully grown in 6 weeks.

**Damage**  
It occurs on a very large number of plants including cassava, cacao, coffee, guava, cotton, rubber, citrus, avocado, hibiscus, Leucaena, Erythrina, cashew,  
It can transmit cacao viruses. They infest the fruit stalks and leaves and are usually accompanied by ants.  
Leucaena is the main host.

**Control**  
1. Controlling the pest on Leucaena is important.  
2. Pyrethroid insecticides will give control.

**References**  
Hill p 77,99, 110, 124, 166, 192, 199, 253, 268, 202, 334, 342, 360  
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia, p 189  
Kranz, p 369
**Name**  
Sugarcane aphid  
(Also called sorghum aphid)

<table>
<thead>
<tr>
<th>Scientific name:</th>
<th>Aphis sacchari Zehntner</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Synonym:]</td>
<td>Longiunguis sacchari (Zehntner)</td>
</tr>
<tr>
<td>Family:</td>
<td>Aphididae</td>
</tr>
<tr>
<td>Order:</td>
<td>HEMIPTERA</td>
</tr>
</tbody>
</table>

**The insect**
Normally this aphid is a dirty whitish yellow colour. It occurs in large numbers on the underside of young sugarcane leaves.

**Life cycle**
Winged females fly between plants and give birth to live young that spread on the plants. Warm dry conditions encourage the increase of this pest.

**Damage**
1. It can damage sugarcane, sorghum, corn, beans, sweet potato, tomato. Sugarcane is the major host.
2. A number of predators and parasites normally keep this insect under control.
3. Affected leaves become spotted with rusty brown marks and can dry up.
4. The insect secretes honeydew that drops on the leaves below and sooty moulds grow on this. So often sooty mould on sugarcane means there were aphids there earlier.
5. Normally the sugarcane recovers.

**Control**
1. Some varieties of sugarcane get more attacked than others.

**References**
Insects of Hawaii Vol. 5 p 86
**Name**  
Sugarcane leafhoppers  
(Also called sugarcane planthopper)

**Scientific names:**  
15 species in country  
*Perkinsiella bicaloris*  
*Perkinsiella boreon* Fennah  
*Perkinsiella bulli* Fennah  
*Perkinsiella diagoras* Fennah  
*Perkinsiella falcipennis* Fennah  
*Perkinsiella lalokensis* Muir  
*Perkinsiella macrinus* Fennah  
*Perkinsiella mycon* Fennah  
*Perkinsiella papuensis* Muir  
*Perkinsiella rattlei* Muir  
*Perkinsiella saccharicida* Kirkaldy  
*Perkinsiella sinensis* Kirkaldy  
*Perkinsiella thompsoni* Muir  
*Perkinsiella vastatrix* (Breddin)

**Family:**  
Delphacidae

**Order:**  
HEMIPTERA

**The insect**
These planthoppers are 3-5 mm long.

**Life cycle**
Adult females live 1-2 months. Each lays about 300 long curved eggs in groups on the midrib of a leaf low on upper surface. They hatch in 14-40 days. There are 5 nymphal instars  
A life cycle takes about 48-56 days and there can be 5 or 6 generations a year.

**Damage**
They damage sugarcane by sucking leaves and the young buds, causing the plants to wither and turn yellow.  
They also secrete honeydew that helps sooty mould fungi to grow.  
Some species spread the virus that causes Fiji disease.

**Control**
1. If needed they can be controlled by repeated sprays of insecticides.

**References**
(other species)  
Frohlich, Pests and Disease of Tropical Crops p 239  
Hill, p 138
**Name**  
*Sugarcane mealy bug*  
(Also as pink sugarcane mealy bug)

**Scientific name:** *Saccharicoccus sacchari* (Cockerell)  
**[Synonym]** *Trionymus sacchari*  
**Family:** Pseudococcidae  
**Order:** HEMIPTERA

---

**The insect**  
A pink mealy bug. The body is clearly segmented and covered with a ‘mealy’ wax secretion. Often breed with females only. Males are rare but can be winged or wingless. Females are about 4 mm long.

**Life cycle**  
Each female lays about 1,000 eggs that are laid under leaf sheathes. They hatch in 10-14 hours. Crawlers feed near leaf sheath and move out as they get larger. A life cycle takes about 30 days to complete.

**Damage**  
It builds up in large numbers on sugarcane stalks. It sucks sap. It is an important pest because less sugar is produced. It can also attack sorghum, rice, and other grasses.

**Control**  
1. Get rid of old crop plant parts after the crop is harvested.
2. Use uninfected canes when planting.
3. Planting material can be dipped in kerosene.
4. Spraying insecticides on the growing cane is normally not useful.
5. Varieties with less tightly fitting leaf sheaths get less damage.

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**References**  
Hill, p 169  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 191  
Kranz, p 348
Name: Sugarcane scale

Scientific name: *Aulacaspis tegalensis* (Zhnt.)

[Synonym: *Aulacaspis rutherfordi*]

[Prob syn. *Diaspis rutherfordi*]

Family: Diaspididae

Order: HEMIPTERA

Other armoured scales in Papua New Guinea can also get on sugarcane. These include:

- *Aspidiella sacchari* (Cockerell)
- *Aspidiotus destructor* Signoret

As well, soft scales can attack sugarcane. These include:

- *Promargarodes australis* Jacubski
- *Pulvinaria elongata* Newstead

The insect

The female scale is white and almost round. Males are wingless.

Life cycle

The female lays 150-250 eggs. Life cycle lasts about 24-28 days.

Damage

It gets on sugarcane and pitpit. The scales get on the stalks and leaf sheaths.

Control

Not normally necessary.

References

CIE Distribution maps No 187

Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 172

Williams, D.J. and Watson, G.W., The Scale Insects of the Tropical South Pacific Region Part 1 The Armoured Scales p 76
Name  | Sugarcane whitefly
---|---
Scientific name: | *Neomaskellia bergii* (Signoret)
Family: | Aleyrodidae
Order: | HEMIPTERA

The insect

Life cycle

Damage
Immature stages and adults feed on under surfaces of sugarcane leaves.

Control
1. Some parasites occur which help control.

References
CSIRO Insects of Aust. p 425
### Name
Sugarcane woolly aphid (Also called white sugarcane aphid)

<table>
<thead>
<tr>
<th>Scientific name:</th>
<th><em>Ceratovacuna lanigera</em> (Zehntner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym:</td>
<td><em>Oregma lanigera</em> Zehntner</td>
</tr>
<tr>
<td>Family:</td>
<td>Aphididae</td>
</tr>
<tr>
<td>Order:</td>
<td>HEMIPTERA</td>
</tr>
</tbody>
</table>

#### The insect
This aphid has a woolly covering which means it could easily be mistaken for a mealybug. The nymphs and unwinged females are covered by a waxy layer. The winged forms have no wax and are brownish green.

#### Life cycle

#### Damage
Moderately common under leaf blades of sugarcane. They can affect the growth of young sugarcane. They secrete honeydew causing sooty moulds to grow.

#### Control
1. Pesticides can reduce parasites so should be used carefully and only when serious damage is expected.

#### References
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 158,159
See Thistleton survey Bulletin 36 p 31
Name: Taro leafhopper

Scientific name: Tarophagus proserpina (Kirk) and Tarophagus colocaisae and Tarophagus persephone

Family: Delphacidae
Order: HEMIPTERA

The insect
These very small, white and brown leafhoppers jump when disturbed. Adults are 4 mm long. They are mostly on the coast. They spend all their life cycle on taro stems.

Life cycle
Eggs are laid near the midrib of the taro leaf. Nymphs are creamy white.

A life cycle takes about 18 days.

Damage
The main damage by these sucking insects is that they can spread virus diseases. The two virus diseases called alomae and bobone spread by these insects are killing taro plants in coastal areas.

These diseases cause taros to become yellow and twisted.

Very large numbers of these insects on taro in the dry season can cause the plant to wilt.

Control
1. Diseased taro should be removed to reduce the source of disease.
2. An egg predator is known to control this pest so chemicals should be avoided.

References
Hick, Rural Development Series Handbook N0 17
PANS Manual No 4 Pest Control in Tropical Root Crops p 197
Waterhouse & Norris, Biological Control 1989, - Pacific Prospects, p 27
**Name**  
**Tobacco whitefly**  
(Also called cotton whitefly)

**Scientific name** *Bemisia tabaci* (Guen.)  
**Family:** Aleyrodidae  
**Order:** HEMIPTERA

### The insect

These are very small whiteflies. Adults are about 1 mm long. Nymphs do not move much. The whiteflies are mostly found on the lower leaf surface. If the leaves are shaken a cloud of small moth-like insects flutter out but resettle.

### Life cycle

Adults have a yellow body and white waxy wings they are 1 mm long. Eggs are yellow and long and laid under leaves they are about 0.2 mm and pear shaped. They hatch in 7 days. Nymphs are yellow, round and scale like. They are 0.6 mm long. There is a resting stage, known as a puparium is white and 0.7 mm long.

A life cycle takes about 2-3 weeks.

### Damage

The young insects suck sap, causing leaves to turn yellow, wilt and die if there are large numbers of insects.  
They spread viruses. On taro they spread dasheen mosaic virus.  
They also secrete honeydew causing sooty mould fungi to grow.  
They damage sweet potato, taro, cassava and occasionally tomato and tobacco.  
Damage is more common during the dry season and they disappear when rain starts.

### Control

1. Control is not normally needed.  
2. Parasites are known to control this pest you will know if they are present as the puparium is black.

### References

Hill, p 146  
Kranz, p 320  
O’Connor, SPC Exotic Pests and Diseases -section on taro  
Pests Control in Tropical Root crops. PANS Manual No 4 p 196  
Swain, Ag Zoology in Fiji p 153
**Name**  
**White backed rice planthopper**  
(Also called white-backed planthopper)

**Scientific name**  
*Sogatella furcifera* Horvath

**Family:**  
Delphacidae

**Order:**  
HEMIPTERA

---

**The insect**

A small 2 mm long pale planthopper with a white stripe on the back of the head, the body is creamy white with a black back. The adults are very mobile and easily disturbed. The front wings are slightly brown and clear. Short winged and long winged generations alternate. Winged adults can fly considerable distances.

**Life cycle**

**Adults** are creamy white and live 18-30 days. Eggs are laid in masses in leaf sheaths. They hatch after 3-6 days. Nymphs are pale brown and this stage lasts 1-12 days.

A life cycle takes 3-4 weeks.

**Damage**

These small sap-sucking bugs attack rice and some other grasses. They secrete a toxic saliva. They attack the stem and leaf of individual plants causing them to die or fall over. They tend to kill individual plants not whole areas, and are found mainly on irrigated rice. They produce honeydew that causes sooty mould fungi to grow.

**Control**

1. Some predators assist with control.
2. As they survive in rice stubble it is important to remove this.

---

**References**


O’Connor, SPC *Exotic pests and diseases Rice section*

Swain, Ag *Zoology in Fiji* p 116, 263
Name  White jassid
(Also called white leafhopper
and white paddy leaf hopper)

Scientific name:  *Cicadella spectra* (Dist.)
[Synonym:  *Tettigoniella spectra* (Dist.)]
[Prob. Syn.  *Cofana spectra* Distant]
Family:  Cicadellidae
Order:  HEMIPTERA

The insect
The adult is 8-11 mm long.

Life cycle
Eggs are laid in leaf sheaths particularly in parts that go under water occasionally.

Damage
Damages rice, sugarcane and grasses but not usually seriously. They also reported on sweet potato and corn.

Control
Not normally required.

References
CIE distribution maps No 385
CSIRO Insects of Australia p 415
**White louse scale**
(Also called snow scale)

**Scientific name:** *Unaspis citri* (Comst.)
**Family:** Diaspididae
**Order:** HEMIPTERA

The insect
These are small scales about 1-2 mm across. Males are white with 3 ridges and smaller than the females; females are brown. They live on the trunks and main branches of mature citrus trees.

Life cycle
Crawlers are yellow and are attracted to light and the ends of twigs.

A life cycle takes about 8 weeks.

Damage
It occurs on the twigs and leaves of citrus. The bark becomes hard and cracks.
Snow scales normally only become a problem in neglected orchards. Seedling trees are more affected than commercial varieties.

It develops in humid regions.
It also occurs on Aibika.

Control
1. Improve the growing conditions of the trees.
2. Several predators and parasites are known to control this pest so chemical control is not usually recommended.
3. Lime-sulphur sprays are effective and lasts 2 to 3 years.

References
CSIRO Insects of Australia p 431
Frohlich, Pests and Diseases of Tropical Crops p 53
Swain, Ag Zoology in Fiji p 63
Waterhouse & Norris, 1987, Biological Control - Pacific Prospects p 72
Name
White scale
(Also called cassava scale; white peach scale and armoured scale)

Scientific name: *Pseudaulacaspis pentagona* (Targ.)
Family: Diaspididae
Order: HEMIPTERA

The insect
The female scale is 2-2.5 mm across, round, flat and white. It has older reddish brown skins near the edges. The adult male is 1.5 mm long and narrower. The young nymphs are red but later develop white waxy threads.

Life cycle
Females are usually mated within 3 weeks of settling in one spot. Approx. 125 eggs are laid 14-16 days after mating by each female. The first half, are usually only female and the second half are male. Eggs hatch in 4-5 days and crawlers emerge. They walk towards light but not far and settle to feed quickly. There are several instars before adult scales are formed.

Damage
It has been recorded in PNG on cassava stems, aibika and capsicum plants. In other places it has been recorded on passion fruit, okra, breadfruit, pawpaw and other ornamentals. They get on the stems of plants in large numbers and often a fungus, *Septobasidium sp.*, occurs together with it. The adults and nymphs suck sap, causing plants to wilt. The scales can entirely form a crust over stalks and twigs. In dry seasons damage can be more serious.

Control
1. Plant only unaffected cuttings.
2. It is attacked by parasites and ladybird predators.
3. Often no control is necessary.
4. However, spraying with malathion and white oil is effective.

References
Hick, Rural Development Handbook No 17
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 171
PANS Manual No 4 Pest Control in tropical root crops p 131
Swain, Ag Zoology in Fiji
Waterhouse & Norris, 1987, Biological Control - Pacific Prospects p 50
Name: Yam mealy bug
*Planococcus citri* or citrus mealy bug also damages yams

Scientific name: *Planococcus dioscoreae* Williams
Family: Pseudococcidae
Order: HEMIPTERA

**The insect**
The adult female mealybug is oval and 2.5 mm long. They are covered with a mealy wax like secretion.

**Life cycle**
Several instars occur as nymphs develop.

**Damage**
Stored yam tubers and yam roots in the field can be damaged. They cause roots and tubers to dry out.

It may be that unusual climatic conditions or something affecting the predators causes this pest to be a problem in some seasons.

**Control**
1. Only use clean healthy tubers as planting material

**References**
PNG Ag J 13(1) 1960 p 39
PANS Manual No 4 Pest Control in Tropical Root Crops p 175
Name: Yam mirid sap sucker

Scientific name: *Platypeltocoris similis* Popp
Family: Miridae
Order: HEMIPTERA

The insect
A very small insect that sucks the sap of yams.

Life cycle

Damage

Control

References
Name: Yellow scale
(Also called citrus yellow scale)
(See also red scale)

Scientific name: *Aonidiella citrina* (Coq.)
Family: Diaspididae
Order: HEMIPTERA

The insect

Life cycle

Damage
It favours shaded situations on the underside of lemon leaves and on lower branches. It can cause leaves to fall off and fruit to get spots on them. They infest leaves and fruit, often the lower surfaces of leaves and only rarely twigs or branches. It prefers cooler shady humid places.

Control

References
Flies
**Name**  
**Fruit flies**  
(See also banana fruit fly, melon fruit fly)

**Scientific names**  
There are about 200 fruit fly species in Papua New Guinea. Only some of these are serious pests. At present it is not possible to name them all correctly. Most Pacific fruit flies are now considered to be in the genus *Bactrocera* rather than the Genus *Dacus* which is what most were formally named as.

**The insects**  
Small to medium sized flies (0.5 - 1 cm long) with a superficial likeness to wasps, that is they often have yellow and brown stripes and grey or dusky wings.

**Life cycle**

- **Adults** - small-medium sized flies
- **Pupae** - in damp soil at base of plant. (7-10 days)
- **Eggs** - 7-10 laid below skin of green fruit just before it starts to ripen. (3-11 days)
- **Larvae** - in pulp of fruit, promote rotting (7-11 days)

A life cycle takes about 3-4 weeks in the lowlands.

**Damage**

*Bactrocera atrisetosus* Perkins  
Reported in zucchini fruit. Also destroying fruit of squash, marrow, and cucumber. It tends to be at higher altitudes. It also attacks tomatoes.  
*Bactrocera bryoniae* (Tryon.)  
Attacks capsicum, mango, banana, nectarine  
*Bactrocera decipiens* Drew  
Occurs only on New Britain and is a serious pest of pumpkins.  
*Bactrocera dorsalis* Hendel  
Attacks many kinds of fruit.  
*Bactrocera frauenfeldi* Schiner  
Reported on *Syzygium* sp fruit. Also recorded from guava fruit. It is a serious pest of mango.  
*Bactrocera frenchi*  
*Bactrocera musae* (Tryon.)  
*Bactrocera neohumeralis* Hardy  
Reported damaging pawpaw and many other kinds of fruit.  
*Bactrocera obliquus*  
*Bactrocera papuaensis* Malloch  
Reported on corn.  
*Bactrocera peculiaris*  
*Bactrocera strigifinis atritus* May  
Reported in pumpkin fruit. Also destroy female flowers of squash.  
*Bactrocera trivialis* Drew  
Larvae recorded destroying fruits of capsicum, grapefruit, peach and guava in mainland PNG  
*Bactrocera umbrosus* (F.)  
Is abundant in lowland areas and infests citrus and breadfruit.

**References**

DAL Entomology Bulletin No 19 or Harvest 8(3) p 134-137  
Waterhouse & Norris, 1993, Biological Control - Pacific Prospects Supplement 2 p 4
Name: Banana fruit fly  
(Several other Bactrocera sp also attack bananas)

Scientific names: Bactrocera musae (Try.)  
and  
Bactrocera bryoniae (Try.)  
Family: Tephritidae  
Order: DIPTERA

The insect  
Fruit flies occur over much of PNG up to about 1600 m altitude.

Life cycle

- **Adults** - small flies 8 mm long
- **Pupae** - in damp soil at base of plant. (7-10 days)
- **Eggs** - 7-10 laid below skin of green fruit just before it starts to ripen. (3-11 days)
- **Larvae** - in pulp of fruit, promote rotting with bacteria introduced when eggs are laid (7-11 days)

A life cycle takes about 3-4 weeks in the lowlands.

Damage
Fruit fly damage a range of fruit including bananas, chillies, pawpaw, capsicums, tomatoes and guavas.  
For banana damage is probably less in tall plants and in plants with harder skins.  
High temperatures and humidity help numbers build up.  
Attacks are occasional and it is not a regular problem with many varieties of bananas.

Control
1. Some kinds of fruit get less damage.  
2. Fruit can be harvested green before eggs are laid in them.  
3. Banana bunches can be covered with plastic bunch covers.  
4. Wrapping of fruit in paper bags while green reduces damage.

References
DAL Entomology Bulletin No 19 or Harvest 8(3) p 134-137  
Hick, Rural Development Series Handbook No 17 p 7  
Smith, The Banana fruit fly in PNG in Agriculture in the Tropics p 323  
Smith, PNG Ag J, 1977, Vol 28 (2,3 & 4) p 47  
Waterhouse & Norris, 1993, Biological Control - Pacific Prospects. Supplement 2 p 4
**Melon fruit fly**

**Scientific name:** *Bactrocera cucurbitae* Coq  
**[Synonyms:** *Dacus cucurbitae* Coq.,  
and  
*Strumeta cucurbitae* Coq]  
**Family:** Tephritidae  
**Order:** DIPTERA

The insect

The adult is a medium sized brown fly 8-10 mm long. The eyes and head are dark brown. There is a dark brown stripe along the edge of the wing.

Life cycle

- **Adult:** brown fly 8-10 mm long  
- **Pupae:** mostly in soil (10 days)  
- **Eggs:** in groups under the skin of fruit. 100-120 eggs per female. (2-3 days)  
- **Larvae:** 10-12 mm long, in fruit feeding promotes rotting with bacteria introduced when eggs are laid.

A life cycle takes about 3-4 weeks.

Damage

It commonly only occurs on pumpkin family plants such as watermelon, zucchini, squash, cucumber and rock melon. It can attack several other fruits. Larvae tunnel into the fruit and a large number of the maggots occur in the pulp. It can be a serious pest. Insect numbers are usually greater in the wet season. It occurs in lowland areas of Papua New Guinea.

Control

1. It is attacked by some predators and parasites, but control is generally not adequate.  
2. Destroy of fallen and infected fruit and rubbish.  
3. Ploughing/digging under crops helps expose the pupae.  
4. Some varieties of pumpkin family plants have resistance.  
5. Portion bait sprays are being introduced and have been shown to be effective elsewhere.

References

Hill, 1975, Agricultural Insect Pests of the Tropics and their control CUP p 323  
Kranz, J., 1977, Diseases, Pests and Weeds of Tropical Crops p 524  
Waterhouse & Norris, 1993, Biological Control - Pacific Prospects Supplement 2 p 4
The insect
The adult flies are a little like wasps in appearance and are red brown in colour. They are a little larger than a common housefly. There are yellow patches on the body. The wings are clear except for a dark band near the front and a stripe near the base.

Life cycle

- **Adults** - live for long periods.
- **Pupae** - in the ground, smooth and light brown.
- **Eggs** - laid in fruit, (2-3 days)
- **Larvae** - in fruit, about 8 mm long, (10 days)

There can be 5 or more generations per year.

Damage
The amount of damage varies with types of fruit as some fruit are harder and get less damaged. In soft varieties of fruit the whole fruit can go soft and squishy and rot. Numbers get worse in humid warm weather. Flies can breed in a very large number of fruits including fig fruits, tree tomato, passionflower, bananas, laulaus, etc. Flies are spread by flying and by being blown in the wind.

Control
1. Harvest fruit while still green and ripen in fly free area.
2. Collect and remove fallen fruit. It must not be buried, but burned.
3. Bait sprays can be used.
4. Insecticide sprays can be used 7 or 8 weeks before fruit ripen.
5. In some areas fruit flies are less.
6. Keeping areas weed free around fruit trees.
7. There are some other insects which parasitise fruit flies.

References
Hassan, E., Major Insect Pests of Australian Crops p 17, 78
O’Connor, Exotic Pests and Diseases. SPC section on citrus
Waterhouse & Norris, 1993, Biological Control - Pacific Prospects, Supplement 2 p 4
**Name**

**Bean fly**
(Also called shoot galling fly and leaf mining maggot)

**Scientific name:** *Ophiomyia phaseoli* (Tryon.)

**[Synonyms:**

- *Agromyza phaseoli* Coq
- *Melanagromyza phaseoli* Coq]

**Family:** Agromyzidae

**Order:** DIPTERA

**The insect**

The adult is a tiny black fly about 2 mm long and the larvae are small white maggots. The adult flies can fly strongly.

**Life cycle**

- **Adults** - small black fly about 2 mm long
- **Pupae** - in stem of bean near ground level. 2.3 mm long x 0.8 mm
- **Eggs** - about 60 laid within leaves of young plant, white and 1 mm long. (3 days)
- **Larvae** - tunnel in leaves down leaf stalk to main stem and into taproot.

Life cycle takes about 2-3 weeks in hot weather.

**Damage**

Plants turn yellow and stems become swollen and cracked, and break off in wind. This insect commonly does serious damage during dry seasons. 8 to 10 maggots per plant can kill a seedling. Common bean is very easily damaged. It is probably the most important bean pest. It has been recorded on common bean, snake bean, soybean and mung bean.

**Control**

1. Remove old crop residues.
2. There are differences between kinds of beans. Snake and winged beans get less damaged.
3. Chemical seed dressings are used but these can be dangerous.
4. Seedlings can be sprayed with insecticide.
5. Avoid overlapping crops of beans near each other.
6. Traditional subsistence seeds are sometimes better than imported seeds.

**References**

- DAL Entomology Bulletin No 28 or Harvest 9
- Hick, Rural Development Handbook No 17
- Hill p 329
- Kalshoven, L.G.E. 1981, Pests of crops in Indonesia p 549
- Kranz, p 5
Name: Cabbage leaf miner

Scientific name: *Liriomyza brassicae* (Riley)
[Also spelt as *Lyriomyza brassicae*]
Family: Agromyzidae
Order: DIPTERA

The insect
A very small fly, about 1.5 mm long. It is mostly yellow but with black lines across the back.

Life cycle
- **Adults** - small about 1.5 mm long
- **Pupae** - oval, shiny & dark brown In leaf
- **Eggs** - very small and laid inside leaf
- **Larvae** - 2.5 mm long & yellow/green

Damage
The larvae burrow into the leaves of cabbage, Chinese cabbage, radish, broccoli, and turnip. It probably also damages other cabbage family plants. In other countries it has been recorded mining into pea leaves.

Control
Not normally required.

References
Schreiner, I.H., 1989, Serpentine leafminers, Pest Advisory Leaflet No 23 South Pacific Commission, Noumea, New Caledonia
Swain Ag Zoology in Fiji p 136, 175
Waterhouse & Norris, 1987, Biological Control - Pacific Prospects, p 159
**Name**  
Paddy stemfly  
(Also called rice seedling flies)

**Scientific name**  
*Atherigona oryzae* Malloch

**Family:** Muscidae  
**Order:** DIPTERA

---

**The insect**

It resembles a small grey housefly.

**Life cycle**

- **Adults**
  - Pupae-in soil in yellow-brown pupal case
  - Eggs-1.5 mm across Laid on youngest leaves (48 hours)
- **Larvae**-only one develops per seedling

A life cycle takes about 26 days.

**Damage**

Larvae infest rice seedlings causing dead hearts. They are also reported damaging young seedlings of maize. They mainly damage non-flooded rice. Larvae only develop with high humidity therefore the pest does not occur in the dry season. Damage can be serious in the wet season in seed-beds.

**Control**

Chemical control is possible but expensive.

**References**

CIE Distribution maps No 411  
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia p 553-554
Name  Shootfly

Scientific name:  Atherigona orientalis Schiner
[Synonyms:  Atherigona excisa Thomas
and
Atherigona trilineata Stein.]
Family:  Muscidae
Order:  DIPTERA

The insect
A very small insect.

Life cycle

Damage
Larvae reported in fruit of rockmelon. Also attacks fruit of capsicum, tomato, corn, common bean, marrow and pumpkin after the fruit have been slightly damaged. Also attack bitter cucumber. Known to attack sorghum in the Solomon Islands.

Control

References
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 554
Name: Sorghum midge

Scientific name: *Contarinia sorghicola* (Coq)
Family: Cecidomyiidae
Order: DIPTERA

The insect
These insects are very small and look like a mosquito. It has a bright orange body and one pair of wings. The larvae are small legless maggots. The larvae can go into a resting stage inside seed and stay alive for 3 years. This makes their spread easy.

Life cycle

- **Adult**: very small fly
  - Females have a dark orange abdomen

- **Pupae**: these can over-winter in grain

- **Eggs**: over 100 laid inside the sorghum flower. (2-4 days)

- **Larvae**: white then turn orange, legless.
  - Less than 2 mm. (9-11 days)

A life cycle takes 14 to 21 days.

Damage
It damages the grain head of sorghum and other sorghum grasses. Damage can be serious.

Control
1. Burn the remains of old crops.
2. Use good seed, and sow well.
3. Some varieties are resistant. Slow maturing varieties get more damage.
4. Don’t grow successive crops in nearby gardens.
5. Chemicals do not offer a good solution

References
DAL Entomology Bulletin No 15 or Harvest 8(1) p 32-35
Hick, S., Rural Development Handbook No 17
Hill, p 319
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 537
Kranz, p 512
Grasshoppers, locusts and crickets
Name: Atractomorpha crenaticeps

Scientific name: Atractormorpha crenaticeps Blanch
Family: Acrididae
Order: ORTHOPTERA

The insect

This grasshopper is uniformly green or light brown with pale pink hind wings.

Life cycle

Damage
It damages the leaves of okra, aibika, brussels sprouts, sugarcane and sweet potato.
They tend to do damage in moist places.

Control

Not normally required.

References
See Thistleton survey Bulletin 36 p 13, 27
**Name**  
Coconut tree hopper

**Scientific name:**  
_Eumossula gracilis_ Willemse

**Family:**  
Tettigoniidae

**Order:**  
ORTHOPtera

## The insect

## Life cycle

## Damage

Reported damaging bananas.

## Control

Not normally required.

## References
**Name**      Coconut treehoppers  
(Also called Sexava)

**Scientific names:**  
- Segestidea defoliatria defoliatria Ulvavov
- Segestidea gracilis (Willemse)  
- Segestidea hanoverana Willemse  
- Segestidea insulana Willemse  
- Segestidea montana Willemse  
- Segestidea novaeguineae Brancsik  
- Segetes cornelii Willemse

**Family:**  
Tettigoniidae

**Order:**  
ORTHOPTERA

**The insect**

These are longhorn grasshoppers. The adults can be 10 cm long. They vary in colour from green to brown. They have well developed wings, jumping legs and very long antennae.

**Life cycle**

The adults live on palm leaves. Eggs are laid in the ground or in accumulated plant material on trunks. They hatch in approx. 70-80 days. Nymphs make their way to the top of palms, there are several instars over 100+ days. A life cycle takes over 200 days.

**Damage**

On the coast they attack coconuts and in the highlands they attack pandanus (Karuka). They also attack bananas and oil palm. They can seriously damage the leaves and crown of coconuts and karuka.

They get worse in places where there is no regular dry period.

The distribution of the ones damaging coconuts is:
- Segestes decoratus Redt. - Coastal NG and New Britain.
- Segestidea gracilis (Willemse) - New Britain and New Ireland.
- Segestidea uniformis (Willemse) - Manus
- Segestidea leefmansi (Willemse) - New Hanover, New Ireland.
- Segestidea novaeguineae (Brancsik) - Coastal New Guinea.

**Control**

1. For coconuts the green tree Kurukum ant has a deterrent effect.
2. Some predators and parasites are known.

**References**

DAL Entomology Bulletin No 11 or Harvest 7(2) p 84-86.
PNG Ag J 23(1 & 2) 1972 p 29
**Name**  
Giant grasshopper

**Scientific name:** *Valanga irregularis*  
Also Javanese grasshopper *Valanga nigricornis* (Burm.)

**Family:** Acrididae  
**Order:** ORTHOPTERA

---

**The insect**  
A very large grasshopper, up to 90 mm long. The colour is green-brown for the adults while the nymphs are pale green. They can be fairly well hidden because their colour is often similar to the background vegetation.

**Life cycle**  
Typical life cycle of a grasshopper

**Damage**  
Both the nymphs and adults feed on citrus leaves and can cause extensive damage to leaves and fruit.

**Control**  
Not normally required.

**References**  
CIE Distribution maps No 310  
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 51
Name: Migratory locust

Scientific name: Locusta migratoria (Linnaeus)
Family: Acrididae
Order: ORTHOPTERA

The insect

A grasshopper up to 40 mm long, and with a ring at its neck. The wings are speckled. The colour varies. Sometimes it breeds in large numbers and moves in a swarm of millions of insects.

Life cycle

Adults live 3 months. Eggs are laid in soil about 6 cm deep in a pod of 200 to 500. They are 6 mm long. They hatch in 17-22 days. Nymphs develop over 1 to 1.5 months before becoming adult. Life cycle takes about 70 to 110 days.

Damage

It can seriously damage the leaves of bananas, sugarcane, rice and maize as well as a large number of grasses. Also damages pineapple, palms and bamboo. They occur up to about 1750 m altitude. High temperatures and low humidity speed up development and heavy rains and lack of sunshine limit development. Often swarms develop in successive years.

Control

Normally in the solitary phase control is not necessary. However, swarms can be highly destructive and insecticides need to be used when they are still in the hopper stage. Early recognition and destruction of breeding places is used in Africa.

References

Frohlich, Pests and Diseases of Tropical Crops p 16
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia, p 47,48
Lamb, Insect pests of PNG p 11
Swain, Ag Zoology in Fiji p 112
**Name**  
Mole crickets  
(Also called African mole cricket)

**Scientific name:**  *Gryllotalpa africana* Pal.  
**Family:** Gryllotalpidae  
**Order:** OTHOPTERA

**The insect**  
The adult is a brown cricket about 25 mm long with a velvety appearance. The front legs are specially adapted for digging. Males are heard chirping in the evening. The eggs are oval brown and 1.5 mm long.

**Life cycle**  
Adults hide in soil in daytime and feeds at night. Eggs are laid in tunnels in the soil. Up to 100, 2.5 mm long, eggs are laid per female. They hatch in 2-3 weeks. The nymphal stage last 10 months.

A life cycle takes about a year.

**Damage**  
It attacks many crops at the seedling stage. Roots are damaged and plants wilt.  
It is worse at lower altitudes and in moist soil.  
It can burrow deeply into the soil. Most of the damage is to seedlings as the insects burrow just below the surface.  
It damages sugarcane, tomatoes and other vegetables. They can feed on peanuts below the ground and sweet potato.

**Control**  
Rice fields can be protected by flooding.

**References**  
Hill, 1975, Ag Insect Pests of the Tropics and their control CUP p 111
**Scientific name:** Phaneroptera brevis Aud.-Serv

**Synonym:** Euanerota brevis

**Family:** Tettigoniidae

**Order:** ORTHOPTERA

### The insect
A long-horned grasshopper, common in the highlands. Its body is narrow. Antennae are 3-4 times the length of the body. Females lay up to 60 eggs over 3 months.

### Life cycle
Adults are winged and green. Eggs are 3 mm long and laid on stems of bushes and are covered with bark. Nymphs are greenish with dark stripes and spots.

A life cycle takes 9-10 weeks.

### Damage
It attacks aibika, beans including winged bean, pigeon pea, peas, Chinese cabbage, cabbage, radish, asparagus, basil, sunflower, okra, brussels sprouts and sweet potato by eating the leaves. It is often found in shady places.

### Control
Usually not necessary

### References
Kalshoven, L.G.E. 1981, Pests of crops in Indonesia, p 58
Name: **Spur throated locust**  
(Also as short horned grasshopper)

Scientific name: *Austracris guttulosa* Walk  
Family: Acrididae  
Order: ORTHOPTERA

The insect
This grasshopper has short antennae and dark markings on the fore wings and unmarked transparent hind wings. The adult is grey brown in colour and 45-55 mm long. It has a peg or spur in the throat region.

Life cycle
Has a typical grasshopper life cycle.

Damage
1. It can form plagues.  
2. Adults and nymphs chew sugarcane leaves and other grasses leaving edges with a ragged appearance.  
3. They are also known to chew citrus leaves.

Control
Birds can control this pest when in small numbers.

References
CSIRO Insects of Australia p 343, 344  
Swain, Ag Zoology in Fiji p 114
Thrips, sawflies, termites and mites
Name: Banana rust thrips

Scientific name: Chaetanaphothrips orchidii F.
Also: Chaetanaphothrips signipennis
Family: Thripidae
Order: THYSANOPTERA

The insect
Adults are about 2 mm long and thin and golden-yellow. They have two pairs of narrow, strap-like, wings with many hairs on them. The front wings have dark areas of colour. All stages of the insect’s life cycle seek cover to hide. Insects fly only poorly and probably get to new gardens in planting material or in the wind.

Life cycle

Adults - live on banana fruit causing smoky patches on skin.

Pupae - on soil (7-10 days)

Eggs - on flowers and young fruit (7 days)

Nymphs - feed on fruit. White or yellow. Fully grown in 1 week.

Damage
Adults and nymphs feed on fruit causing brown rust patches on banana fingers. This does not affect the eating quality of the fruit.
Damage is less in cooler weather as the insect favours warm humid areas.
Removing the male bud may help control.
The thrips can also occur on citrus and giant taro.

Control
1. Plant washed peeled rhizomes as the insect is spread with banana planting material.
2. Cover the developing fruit bunches with polythene bags.

References
CSIRO Insects of Australia p 463
Frohlich plate 6
Hassan, Major Insect and Mite pests of Australian Crops p 23
Hick, Rural Development Series Handbook No 17
Kranz, Diseases, Pests and Weeds of Tropical crops
Pest Control in Bananas PANS Manual No 1 p 94
Name: Cacao thrips
(Also called red banded thrips)

Scientific name: *Selenothrips rubrocinctus* (Giard)
Family: Thripidae
Order: THYSANOPTERA

The insect
Slender brown insects up to 2 mm long.

Life cycle

- **Adult**- dark brown and 1 mm long.
- **Pupae**- (3-6 days)
- **Eggs**- 30-40 kidney shaped, eggs laid separately 0.25 mm long. (12-18 days)
- **Nymphs**- yellow with bright red band on abdomen. 1 mm long (6-10 days)

10 generations can occur in a year.

Damage
It damages cacao, cashew, mango, avocado, apple and some other crops. They damage macadamia nuts in Queensland.
Leaf tissue withers and becomes silvery. Later leaves of cacao become red.
It gets worse in dry periods and in sunny locations. It causes leaves to fall off.

Control
Not normally required.
Usually associated with plants that are already under stress for some other reason such as drought or poor soils. These problems should be cured first.

References
Frohlich, p 91
Hill, p 234
**Name**  
Onion thrips

**Scientific name:** *Thrips tabaci* Lind.
**Family:** Thripidae
**Order:** THYSANOPTERA

The insect
This insect is small 1-1.2 mm long and pale yellow. They have 2 pairs of narrow fringed wings. It can be picked out from other thrips because it has short bristles on the rear of the prothorax and 4 bristles on the front wings away from the body. They can lay eggs without being fertilised and these will produce young.

Life cycle

```
Adults

Pupae- in soil

Eggs- in tissue of plant
Small and white.
(3-10 days)

Nymphs- light yellow in colour
Feeding on leaves. (1-3 weeks)
```

Life cycle depends on temperature. There can be 15 cycles per year.

Damage
They attack onions, tobacco, capsicums and other plants in the tomato family as well as many other plants. They suck sap producing small white spots on leaves, mostly close to the veins. Leaves can be deformed as a result. The insects usually feed under the leaves. They can transmit viruses. They are worse in areas with hot dry weather. They leave small black droplets of faecal matter.

Control
1. Sprays can be used but must be repeated after a short interval as they do not kill the eggs.
2. Digging the ground and getting rid of old plants helps reduce numbers.
3. Rain or overhead irrigation, reduce numbers.
4. Some crop varieties are less susceptible.

References
Frohlich, Pests and Diseases of Tropical crops p 13,129
Hill, p 225; Kranz, p 280
Swain, Ag Zoology in Fiji p 183
Waterhouse & Norris, Biological Control 1989, - Pacific Prospects Supplement 1, p 36
**Red spider mite**

<table>
<thead>
<tr>
<th>Name</th>
<th>Scientific name: Tetranychus marianae McGregor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>Tetranychidae</td>
</tr>
<tr>
<td>Order</td>
<td>ACARINA</td>
</tr>
</tbody>
</table>

**The mite**

This is a mite (it has 8 legs) not an insect. Mites are very small and grow up to a length of only 0.5 mm. They are wingless so cannot spread quickly. They usually spread by spinning a fine thread (web) and float in the air rather like a parachute.

**Life cycle**

Adults are red and 0.5 mm. Eggs are spherical and laid under leaves. Nymphs are yellow, green or red.

**Damage**

It commonly attacks leaves of cassava, bananas, peas, dwarf beans and winged beans. Other plants can also be attacked. They live on the lower surfaces of leaves often near veins. They suck sap and yellow spots are produced on the leaf that then may dry off. They leave a fine silk webbing under the leaf and in bad attacks this may cover the whole plant. Damage gets worse in hot dry weather. They can cause heavy damage to beans.

**Control**

Control is often not necessary or practical.

**References**
Name: White ants or termites

Scientific name: Coptotermes elisae
           Microcerotermes biroi

Family: Order: ISOPTERA

The insect
Coptotermes live partly above and partly below ground. They live in colonies. They can penetrate living as well as dead trees and make mud covered walkways on trunks of trees to a height of 2-3 m.

Life cycle

Damage
Normally they attack dead trees and wood but if a tree is not growing well may also be attacked.

Control
As damage is more common in newly cleared rain forest, planting annual food crops before fruit trees helps reduce damage to trees.

References
DAL Entomology Bulletin No 47 or Harvest 12(3) p 97
Kalshoven, L.G.E., 1981, Pests of crops in Indonesia, p 74-77
**Name**  
Yam sawfly

**Scientific name:** *Senoclidia purpurata* (F. Sm.)  
**Family:** Tenthredinidae  
**Order:** HYMENOPTERA

**The insect**  
This sawfly or wasp is about 10 mm long.

**Life cycle**

```
Adults

Pupa - in soil
  --> Eggs - in young shoots and leaves

Larvae
```

**Damage**  
Larvae have been reported on yam leaves, feeding together in rows. They can occasionally cause serious leaf loss.

**Control**

Not normally required.

**References**

PANS Manual No 4 Pest Control in Tropical Root crops p 173
### Minor insect pests with occasional records

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Family</th>
<th>Observations</th>
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<td>Acalolepta holotephra</td>
<td>Boisd</td>
<td>Cerambycidae (COL)</td>
<td>Boring, Ficus, LAES East New Britain Province July 1976. Also boring into cassava stems, LAES</td>
</tr>
<tr>
<td>Acauloplacella immensis</td>
<td>Fauvel</td>
<td>Tettigoniidae (ORTH)</td>
<td>Reported eating leaves of coastal pitpit</td>
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<tr>
<td>Acleris sp.</td>
<td>Fauvel</td>
<td>Noctuidae (LEP)</td>
<td>Damaging brussels sprouts.</td>
</tr>
<tr>
<td>Acrocercops cramerella</td>
<td>(Snellen)</td>
<td>Gracillariidae (LEP)</td>
<td>Also known to damage rambutan.</td>
</tr>
<tr>
<td>Acrocercops sp nr. phaedeta</td>
<td>Meyrick</td>
<td>Gracillariidae (LEP)</td>
<td>Reported mining leaves of Java almond throughout year near Port Moresby.</td>
</tr>
<tr>
<td>Acyrthosiphon solani</td>
<td>Kaltenbach</td>
<td>Aphididae (HEM)</td>
<td>Reported on potato.</td>
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<tr>
<td>Adoxophyes melichron</td>
<td></td>
<td>Tortricidae (LEP)</td>
<td>Reported damaging peanuts; also okra and sugar pea. Can also damage cacao and pawpaw.</td>
</tr>
<tr>
<td>Adoxophyes tetraphracta</td>
<td>Meyrick</td>
<td>Tortricidae (LEP)</td>
<td>Larvae reported damaging leaves velvet bean.</td>
</tr>
<tr>
<td>Adoxophyes sp</td>
<td></td>
<td>Tortricidae (LEP)</td>
<td>Reported damaging avocado, peanuts, parsley, chinese cabbage, soybean, asparagus, eggplant, okra, peas, sweet potato, soursop. Other species in Kalshoven p 222, 223</td>
</tr>
<tr>
<td>Aedia sericea</td>
<td>Butler</td>
<td>Noctuidae (LEP)</td>
<td>Frequent in small numbers in sweet potato in highlands. See Thistleton survey Bulletin 36 p 6</td>
</tr>
<tr>
<td>Agapophyta bipunctata</td>
<td>Boisd</td>
<td>Pentatomidae (HEM)</td>
<td>Reported on coconut and sago.</td>
</tr>
<tr>
<td>Agapophyta similis</td>
<td>Blote</td>
<td>Pentatomidae (HEM)</td>
<td>Pests of pigeon pea and Tephrosia. Large populations can occur and kill plants. Nymphs and adults feed on young shoots.</td>
</tr>
<tr>
<td>Agapophyta viridula</td>
<td>Blote</td>
<td>Pentatomidae (HEM)</td>
<td>Reported sap sucker on basil. Other species in Kalshoven p 94</td>
</tr>
<tr>
<td>Agonoscelis rutila</td>
<td></td>
<td>Pentatomidae (HEM)</td>
<td>Reported mining in leaf of coastal pitpit. Lettuce seedlings severely damaged. Also tomato leaves eaten at Wau. See Kalshoven p 568.</td>
</tr>
<tr>
<td>Agromyzidae papuensis</td>
<td></td>
<td>Agromyzidae (DIPT)</td>
<td>Reported causing minor damage to Yam leaves.</td>
</tr>
<tr>
<td>Agrotis interjectionis</td>
<td>Guenee</td>
<td>Noctuidae (LEP)</td>
<td>Recorded on beetroot at Wau. Feeding on leaves of <em>Ficus</em>. Other species in Kalshoven p 518,520</td>
</tr>
<tr>
<td>Agrypnus sp.</td>
<td></td>
<td>Elateridae (COL)</td>
<td>In leaf sheaths sugarcane. See Thistleton survey Bulletin 36 p 26</td>
</tr>
<tr>
<td>Aiteta iridias</td>
<td>Myr.</td>
<td>Noctuidae (LEP)</td>
<td>Larvae feeding on foliage of <em>Terminalia catappa</em> or Java almond</td>
</tr>
<tr>
<td>Alcides australis</td>
<td>Boisduval</td>
<td>Curculionidae (COL)</td>
<td>Reported causing minor damage to yam leaves.</td>
</tr>
<tr>
<td>Alcides sp.</td>
<td></td>
<td>Curculionidae (COL)</td>
<td>Recorded on beetroot at Wau. Feeding on leaves of <em>Ficus</em>. Other species in Kalshoven p 518,520</td>
</tr>
<tr>
<td>Alcides elegans</td>
<td>Guerin-Meneville</td>
<td>Curculionidae (COL)</td>
<td>Reported damaging sugarcane.</td>
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<tr>
<td>Aleurodes comata</td>
<td></td>
<td>Aleurodidae (HEM)</td>
<td>Reported doing minor damage to pumpkin leaves. Kalshoven p 445</td>
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<tr>
<td>Altica sp</td>
<td></td>
<td>Chrysomelidae (COL)</td>
<td>Reported on raspberry (Syn. <em>Halticus</em> sp.)</td>
</tr>
<tr>
<td>Alticus sp.</td>
<td></td>
<td>Chrysomelidae (COL)</td>
<td>Reported on rice</td>
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<tr>
<td>Anadastus albertisi</td>
<td>Harold</td>
<td>Languridae (COL)</td>
<td>Reported damaging lettuce.</td>
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<tr>
<td>Ananipa sp.</td>
<td></td>
<td>Gryllidae (ORTH)</td>
<td>Reported slightly damaging sugarcane</td>
</tr>
<tr>
<td>Anomala anoguttata</td>
<td>Burm.</td>
<td>Rutelidae (COL)</td>
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<td><strong>Species</strong></td>
<td><strong>Family</strong></td>
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<tr>
<td><em>Antestiopsis semiviridis</em> (Walk.)</td>
<td>Pentatomidae (HEM)</td>
<td>Coffee bugs</td>
<td></td>
</tr>
<tr>
<td><em>Anticarsia irrorata</em> F.</td>
<td>Noctuidae (LEP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Apachynus beccarii</em> Dubrony</td>
<td>Apachyidae (DERM)</td>
<td>Damaging potato.</td>
<td></td>
</tr>
<tr>
<td><em>Aphodius lividus</em> Olivier</td>
<td>Scarabaeidae (COL)</td>
<td>Larvae damaging false stem cardamom.</td>
<td></td>
</tr>
<tr>
<td><em>Aphthona bicolorata</em> Jacoby</td>
<td>Chrysomelidae (COL)</td>
<td>Doing minor damage to pumpkin leaves eating epidermis. Destroyed sorghum seedlings. Also on cucumber stripping off the leaf epidermis. Feed on the leaf epidermis of sweet potato.</td>
<td></td>
</tr>
<tr>
<td><em>Aphthona sp</em> nr <em>scutellata</em> Baly</td>
<td>Chrysomelidae (COL)</td>
<td>Doing minor damage to pumpkin leaves.</td>
<td></td>
</tr>
<tr>
<td><em>Argina astrea</em> Drury</td>
<td>Arctiidae (LEP)</td>
<td>Orange sann moth Recorded as <em>Argina cribraria</em> (Clerck) on sweet potato and Crotalaria. An orange spotted moth. There are white edged spots on the front wings and darker spots on the rear wings. Larvae feed within the seedpods of crotalaria. Caterpillar is black with yellow rings across the body and with long black and white hairs. There is a row of orange spots along the side. They are up to 25 mm long. See CSIRO Insects p 861, 62. Ag Zool in Fiji p 391. Kalshoven p 324 Feeding on young stems and leaves of <em>Ficus</em>.</td>
<td></td>
</tr>
<tr>
<td><em>Armacia sp</em></td>
<td>Ricaniidae (HEM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Arrhenes dschilus</em> Plotz.</td>
<td>Hesperiidae (LEP)</td>
<td>Recorded causing moderate damage to sugarcane. In Common, Butterflies of Australia. plate 9</td>
<td></td>
</tr>
<tr>
<td><em>Astacops dorycus</em> Boisd.</td>
<td>Lygaeidae (HEM)</td>
<td>Two small bugs causing wilting of leaves</td>
<td></td>
</tr>
<tr>
<td><strong>Species</strong></td>
<td><strong>Family</strong></td>
<td><strong>Notes</strong></td>
<td></td>
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<tr>
<td>----------------------------------</td>
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<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><em>Asura crocota</em> Hampon</td>
<td>Arctiidae (LEP)</td>
<td>Larvae reported boring superficial channels in stored sweet potato tubers in the highlands.</td>
<td></td>
</tr>
<tr>
<td><em>Ataenius spinator</em> Harold</td>
<td>Scarabaeidae (COL)</td>
<td>Reported feeding on roots of coastal pitpit.</td>
<td></td>
</tr>
<tr>
<td><em>Atractomorpha similis</em></td>
<td>Acrididae (ORTH)</td>
<td>Reported on leaves of sweet potato and also pollinating plant.</td>
<td></td>
</tr>
<tr>
<td><em>Atysa sp.</em></td>
<td>Chrysomelidae (COL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Aulacophrys fascialis</em> Marsh.</td>
<td>Curculionidae (COL)</td>
<td>Adults fed on leaves and fruit of strawberry.</td>
<td></td>
</tr>
<tr>
<td><em>Badamia exclamationis</em> Fabricius</td>
<td>Hesperiidae (LEP)</td>
<td>Moderate to severe defoliation of young okari nut tree.</td>
<td></td>
</tr>
<tr>
<td><em>Bathytricha truncata</em> Walker</td>
<td>Noctuidae (LEP)</td>
<td>As <em>Phragmatiphila truncata</em> Walker Cane-moth borer; Large sugarcane moth borer Reported damaging sugarcane. Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera. CABI</td>
<td></td>
</tr>
<tr>
<td><em>Batracamorphus sp.</em></td>
<td>Cicadellidae (HEM)</td>
<td>Reported as sap sucker of roselle and sunflower at Wau Ecology Institute</td>
<td></td>
</tr>
<tr>
<td><em>Blastophaga sp</em></td>
<td>Agaonidae (HYM)</td>
<td>Reported on millet</td>
<td></td>
</tr>
<tr>
<td><em>Blissus sp</em></td>
<td>Lygaeidae (HEM)</td>
<td>Adults and larvae fed on leaf sheath and stems of rice seedlings near and under the ground.</td>
<td></td>
</tr>
<tr>
<td><em>Borbo cinnara</em> Wallace</td>
<td>Hesperiidae (LEP)</td>
<td>Reported eating leaves of maize at Wau Ecology Institute. Larvae feeding on rice leaves.</td>
<td></td>
</tr>
<tr>
<td><em>Bothricara palliata</em> Macleay</td>
<td>Cerambycidae (COL.)</td>
<td>Reported on rice.</td>
<td></td>
</tr>
<tr>
<td><em>Bothrogonia sp</em></td>
<td>Cicadellidae (HEM.)</td>
<td>Sap sucker of coastal pitpit, and kidney bean at Wau Ecology Institute</td>
<td></td>
</tr>
<tr>
<td><em>Brachyplatis papuus</em> Guer.</td>
<td>Pentatomidae (HEM.)</td>
<td>Recorded damaging beans. Also damages some tree legumes.</td>
<td></td>
</tr>
<tr>
<td><em>Brachyplatys sp</em></td>
<td>Pentatomidae (HEM.)</td>
<td>Recorded sucking pod of velvet bean at Wau Ecology Institute.</td>
<td></td>
</tr>
<tr>
<td><em>Brachyplatis translineatus</em> Walk.</td>
<td>Pentatomidae (HEM)</td>
<td>Damaging <em>Passiflora foetida</em> and cacao</td>
<td></td>
</tr>
<tr>
<td><em>Bromitspa lateralis</em></td>
<td>Chrysomelidae (COL)</td>
<td>Recorded damaging sugarcane</td>
<td></td>
</tr>
<tr>
<td><em>Bryscia exigua</em> Dist.</td>
<td>Pentatomidae (HEM)</td>
<td>Reported damaging cassava.</td>
<td></td>
</tr>
<tr>
<td><em>Caedius demeijerei</em> Geb.</td>
<td>Tenebrionidae (COL)</td>
<td>Reported damaging beans especially young seedlings to which they can cause considerable damage. Also reported on taro. The adults are found on the ground under beans. Also radish.</td>
<td></td>
</tr>
<tr>
<td><em>Calliteara horsfieldi</em> Saunders</td>
<td>Lymantriidae (LEP)-tussock moths.</td>
<td>as <em>Dasychira horsfieldi</em> Saunders Reported damaging sugarcane.</td>
<td></td>
</tr>
<tr>
<td><em>Carpophilus sp nr tenuis</em> Murray</td>
<td>Nitidulidae (COL)</td>
<td>Reported damaging betel nut</td>
<td></td>
</tr>
<tr>
<td><em>Carpophilus maculatus</em> Murray</td>
<td>Nitidulidae (COL)</td>
<td>Damaging lettuce. Also damaging sweet potato leaves and potato leaves with minor damage. Picture Epenhuijsen Vegetables in Nigeria p 52</td>
<td></td>
</tr>
<tr>
<td><em>Cassida diomma</em> Boisduval</td>
<td>Chrysomelidae (COL)</td>
<td>small tortoise beetle</td>
<td></td>
</tr>
<tr>
<td><em>Cassida papuana</em> Spaeth</td>
<td>Chrysomelidae (COL.)</td>
<td>Reported feeding on sweet potato leaves in small numbers and doing minor damage. See DAL Entomology Bulletin No 18 or Harvest 8(2) p 96.</td>
<td></td>
</tr>
<tr>
<td><em>Cassida sexguttata</em> Boisduval</td>
<td>Chrysomelidae (COL.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Cephrnes mosleyi** (Butl.)  
Hesperiidae Coconut skipper  
Larvae caused moderate leaf damage to young coconuts. Parasites help control. Other species in Kalshoven.

**Ceresium pachymerum**  
(Cerambycidae (COL))  
Ceroplastodes chiton Green  
Coccidae (HEM)  
Check wax scales. Occurs on cacao, soursop, pawpaw. Now renamed *Drepanococcus chiton* (Green). Attended by ants.

**Chaetocnema basalis**  
(Baly)  
Chrysomelidae (COL)  

**Chauliognathus waroensis**  
Wittmer  
Cantharidae (COL)  
Reported damaging sweet potato and bean leaves in highlands.

**Chelisoches morio**  
Fabricius  
Chelisocidae (DERM)  
Commonly associated with flowering taro. Also recorded damaging banana fruit. In Kalshoven p 69 with picture. A predator of small insects.

**Chlumetia transversa**  
Walker  
Noctuidae (LEP) Mango shoot caterpillar  
Reported damaging mango trees. Kalshoven p 350 It occurs up to 1250 m The violet larvae initially bores into the young leaf, then the leaf stalk, buds and shoots. The caterpillars pupate in the soil in flimsy cocoons. The eggs are laid on the young leaves. Total development takes 22-27 days. Repeated attacks can lead to serious damage.

**Cicadella sp.**  
Cicadellidae (HEM)  

**Cicadella wallacei**  
Distant  
Cicadellidae  
Reported on sweet potato in highlands. See Thistleton survey Bulletin 36 p 13

**Cicindela decem-guttata urvillei**  
Dejean  
Cicindelidae (COL)  
Reported on rice.

**Ciriceps sp.**  
Clavigralloides acantharis Fabricius  
Notodontidae (LEP)  
 Reported on male flower of betel nut.

**Cletus sp**  
Clostera rubida Druce  
Clysterius angustus Arrow  
Colobathristidae (COL)  
Reported sucking the seed of amaranth Reported on *Flacourtia sp.*

**Clysterius angustus**  
Arrow  
Elateridae (COL)  
Adults reported feeding on corn cobs. In sweet potato See Thistleton survey Bulletin 36 p 21

**Colaspoma regulare**  
Crotch  
Colaspoma (HEM)  

**Colgar tricolor**  
Dist.  
Flatidae (HOM)  
On leaves and stems of sweet potato. Check *Colaspoma*. Kalshoven p 440 Makes small round holes in sweet potato. Reported damaging aibika, chinese cabbage, sunflower, okra, avocado, cabbage; as well as coffee, rubber, cacao, cashew. Sap sucker.

**Colposcelis vignaphila**  
Bryant  
Chrysomelidae (COL)  
On common bean.

**Compsolacon gracilis**  
Bryant  
Elateridae (COL)  
Adults reported feeding on corn cobs. In
Conoderus mucronatus Candeze

Conogonia sp

Coproporus sp.

Coptosoma pygmaeum Mont.

Coptosoma variegata Herrich-Schaffer

Coptotermes hyaloapex Holmg.

Coronacella kirkaldyi Muir

Creatonotus gangis (L.)

Criocerus sp.

Criocerus clarkii Baly

Criontiades sp.

Cryptophasa setiotricha Meyr.

Cryptophasa sp. nr arithmologia Meyrick

Cyrtopeltis modestus

Cyrtorhinus lividipennis Reuter

Cyrtorhinus sp.

Darala rubeola Feld.

Dasychira mendoza Hubn.


On potato leaves.

On flowering taro.

Reported damaging cabbage.

See CSIRO Insects of Aust p 450.

Reported damaging pigeon pea.

On Ton Pometia pinnata

Reported on rice.

Larvae have been reported on maize.


Larvae dark with light stripe along side some white spots on body and red warts bearing hair tufts. They move quickly and can appear in numbers on sugarcane or maize. They pupate in loose cocoons.

The moths are remarkable because of the long dark triangular marks on the light coloured front wings. See Kalshoven p 322.

Criocerus sp.

Crioceridae (COL)

Criocerus clarkii Baly

Crioceridae (COL)

Criontiades sp.

Miridae (HEM)

Cryptophasa setiotricha Meyr.

Xyloryctidae (LEP)

Cryptophasa sp. nr arithmologia Meyrick

Xyloryctidae (LEP)

Cyrtopeltis modestus

Miridae (HEM)

Cyrtorhinus lividipennis Reuter

Miridae (HEM)

Cyrtorhinus sp.

Miridae (HEM)

Darala rubeola Feld.

Lasiocampidae (LEP)

Dasychira mendoza Hubn.

Lymantriidae (LEP) leaf eating caterpillar

Causes defoliation of yams. Most noticeable after rains. Pupation takes place in the soil.

Feeding on leaves of pumpkin.

On potato leaves. On sweet potato leaves.

Larvae reported damaging raintree trunk near Port Moresby

Reported damaging Malay apple.

Reported sap-sucker of tomato at Wau Ecology Institute. Other species in Kalshoven p 126. Possibly Cyrtopeltis tenuis due to confusion with naming.

Reported on rice and possible predator of Nilaparvata lugens. See Kalshoven p 126.

Reported on taro.

Larvae on fronds of coconuts. Feed on fronds at night but during day rest under fibrous cover of leaf axil of young palms. Pupal period 20 days.

Larvae reported feeding on foliage of Hibiscus at Kerevat. Also known to damage potato. Eating leaves eggplant, cassava and soursop at Wau Ecology Institute Kalshoven p 360. Larvae small and brightly coloured. The head and legs are red. A tuft of white hairs occurs on the fourth segment, and a black one on the fifth. There is a white band around the body surrounded by a red spot. They are 30-40 mm long. They eat many shrubs and
trees. Some now renamed *Psalis.*

As *Noorda albizonalis* Hamps Larvae reported feeding on mango fruit.

Kalshoven p 277. The larvae feed in the pulp and later the pith. The borers grow to 2cm long. Fruit flies later attack. Pupation takes place in the soil. See Zhang Bin-Cheng, 1994, Index of Economically Important Lepidoptera. CABI

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<table>
<thead>
<tr>
<th><strong>Species</strong></th>
<th><strong>Family</strong></th>
<th><strong>Notes</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deanolis albizonalis</strong></td>
<td>Pyralidae (LEP)</td>
<td>Red banded mango borer.</td>
</tr>
<tr>
<td><strong>Demonax collaris</strong> Pascoe</td>
<td>Cerambycidae (COL)</td>
<td>Reported damaging soybean in highlands.</td>
</tr>
<tr>
<td><strong>Dendrothripoides ipomoeae</strong> Bagn.</td>
<td>Thripidae (THYS)</td>
<td>Feeding on sweet potato leaves causing yellow freckling.</td>
</tr>
<tr>
<td><strong>Dentiblissus venosus</strong> Breddin</td>
<td>Lygaeidae (HEM)</td>
<td>On sugarcane.</td>
</tr>
<tr>
<td><strong>Depsages granulosa</strong> Guerin-Meneville</td>
<td>Cerambycidae (COL)</td>
<td>Reported damaging pigeon pea.</td>
</tr>
<tr>
<td><strong>Deraecoris sp.</strong></td>
<td>Miridae (HEM)</td>
<td>On taro, LAES.</td>
</tr>
<tr>
<td><strong>Desmopterella sp</strong></td>
<td>Pyrgomorphidae (ORTH)</td>
<td>Reported eating leaves of sunflower.</td>
</tr>
<tr>
<td><strong>Diacrisia niceta</strong> (Stal.)</td>
<td>Arctiidae (LEP)</td>
<td>Hairy caterpillar reported feeding on <em>Portulaca oleracea.</em> They feed on the young leaves. The pupa is in the soil or under dry leaves.</td>
</tr>
<tr>
<td><strong>Diacrisia papuana</strong> Roth.</td>
<td>Arctiidae (LEP)</td>
<td>Reported feeding extensively on banana fruit in highlands.</td>
</tr>
<tr>
<td><strong>Dichocrosis sp.nr punctiferalis</strong> Guenee</td>
<td>Pyralidae (LEP)</td>
<td><em>Peach yellow moth</em> Reported damaging wild ginger. <em>D punc.</em> larvae damage macadamia nuts in Queensland. Also recorded damaging cotton. Kalshoven p 266. Occurs to 1750 m. Found incidentally on many plants. Caterpillar is red brown and lives in a web made of frass. The pupae lie in a fairly solid cocoon.</td>
</tr>
<tr>
<td><strong>Dieuches finitimus</strong> Van Duzee</td>
<td>Lygaeidae (HEM)</td>
<td>Reported from strawberries (F vesca) in highlands.</td>
</tr>
<tr>
<td><strong>Dieuches sp.</strong></td>
<td>Lygaeidae (HEM)</td>
<td>Reported sucking the seed of basil.</td>
</tr>
<tr>
<td><strong>Dimorphopterus cornutus</strong> Slater</td>
<td>Lygaeidae (HEM)</td>
<td>Infesting roots of rice seedlings.</td>
</tr>
<tr>
<td><strong>Dimorphopterus sp.</strong></td>
<td>Lygaeidae (HEM)</td>
<td>Killed significant area of rice.</td>
</tr>
<tr>
<td><strong>Dindymus pyrochrous</strong> Boisd.</td>
<td>Pyrrhocoridae (HEM)</td>
<td>Reported damaging ginger. Other species in Kalshoven p 111.</td>
</tr>
<tr>
<td><strong>Ectatorhinus magicus</strong> Gerstaecker</td>
<td>Curculionidae (COL)</td>
<td>Boring into trunk of galip.</td>
</tr>
<tr>
<td><strong>Elassogaster lineata</strong> de Meij</td>
<td>Platystomatidae (DIPT)</td>
<td>Reported from sugarcane.</td>
</tr>
<tr>
<td><strong>Elassogaster sepsoides</strong> Walk.</td>
<td>Platystomidiidae (DIPT)</td>
<td>On potato.</td>
</tr>
<tr>
<td><strong>Elaunon bipatitus</strong> Kirby</td>
<td>Forficulidae (DERM)</td>
<td>On sugarcane and bananas.</td>
</tr>
<tr>
<td><strong>Enoplopter ?hieroglyphicum</strong> de Meij</td>
<td>Tephritidae (DIPT)</td>
<td>On potato.</td>
</tr>
<tr>
<td><strong>Epilachna guttatapustulata</strong> Fabricius</td>
<td>Coccinellidae (COL)</td>
<td>On taro.</td>
</tr>
<tr>
<td><strong>Epilachna signatipennis</strong> Boisd.</td>
<td>Coccinellidae (COL) leaf eating beetle</td>
<td>Reported damaging sweet potato, rice bean, common bean, cowpea, lima bean, cucumber. NG Beetles p 50</td>
</tr>
<tr>
<td><strong>Epilachna vigintisexpunctata</strong></td>
<td>Coccinellidae (COL)</td>
<td>Causing severe damage to eggplant leaves.</td>
</tr>
</tbody>
</table>
**Erythroneura sp.** *Boisduval*
*Cicadellidae* [Jassidae](HEM)
Adults and nymphs feeding on underside of leaves of winged bean. Damage sometimes severe. Many not described. Kalshoven p 139.

**Euborellia annulipes** *Lucas*
*Labiduridae* (DERM)
Boring into peanut fruit and feeding on kernels.

**Euconocephalus sp.**
*Tettigoniidae* (ORTH)
Reported eating leaves of maize and coastal pitpit.

**Eudecatoma sp.**
*Eurytomidae* (HYMEN)
Wasp forming galls on lime trees.

**Eumetopina flavipes** *Muir*
*Delphacidae* (HEM)

**Eumossula gracilis** *Willemse*
*Tettigoniidae* (ORTH)
Reported damaging bananas.

**Eupneusta solena** *Bradley*
*Elachistidae* (LEP) leaf miner of sugarcane
Reported larvae mining sugarcane leaves. See Bull. Ent Res. 64:73-79. 1974. Damage not severe. This species is very similar to *Dicranocetes saccharella* Busk. The larvae grow to 6 or 7 mm long. The pupae are 5-6 mm long in a cocoon on the leaf of sugarcane.

**Euproctis sp.**
*Lymantriidae* (LEP)
Reported eating leaves of broccoli, okra, asparagus, apple, capsicum and winged bean at Wau Ecology Institute. Other *Euproctis spp.* See CIE Distribution maps No 388 and 362 (revised). Called gold-tail moth and brown tailed moth respectively.

**Euricania discigutta** *(Walk.)*
*Ricaniidae* (HEM) plant hopper
Reported damaging coffee and also cabbage, chinese cabbage, aibika, beans and corn. Related species reported on cassava in Solomons.

**Euricania tristicula** *Stal*
*Ricaniidae* (HEM)
Adults collected from citrus.

**Euricania villica**
*Ricaniidae* (HEM) plant hopper
Reported sucking sap of sunflower, avocado, common bean, soursop at Wau Ecology Institute.

**Euronotobrachys sp.**
*Eurybrachidae* (HEM)
Reported on taro.

**Euscyrtus hemelytrus** *(de Haan)*
*Gryllidae* (ORTH)
Reported damaging sugarcane.

**Eysarcoris ventralis** West.
*Pentatomidae* (HEM)
Adults feed on leaf sheath of rice Reported feeding on stems of okra and hibiscus.

**Ganae pulchella** *Pascoe*
*Curculionidae* (COL)
Adults feeding on aibika and boring into stems. Kalshoven p 437. picture p 436. An important pest of cacao in Bismarck Archipelago.

**Gesonula mundata sanguinolenta** *Kraus*
*Acridiidae* (ORTH)
A brightly coloured small grasshopper reported damaging taro, sugarcane, and macadamia. PNG Ag J 17(3) 1965. Defoliating young macadamia trees. On taro adults and hoppers feed on leaves. Eggs laid in petioles. Moderate damage to leaves.

**Glenea aluensis** *Gahan*
*Cerambycidae* (COL)
Adults feeding on aibika and boring into stems. Kalshoven p 437. picture p 436. An important pest of cacao in Bismarck Archipelago.

**Glyptoporopterus sharpi** *Faust.*
*Curculionidae* (COL)
Reported on taro.

**Gonocephalum**
*Tenebrionidae* (COL)
Reported damaging radish Other species in
ochthebioides Ful. False wireworm Curculionidae (COL) Kalshoven p 423 Reported damaging raspberries.

**Gymnopholus interpres** Hllr. Curculionidae (COL) Reported damaging raspberries.

**Gymnopholus marquardti** Hllr. Curculionidae (COL) Reported damaging raspberries.

**Gymnopholus weiskei** Hllr. Curculionidae (COL.) Reported damaging yam. See PNG Ag J 18(3)

**Halticus insularis** Usinger Miridae (HEM.) On taro. Now *Alticus* Reported on peanuts and beans. Sucking sap of common bean, cucumber, parsnip, chinese cabbage, okra, coriander, dill, soybean, sweet potato, lettuce and radish at Wau Ecology Institute. Now *Alticus*

**Halticus minutus** Reuter Miridae (HEM) flea hopper. Reported on peanuts and beans. Sucking sap of common bean, cucumber, parsnip, chinese cabbage, okra, coriander, dill, soybean, sweet potato, lettuce and radish at Wau Ecology Institute. Now *Alticus*

**Haptoncus sp. nr concolor** Nitidulidae (COL) Reported on male flower of betel nut palm. Nymphs and adults reported damaging greater yam leaves and some varieties suffered severe damage. The leaves go spotted with light patches. See photo Gagne Staple crops in subsistence agriculture. *Monographie Biologicae* Vol 42 p 248.

**Haptesus tropicus** Neboiss Elateridae (COL) In leaf sheaths sweet potato See Thistleton survey Bulletin 36 p 26

**Haptoncus sp.** Reported sucking sap of soursop

**Hexacentrus mundar** Walker Tettigoniidae (ORTH) Reported on taro.

**Hippotion boerhavieae** Fab. Sphingidae (LEP) Reported chewing leaves of potato, capsicum, sunflower, turnip, avocado, maize, okra, winged bean.

**Homeoxipha fuscipennis** Gryllidae (ORTH) Reported on taro. Moderate to severe damage by eating leaves. Reported chewing leaves of potato, capsicum, sunflower, turnip, avocado, maize, okra, winged bean.

**Hypolixus mastersi** Pascoe Curculionidae (COL) Reported damaging corn and yam. Other species in Kalshoven p 506.

**Hypolixus ritsemae** Pasc. Curculionidae (COL) Reported damaging sugarcane. Long narrow areas had been chewed in leaves but damage was slight.

**Hyposidra talaca** (Wlk.) Geometridae (LEP) Eating leaves of asparagus, common bean, yam, custard apple, sour sop and avocado at Wau Ecology Institute. Kalshoven p 307. The caterpillar attacks many woody plants. It can attack coffee, *Syzygium*. The larvae are brown and bear rows of white spots across the body. The mature larvae lower themselves on threads and pupate 2-4 cm deep in the soil. The eggs are iridescent and in clusters. One female may deposit several hundred eggs. A life cycle takes 2.5 to 3.5 months at 1700 m altitude. The loss of leaves of tea etc can be serious.

**Hypotactus ruralis** Fst. Curculionidae (COL) Reported damaging cassava.

**Idiophantis eugeniae** Gelechiidae (LEP) In galls on large laulau (*Eugenia species*)
**Bradley**

*Idopsis coerulea* Faust.  
Curculionidae (COL)  
Causing minor shot hole damage to potato. Also reported damaging chilli.

*Idopsis excellens* Faust.  
Curculionidae (COL)  
Reported damaging sweet potato leaves.

*Idopsis grisea* Faust.  
Curculionidae (COL)  
Check *Idopsis ?* on passionfruit, citrus, sweet potato, avocado.

*Ischiopsopha bifasciata*  
Quoy & Gaim var. *hyla*  
Heller  
Cetoniinae (COL)  
Reported adults feeding on ripe pawpaw fruit.

*Ischiopsopha ignatipennis*  
Boisd.  
Cetoniinae (COL)  
Reported damaging coconut flowers.

*Ischnaspis longirostris*  
(Sign.)  
Diaspididae (HEM)  
Armoured scale on persimmon. Kalshoven  
p 175. A somewhat threadlike dark brown  
Scale. 4.4 x 1 mm Appears on coffee,  
*Guilema gasipaes* palms, and mango.  
Damage can be severe to seedlings.

*Kolla sp.*  
Cicadellidae (HEM)  
Reported damaging lettuce causing brown  
spotting. Also sweet potato leaves.  
See Thistleton survey Bulletin 36 p 10

*Laccoptera impressa*  
Blanchard  
Chrysomelidae (COL)  
Shot hole damage to leaves of apple.  
Damaging mulberry.

*Lasiodactylum notabilis*  
Oliff  
Nitidulidae (COL)  
Damaging Malay apple.

*Lema papuana* Jac.  
Chrysomelidae (COL)  
Reported on banana and hemp. See  
*Oulema*

*Lema variator* Gres.  
Chrysomelidae (COL)  
See *Oulema*

*Lema wauensis* Gres.  
Chrysomelidae (COL)  
Reported damaging ginger and *Lema sp*  
reported chewing banana leaves at Wau.  
See *Oulema* Picture other species in  
Kalshoven. p 438

*Leptothea ciskii* Weise  
Coccinellidae (COL)  
Reported on pumpkins.

*Licyllus albicollis* Fab.  
Chrysomelidae (COL)  
Reported feeding on leaves of eggplant.

*Liliocerus sp nr. bakewelli*  
Baly  
Crioceridae (COL)  
Reported adults and larvae chewing leaves  
of greater yam at Wau Ecology Institute.  
Reported on sugarcane. Adults and  
nymphs in moderate numbers. On  
underside of leaves.

*Liliocerus papuana* (Jac.)  
Crioceridae (COL)  
Reported on rice.

*Lophops saccharicida*  
Kirkaldy  
Lophopidae (HEM)  
 Reported on sugarcane. Adults and  
nymphs in moderate numbers. On  
underside of leaves.

*Lophops sp.*  
Lophopidae (HEM)  
On rice.  
Reported on coconut flowers.

*Lophotecestes penicilliger*  
(Heller)  
Curculionidae (COL)  
Reported on coconut flowers.

*Lygaeus hospes* Fabr.  
Lygaeidae (HEM)  
Adults common on and causing yellow  
spots on silver beet.

*Lymantria rosina* Pag.  
Lymantriidae (LEP)  
Numerous larvae reported on guavas in  
Gazelle peninsula. See *Dasychira* and  
*Psalis*

*Machaerota humboldti*  
Machaerotidae (HEM)  
Reported sucking sap of okra, turnip,  
sugarcane and sunflower at Wau  
Ecology Institute.

*Megalurothrips usitatus*  
Bagnall  
Thripidae (THYS)  
On mung bean, peanut, soybean, lima  
bean.

*Megamelus sp.*  
Delphacidae (HEM)  
Nymphs and adults reported on bitter  
cucumber (*Momordica charanta*) and  
marrow.

*Megymenum papuense* Dist.  
Pentatomidae (HEM)  

*Megymenum papuense*  
Dist.  
Pentatomidae (HEM)  
| **Becker** | Oscinella inaequalis. It attacks rice seedlings and can cause serious damage needing re-sowing. Recorded sucking pods of mung bean at Wau Ecology Institute. Reported on taro. |
| **Melacanthus argineguttatus** | Alydidae (HEM) | Arrow | Recorded sucking pods of mung bean at Wau Ecology Institute. |
| **Melanophus clypealis** | Scarabaeidae (COL) | Arrow | Reported on taro. |
| **Melanitis constantia** | Satyridae (LEP) | Cramer | Reported larvae feeding on leaves of sugarcane. |
| **Menella bisignata** | Pentatomidae (HEM) | Walker | On rice. |
| **Menochilus sexmaculatus** | Coccinellidae (COL) | Fab. | Reported on corn. In Kalshoven p406. Syn. Chilomenes sexmaculatus. A common predator of aphids and whiteflies. It is red with black spots arranged in zigzag rows. It is 5-6mm long. The larvae are black brown with white and yellow markings. Development takes 18-24 days, They are attracted to light. |
| **Meninda bisignata** | Pentatomidae (HEM) | Walker | Reported on rice. |
| **Menochilus sexmaculatus** | Coccinellidae (COL) | Fab. | Reported on corn. In Kalshoven p406. Syn. Chilomenes sexmaculatus. A common predator of aphids and whiteflies. It is red with black spots arranged in zigzag rows. It is 5-6mm long. The larvae are black brown with white and yellow markings. Development takes 18-24 days, They are attracted to light. |
| **Meredolus sp.** | Curculionidae (COL) | | Reported on betel nut palm. |
| **Meredolus cocotis** | Curculionidae (COL) | Marshall | From male flowers coconut. |
| **Meroleptus cinctor** | Curculionidae (COL) | Marshall | From strawberry plants. |
| **Metrania papuana** | Noctuidae (LEP) | Marshall | Adults feeding on foliage of sweet potato. See Cassida |
| **Metriopa sp** | Chrysomelidae (COL) | | Adults feeding on foliage of sweet potato. See Cassida |
| **Microtermes biroi** | Rhinotermitidae (ISOP) | Desneaux | Building runways on trunk coconuts. See DAL Entomology Bulletin No 47 |
| **Mulciber linnaei** | Cerambycidae (COL) | Thoms | Adults very common in sugarcane gardens. Larvae bore into cane stems and can cause moderate damage. |
| **Mycalesis asophis** | Satyridae (LEP) | Hew | Other species in Kalshoven p 370 |
| **Mythimna unipuncta** | Noctuidae (LEP) | Haw | As Cirphus unipuncta Haw. Cutworm damaging sugarcane |
| **Myzus ornatus** | Aphididae (HEM) | Laing | Common in highlands on potato |
| **Nagia episcopalis** | Noctuidae (LEP) | Hampson | Reported from Terminalia tree (Okari nut family). |
| **Neotermes sp** | Colotermitidae (ISOPTERA) | | Kalshoven p73. |
| **Nephotettix apicalis** | Cicadellidae [Jassidae] (HEM) | (Motsch.) | Adults feed on leaf sheath of rice. Now Nephotettix nigropictus. Kalshoven p137. Adults 406 mm long. Occurs on many plants in the grass family. The damage is direct (hopper burn) and indirect by spreading viruses. There are often a large number of nymphal skins on the leaf. Much honeydew is produced which results in sooty moulds. While feeding the nymphs and adults remain parallel to the veins. The adults are very active during night and are attracted to lights. The eggs are laid in soft parts of the leaf sheath in rows of about 25. A female lays about 100-200 eggs. They hatch after a week. Nymphs are white then become green. They are fully grown in 3 weeks. Adults live about 4 weeks. They have black spots on the centre and tips of the wings. The abdomen is brown. Removing weeds helps |
| **Nephotettix apicalis** | Cicadellidae [Jassidae] (HEM) | (Motsch.) | Adults feed on leaf sheath of rice. Now Nephotettix nigropictus. Kalshoven p137. Adults 406 mm long. Occurs on many plants in the grass family. The damage is direct (hopper burn) and indirect by spreading viruses. There are often a large number of nymphal skins on the leaf. Much honeydew is produced which results in sooty moulds. While feeding the nymphs and adults remain parallel to the veins. The adults are very active during night and are attracted to lights. The eggs are laid in soft parts of the leaf sheath in rows of about 25. A female lays about 100-200 eggs. They hatch after a week. Nymphs are white then become green. They are fully grown in 3 weeks. Adults live about 4 weeks. They have black spots on the centre and tips of the wings. The abdomen is brown. Removing weeds helps |
Nipaecoccus vastator
(Mask) Pseudococcidae (HEM) Pink mealybug

Mealybug on citrus. Kalshoven p185. Syn. Pseudococcus defluiteri Betr. The body contents are dark orange. It is a pest of coffee. A wasp can give good control.

Nisia sp.
Nisotra basselae Bry
Nisotra obliterata Jacoby
Nisotra spp
Nyctemera baulus Boisduval
Nysius epiensis China
Nysius femoratus Van Duzee
Nysius villicus Van Duzee
Odontomyia sp
Olethreutes (Argyropleco) sp.
Onchyrota concursa Walker
Onthophagus latinasutus Arrow
Onthophagus sp nr papiensis Harold
Opogona fumiceps
Opogona saccharella
Orchamoplatus mammaeferus (Quanitance & Baker)
Orinaeme sp.
Orosius argentatus Evans

Mealybug on citrus. Kalshoven p185. Syn. Pseudococcus defluiteri Betr. The body contents are dark orange. It is a pest of coffee. A wasp can give good control.

Mealybug on citrus. Kalshoven p185. Syn. Pseudococcus defluiteri Betr. The body contents are dark orange. It is a pest of coffee. A wasp can give good control.

Reported on taro

Adults on aibika and amaranthus

Cauing severe shot hole damage to aibika. On coast and to 1600m.

Reported feeding on okra and hibiscus. Other species in Kalshoven p 444

Larvae damaging leaves of cabbage. Larvae feeding on leaves taro in highlands. Also damaging winged bean leaves.

Reported damaging beans. Adults cause yellow spotting of foliage. Also on peanuts.

On leaf taro.

Reported sucking the seed of sunflower and lettuce. Also on potato and sweet potato. They are inconspicuous greyish brown bugs 3-4mm long. The damage is normally unimportant. They normally live on weeds.

Larvae in cabbage.

Heavy shedding of fruit of pao nut tree. Now Cryptophlebia. Actually Oletheutidae related to Tortricidae with similar life cycle. Moths have rows of slanting stripes along the edges of the fore wings. Cryptophlebia ombrodelta (Low) occurs in Asia and Pacific and attacks fruit. Kalshoven p 225. Picture p 226. Larvae are pink and up to 15mm long. The head is brown. Life cycle about 26-32 days. Early harvesting of fruit is recommended as control.

Larvae on sweet potato. Larvae fold and web leaves. See Thistleton survey Bulletin 36 p6

Reported damaging radish. See NG Beetles p31/32.

On cabbage.

Reported damaging sugarcane. See CSIRO p807. Ag Zool p198,

On beans. See Thistleton survey Bulletin 36 p45

Reported damaging sugarcane.

Feeding on leaf taro Kalshoven p 142. Picture p141. Also attacks peanuts. A hopper about 3mm long. It lays eggs in the petioles and stems. About 200 per female. Development takes about a
Both nymphs and adults actively feed on leaves. It can transmit virus disease of peanuts. It can also transmit disease of tomato and legumes.

Orthaca cincticornis Walk. Lygaeidae (HEM)
Dense populations on maize leaves and flowers.

Oryctes centaurus Sternb Scarabaeidae (COL)
Reported damaging coconuts.

Oxidus gacilis
Reported feeding on strawberry fruit and peanut seedlings at Wau Ecology Institute.

Oxya gavisa (Walk.) Acrididae (ORTH)
[Syn O. j. vitticornis (Blanchard) and O. j. japonica (Thnb.)] On sugarcane See Thistleton survey Bulletin 36 p27 On maize, p53. See CIE Distribution maps No 295. Also occur on rice, maize, coconuts, cacao, coffee and cotton.

Oxya vittigera (Blanch) Acrididae (ORTH)
Reported causing slight damage to sugarcane foliage. Also damaging rice and maize.

Oxyderes cyrtus Jordan [ex Araeacerus] Anthribidae (COL)
Reported damaging pawpaw. On rotting fruit and dying petiole scars.

Pachybrachius nervosus Horv. Lygaeidae (HEM)
Reported causing yellow spotting on beans. Also feeds on developing rice grains. Adults can infest leaf sheath of rice. Very common on sugarcane in some areas on young leaves and in leaf rolls.

Pamara amalia Semper Hesperiidae (LEP)
On mandarin.

ParaBactrocera perplexus Trypetidae (DIPT)
Reported as important especially in New Britain damaging pumpkin fruit. Few fruits can be harvested.

Parastasia guttulata Fairmaire Scarabaeidae (COL)
Larvae reported from among roots of coastal pipit Adult also reported boring tunnels into jackfruit fruit.

Paratella sp. Flatidae (HEM)
Reported sucking sap of avocado. Also cacao.

Paratella miniata Mcl. Flatidae (HEM)
On sorghum

Patanga sp. Lygaeidae (HEM)
Reported damaging sugarcane. Bands of hoppers. Other species in Kalshoven p55 Possibly Patanga succincta (L.)

Pelopidas agna dingo Evans Hesperiidæ (LEP)
Feed on rice and obvious but probably not serious. Other species in Kalshoven p383. Reported damaging sugarcane. Adults fed on leaf sheaths.

Phaenacantha spp. Colobathristidae/Pyrroco ridae (HEM) sugarcane bug.

Pharotes torvus Marshall Curculionidae (COL)
Reported severely chewing petioles of taro. See Thistleton survey Bulletin 36 p40

Philia femorata Walk. Pentatomidae (HEM)
Reported on peanut.

Phodoryctis caerulea Meyrick Gracillariidae (LEP)
As Acrocercops caerulea Meyrick Leaf miner causing slight damage to cowpea. On cabbage.

Phormesa sp. Colydiidae (COL.)
Adults and nymphs on leaves of karuka.
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Family</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Piezodorus rubrofasciatus</em> Fab.</td>
<td>Pentatomidae (HEM)</td>
<td>Sucking pods of mung bean. Other species in Kalshoven p93</td>
</tr>
<tr>
<td><em>Pinnaspis strachani</em> (Cooley)</td>
<td>Diaspididae (HEM)</td>
<td>Armoured scale on persimmon.</td>
</tr>
<tr>
<td><em>Platyctonus wallacei</em> Pascoe</td>
<td>Anthribidae (COL)</td>
<td>Reported damaging pigeon pea.</td>
</tr>
<tr>
<td><em>Plautia sp.</em></td>
<td>Pentatomidae (HEM)</td>
<td>Stink bugs</td>
</tr>
<tr>
<td><em>Plautia brunneipennis</em></td>
<td>Pentatomidae (HEM)-</td>
<td>Reported damaging capsicum, snake bean, sunflower and sugarcane.</td>
</tr>
<tr>
<td></td>
<td>stink bugs</td>
<td></td>
</tr>
<tr>
<td><em>Polyomona boeticus</em> (L)</td>
<td>Lycaenidae (LEP)</td>
<td>Larvae reported inside pods of pigeon pea.</td>
</tr>
<tr>
<td><em>Prodromopsis oculatus</em></td>
<td>Miridae (HEM)</td>
<td>Reported sap sucker on banana.</td>
</tr>
<tr>
<td><em>Prosoplus grisescens</em> Breuning</td>
<td>Cerambycidae (COL)</td>
<td>Reported on corn/maize flowers</td>
</tr>
<tr>
<td><em>Prosoplus oblique plagiatus</em></td>
<td>Cerambycidae (COL)</td>
<td>Reported on pods of winged bean.</td>
</tr>
<tr>
<td><em>Protoaenia fusca</em> Herbst</td>
<td>Scarabaeidae (COL)</td>
<td>Reported on flowers of corn plants. Known to damage sugarcane. Kalshoven p484</td>
</tr>
<tr>
<td><em>Pseudomonatia typica</em> China &amp; Carvalho</td>
<td>Miridae (HEM)</td>
<td>Adults and nymphs on young leaves and fruit of avocado causing considerable dieback and fruit shedding.</td>
</tr>
<tr>
<td><em>Pseudoligota sp</em></td>
<td>Staphylinidae (COL)</td>
<td>On male flower of betel nut palm. On male flower coconut.</td>
</tr>
<tr>
<td><em>Pteranistria sp.</em></td>
<td>Coreidae (HEM)</td>
<td>Reported damaging granadilla.</td>
</tr>
<tr>
<td><em>Pterolophia grisescens</em> Pascoe</td>
<td>Cerambycidae (COL)</td>
<td>Syn <em>P terrea</em> Pascoe. Reported damaging pigeon pea.</td>
</tr>
<tr>
<td><em>Pyroderes ? amphisaris</em> Meyrick</td>
<td>Cosmopterigidae (LEP)</td>
<td>From grains of sorghum.</td>
</tr>
<tr>
<td><em>Rhynoscapha cobaltinata</em> Heller</td>
<td>Curculionidae (COL)</td>
<td>Reported damaging Highlands breadfruit.</td>
</tr>
<tr>
<td><em>Rhynoscapha fanebris</em> Chev.</td>
<td>Curculionidae (COL)</td>
<td>Reported on soybean.</td>
</tr>
<tr>
<td><em>Rhynoscapha maclayi</em> MacLeay</td>
<td>Curculionidae (COL)</td>
<td>Reported damaging pawpaw.</td>
</tr>
<tr>
<td><em>Rhynocisgapha thomsoni</em> Wtherh.</td>
<td>Curculionidae (COL)</td>
<td>Reported feeding on lemon trees. Larvae and pupae in soil to depth of 1m. Roots showed feeding scars.</td>
</tr>
<tr>
<td></td>
<td>Citrus leaf eating weevil</td>
<td></td>
</tr>
<tr>
<td><em>Rhynocisgapha wallacii</em> Crotch</td>
<td>Coccinellidae (COL)</td>
<td>Reported on citrus in Karimui</td>
</tr>
<tr>
<td><em>Rhynarida cacaona</em> Gressitt</td>
<td>Chrysomelidae (COL)</td>
<td>Large numbers skeletonising leaves of mango.</td>
</tr>
<tr>
<td><em>Rhynarida clypeata</em> Jacoby</td>
<td>Chrysomelidae (COL)</td>
<td>Reported causing slight damage to mulberry. Also okra and hibiscus. Feeding on leaves of mung bean. Also feeding on sugarcane leaves with slight damage.</td>
</tr>
<tr>
<td><em>Rhynarida coriacea</em> Jac.</td>
<td>Chrysomelidae (COL)</td>
<td></td>
</tr>
<tr>
<td><em>Rhynarida ? fasciata</em> Baly</td>
<td>Chrysomelidae (COL)</td>
<td>Causing severe damage to eggplant leaves.</td>
</tr>
<tr>
<td>Insect Name</td>
<td>Family</td>
<td>Genus</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Rhyparida morosa Jac.</td>
<td>Chrysomelidae(COL)</td>
<td>Reported damaging sugarcane and grasses.</td>
</tr>
<tr>
<td>Rhyparidella casuarinae</td>
<td>Chrysomelidae(COL)</td>
<td>Reported eating leaves of eggplant at Wau.</td>
</tr>
<tr>
<td>Rhyparidella sobrina Bryant.</td>
<td>Chrysomelidae(COL)</td>
<td>Causing shot hole damage to aibika in highlands.</td>
</tr>
<tr>
<td>Rhyparidella wauensis</td>
<td>Chrysomelidae(COL)</td>
<td>Reported adults eating leaves of soybean, mung bean, pumpkin, sunflower, radish, broad bean at Wau ecology institute.</td>
</tr>
<tr>
<td>Ricanula puncticosta</td>
<td>Ricaniiidae(HEM)</td>
<td>Reported sap sucker of sunflower, asparagus at Wau Ecology Institute</td>
</tr>
<tr>
<td>Ropica honesta Pascoe</td>
<td>Cerambycidae(COL)</td>
<td>Reported damaging dry winged bean pods.</td>
</tr>
<tr>
<td>Rosenbergia weiskei Heller</td>
<td>Cerambycidae(COL)</td>
<td>Reported damaging highlands breadfruit.</td>
</tr>
<tr>
<td>Saccolaemus longiceps Pascoe</td>
<td>Curculionidae(COL)</td>
<td>On trunk okari nut tree.</td>
</tr>
<tr>
<td>Sciophyrus diminutus Horvath</td>
<td>Coreidae(HEM)</td>
<td>Under sweet potato vines on soil.</td>
</tr>
<tr>
<td>Scoliophthalmus sp</td>
<td>Chloropidae(DIPT)</td>
<td>Larvae boring into stems of sugarcane.</td>
</tr>
<tr>
<td>Scirpophaga nivella Fabricius</td>
<td>Pyralidae(LEP)</td>
<td>Boring tops of sugarcane.</td>
</tr>
<tr>
<td>Sesamia grisescens Walker</td>
<td>Noctuidae(LEP)</td>
<td>stem borer. Reported damaging sugarcane. Heavy damage. Larvae were found in canes of all ages. See Thistleton survey Bulletin 36 p24. Kalshoven p349.</td>
</tr>
<tr>
<td>Silba sp.</td>
<td>Lonchaeidae(DIPT)</td>
<td>Larvae boring into stems of sugarcane. Also from capsicum fruit. Other species in Kalshoven p 547.</td>
</tr>
<tr>
<td>Simodactylus sp.</td>
<td>Elateridae(COL)</td>
<td>From carrot foliage.</td>
</tr>
<tr>
<td>Simplicia caeneusalis Walker</td>
<td>Noctuidae(LEP)</td>
<td>Larvae reported boring into potato tubers. Kalshoven p 351 Occurs in large numbers in coffee prunings and sago leaf.</td>
</tr>
<tr>
<td>Solephyma papuana</td>
<td>Galerucidae(COL)</td>
<td>Reported damaging sweet potato</td>
</tr>
<tr>
<td>Spirocaria bissellata Mulsant</td>
<td>Coccinellidae(COL)</td>
<td>Reported to cause slight damage to sugarcane foliage. Also reported damage to rice. Reported as sap sucker of banana leaves.</td>
</tr>
<tr>
<td>Stenocatantops augustifrons (Walker)</td>
<td>Acrididae(ORTH)</td>
<td>Reported causing extensive windowing of sweet potato leaves in lowlands. They tie leaves together and chew the leaves. Other species in Kalshoven p264.</td>
</tr>
<tr>
<td>Stephanitis typica (Distant)</td>
<td>Tingidae(HEM)</td>
<td>Reported as sap sucker of banana leaves.</td>
</tr>
<tr>
<td>Strumeta barrantiagonsae (Tryon.)</td>
<td>Tephritidae(DIPT)</td>
<td>Larvae severely defoliating leaves of guava.</td>
</tr>
<tr>
<td>Strumeta recurrens Her.</td>
<td>Tephritidae(DIPT)</td>
<td>larvae reported boring into potato tubers.</td>
</tr>
<tr>
<td>Symphilites sp.</td>
<td>Cerambycidae(COL)</td>
<td>Reported damaging sweet potato</td>
</tr>
<tr>
<td>Syncrotus (Syncrotellus) similis Ghauri</td>
<td>Pyrrhocoridae(HEM)</td>
<td>Reported as sap sucker of banana leaves.</td>
</tr>
<tr>
<td>Syntherata janetta White</td>
<td>Saturniidae(LEP)</td>
<td>Larvae severely defoliating leaves of guava.</td>
</tr>
<tr>
<td>Tabidia insuralis Snell</td>
<td>Pyralidae(LEP)</td>
<td>Reported causing extensive windowing of sweet potato leaves in lowlands. They tie leaves together and chew the leaves. Other species in Kalshoven p264.</td>
</tr>
<tr>
<td>Taenaris butleri Oberth.</td>
<td>Amathusiidae(LEP)</td>
<td>Reported damaging Cycas cicutralis</td>
</tr>
</tbody>
</table>
**Taenaris dimona** Hew  
Amathusiidae (LEP)  
Reported damaging banana leaves.

**Tagiades obscurus tindali** Rbb  
Hesperiidae (LEP)

**Tagiades tregellius** Hopf.  
Hesperiidae (LEP)

**Tagiades tregellius canonicus**  
Hesperiidae (LEP)

**Tauchiridea adusta** Bolivar  
Acrididae (ORTH)

**Teleclita strigata cinnamomea** Rothsch.  
Notodontidae (LEP)

**Teleogryllus commodus** Wlk.  
Gryllidae-field cricket

**Telostylinus sp.**  
Neriidae (DIPT)

**Telostylinus nubifasciatus** Walker  
Membracidae (HOM)

**Tettigella pasiphae** Kirk  
Cicadellidae (HEM)

**Terentius nubifasciatus**  
Cicadellidae (HEM)

**Tettigella sp.**  
Cicadellidae (HEM)

**Tetraneura nigriabdominalis** (Sas.)  
Aphididae (HEM)  
Rice root aphid.

**Theretra oldenlandiae** Fab.  
Sphingidae (LEP) Vine hawkmoth

**Thressa punctifera de Meijere**  
Chloropidae (DIPT)

**Thysanoplusia orichalcea** Fabricius  
Noctuidae (LEP)

**Tiracola rufimargo**  
Noctuidae (LEP)

**Trachycentra chlorogramma** Meyrick  
Tineidae (LEP)

**Trachylepidia fructicassiella** Ragonot  
Pyralidae (LEP)

**Trichogomphus excavatus** Mohinke  
Scarabaeidae (COL)

**Trichogomphus semmelinki** Rits  
Scarabaeidae (COL)

**Trochorhopalus strangulatus** Gyllenhal  
Curculionidae (COL)

**Trypopsilopa chinensis** Wiedimann  
Ephydridae (DIPT)

**Valanga irregularis**  
Acrididae (ORTH) Giant
<table>
<thead>
<tr>
<th>(Walker)</th>
<th>grasshopper</th>
<th>CIE Distribution maps No 310. Damages palms, rice, Kalshoven p51</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valanga nigricornis (Burm.)</td>
<td>Acrididae (ORTH) Javanese grasshopper</td>
<td>Giant grasshoppers reported causing damage to sugarcane, rice, pepper, Chinese cabbage and aibika. See Thistleton survey Bulletin 36 p28</td>
</tr>
<tr>
<td>Valanga sp.</td>
<td>Acrididae (ORTH)</td>
<td></td>
</tr>
<tr>
<td>Xanthodes transversa Guenee</td>
<td>Noctuidae (LEP)</td>
<td>Reported on okra. Kalshoven p 351 Syn Acontia. Feed on leaves of Malvaceae - hibiscus, aibika, and roselle. The young larvae are green with short diagonal lateral stripes on each segment. Mature larvae are dark purple and 38mm long. They pupate in a cocoon in the soil.</td>
</tr>
<tr>
<td>Zeuzera coffeae Nietner</td>
<td>Cossidae (LEP) Red twig borer or red branch borer.</td>
<td>Also called red coffee borer. Reported damaging chilli plant by boring into stems. Also damage coffee, tea, teak, mahogany, sandalwood. See CIE distribution maps No 313. Kalshoven p199 Larvae are red to violet brown often with yellow rings. They bore into woody stems. A circular tunnel is formed under the bark. The end of the branch dies. The moths fly at night. Up to 1000 eggs per female. Development takes 4-5.5 months. Control is seldom necessary.</td>
</tr>
<tr>
<td>Zophiuma lobulata Ghauri</td>
<td>Lophopidae (HEM) Lophopid treehopper</td>
<td>This insect injects a toxin and can cause serious nut fall of coconuts in the Finschhafen and Popondetta areas. It has egg parasites that help control the pest. Also called coconut leafhopper. Adults and nymphs present on palms. Reported on granadilla.</td>
</tr>
<tr>
<td>Zygina sp.</td>
<td>Cicadellidae (HEM)</td>
<td>Reported on winged bean leaves.</td>
</tr>
<tr>
<td>Zygina medioborealis Ghauri</td>
<td>Cicadellidae (HEM)</td>
<td>Common on sweet potato in highlands. See Thistleton survey Bulletin 36 p13</td>
</tr>
</tbody>
</table>
INSECT PESTS IN ALPHABETICAL ORDER OF ORDER

MITES
Tetranychus marianae McGregor
Tetranychidae (ACAR) Red spider mite

BEETLES AND WEEVILS
Araecerus sp. (See Oxyderes)
Araecorynus sp.
Oxyderes cyrtus Jordan

Agrilus occipitalis Esch
Buprestidae (COL)

Chauliognathus waroensis Wittmer
Cantharidae (COL)

Aspidomorpha adhearens Weber
Cassididae (COL) tortoise beetles
Aspidomorpha australasiae Jacoby
Cassididae (COL) tortoise beetles
Aspidomorpha miliaris (F.)
Cassididae (COL) tortoise beetles
Aspidomorpha punctum
Cassididae (COL)
Aspidomorpha quadriradiata Boh.
Cassididae (COL) tortoise beetles
Aspidomorpha socia Montr.
Cassididae (COL) tortoise beetles
Aspidomorpha testudinaria Montr.
Cassididae (COL) tortoise beetles

Acalolepta holotephra Boisd
Cerambycidae (COL)
Bothrichara palliata Macleay
Cerambycidae (COL)
Ceresium pachymerum (Pascoe)
Cerambycidae (COL)
Demonax collaris Pascoe
Cerambycidae (COL)
Mulciber lineae Thom
Cerambycidae (COL)
Orinaeme sp.
Cerambycidae (COL)
Prosopius grisescens Breuning
Cerambycidae (COL)
Prosopius oblique plagiatus Breuning
Cerambycidae (COL)
Ropica honesta Pascoe
Cerambycidae (COL)
Rosenbergia weiskei Heller
Cerambycidae (COL)
Symphilot sp.
Cerambycidae (COL)

Ischiopsopha bifasciata Quoy & Gaim var.
Cetoniinae (COL)
hyla Heller

Alticus sp.
Chrysomelidae (COL)
Arhisopa tenimerensis Jacoby
Chrysomelidae (COL) Black flea beetle
Aulacophora abdominalis (Fabricius)
Chrysomelidae (COL) pumpkin beetles
Aulacophora coffeae Hornstedt
Chrysomelidae (COL)
Aulacophora culellata Blackburn
Chrysomelidae (COL)
Aulacophora femoralis (Mots.)
Chrysomelidae (COL)
Aulacophora melanopus Blanchard
Chrysomelidae (COL)
Aulacophora pallidifasciata Jacoby
Chrysomelidae (COL)
Aulacophora papuana Jac.
Chrysomelidae (COL)
Aulacophora pygidialis Baly
Chrysomelidae (COL)
Aulacophora rigoensis Jacoby
Chrysomelidae (COL)
Aulacophora similis Baly
Chrysomelidae (COL)
Aulacophora wallaci Baly
Chrysomelidae (COL)
Brontispa lateralis
Chrysomelidae (COL)
Brontispa longissima Gestro
Chrysomelidae (COL) Coconut hispid
Brontispa palmivora Gres
Chrysomelidae (COL)
Cassida diomma Bois.
Chrysomelidae (COL)
Chaetocnema basalis Baly
Chrysomelidae (COL)
Lagria sp.
Lema papuana Jac. Chrysomelidae (COL)
Lema variator Gres. Chrysomelidae (COL)
Lema wauensis Gres. Chrysomelidae (COL)
Licyllus albicollis Fab. Chrysomelidae (COL)
Metriona sp. Chrysomelidae (COL)
Monoleta nigroapicata Bry. Chrysomelidae (COL)
Monoleta semiviolacea Fab. Chrysomelidae (COL)
Nisotra basselae Bry. Chrysomelidae (COL)
Nisotra spp. Chrysomelidae (COL)
Psyllodes loriae Jac. Chrysomelidae (COL)
Rhyparida cacaona Gressitt Chrysomelidae (COL)
Rhyparida coriacea Jac. Chrysomelidae (COL)
Rhyparida morosa Jac Chrysomelidae (COL)
Cicindela decem-guttata urvillei Dejean Cicindellidae (COL)
Coelophora inaequalis F. Coccinellidae (COL)
Epilachna cucurbitae Richards Coccinellidae (COL)
Epilachna signatipennis Boisduval Coccinellidae (COL) Leaf eating beetle
Henosepilachna haemorrhoea (Biel) Coccinellidae (COL) leaf eating ladybird
Henosepilachna signatipennis Boisd Coccinellidae (COL) leaf eating ladybird
Leptothea ciskii Weise Coccinellidae (COL)
Menochilus sex-masculatus Fab. Coccinellidae (COL)
Rhynchortalia wallaci Crotch Coccinellidae (COL)
Spirocaria bissellata Mulsant Coccinellidae (COL)
Cletus sp. Colobathristidae (COL)
Onthophagus latenasutus Arrow Copridae (COL)
Criocerus sp. Crioceridae (COL)
Criocerus clarkii Baly Crioceridae (COL)
Lileacerus bakewelli Baly Crioceridae (COL)
Lileacerus papuana (Jac.) Crioceridae (COL)
Apirocalus cornutus (Pascoy) Curculionidae (COL) Horned weevil
Apirocalus ebrius Faust Curculionidae (COL) Horned weevil
Apirocalus terrestris Thompson Curculionidae (COL) Horned weevil
Alcidodes australis Boisduval Curculionidae (COL)
Aulacophrys fascialis Marsh. Curculionidae (COL)
Cosmopolites sordidus (Germar) Curculionidae (COL) Banana weevil borer
Cylas formicarius elegantulus (Summers) Curculionidae (COL) Sweet potato weevil
Diocalandra taitense (Guer.) Curculionidae (COL) Lesser coconut borer
Eupholus nickerli Hllr. Curculionidae (COL) Eupholus weevils
Eupholus schonherri Guer Curculionidae (COL)
Ganae pulchella Pascoe Curculionidae (COL)
Glyptoporopterus sharpi Faust. Curculionidae (COL)
Gymnopholus interpres Hllr. Curculionidae (COL)
Gymnopholus marquardti Hllr. Curculionidae (COL)
Gymnopholus weiskei Hllr. Curculionidae (COL)
Hypolixus mastersi Pascoe Curculionidae (COL)
Hypolixus ritsemae Pasc. Curculionidae (COL)
Hypotactus ruralis Fst. Curculionidae (COL)
Idopsis caerulea Faust. Curculionidae (COL)
Idopsis excellens Faust. Curculionidae (COL)
Idopsis grisea Faust. Curculionidae (COL)
Meroleptus cinctor Marshall Curculionidae (COL)
Oriblius cinereus Mshl. Curculionidae (COL) Shot hole weevils
Oribius cruciatus Fst. Curculionidae (COL)
Oribius destructor Marshall Curculionidae (COL)
Oribius improvidus Marshall Curculionidae (COL)
Oribius inimicus Marshall Curculionidae (COL)
Pharotes torus Marshall Curculionidae (COL)
Rhabdoscelus obscurus (Boisduval) Curculionidae (COL) Cane weevil borer
Rhinocapsa cobaltinata Heller Curculionidae (COL)
Rhinocapsa maclayi Macleay Curculionidae (COL)
Rhinocapsa thomsoni Wterh. Curculionidae (COL) Citrus leaf eating weevil
Rhyynchophorus bilineatus (Montr.) Curculionidae (COL) Palm weevil
Sparganobasis subercucius Marsh. Curculionidae (COL) Coconut bole weevil
Trochiorhapalus strangulatus Gyllenhal Curculionidae (COL)

Scapanes australis australis Boisd. Dynastidae (COL)
Scapanes australis grossepunctatus Stern Dynastidae (COL) NG rhinoceros beetle

Compsolacon gracilis Candeze Elateridae (COL)

Cassena intermedia Jac. Galerucidae (COL)
Cassena papuana (Jac.) Galerucidae (COL)
Solephyma papuana Galerucidae (COL)

Promecotheca papuana Csiki Hispidae (COL) Coconut leaf miner

Anomala anoguttata Burm. Rutelidae (COL)

Aphodius lividus Olivier Scarabaeidae (COL)
Ataenius spinator Harold Scarabaeidae (COL)
Dermolepida nigrum (Non f.) Scarabaeidae (COL)
Dermolepida noxium Britton Scarabaeidae (COL)
Lepidota reuleuxi Brenske Scarabaeidae (COL) Ramu canegrub
Melanphyphus clypealis Arrow Scarabaeidae (COL)
Oryctes centaurus Sternb Scarabaeidae (COL)
Oryctes rhinoceros (L.) Scarabaeidae (COL) Asiatic rhinoceros beetle
Papuana biroi End. Scarabaeidae (COL) taro beetles
Papuana huebneri Fairm. Scarabaeidae (COL) taro beetles
Papuana japonensis Arrow Scarabaeidae (COL) taro beetles
Papuana laeivipennis Scarabaeidae (COL) taro beetles
Papuana semistriata Scarabaeidae (COL) taro beetles
Papuana trinodosa Prell. Scarabaeidae (COL) taro beetles
Papuana woodlarkiana (Montr.) Scarabaeidae (COL) taro beetles
Parastasia guttulata Fairm. Scarabaeidae (COL)

Protactia fusca Herbst. Scarabaeidae (COL) Mango flower beetle
Protactia papuana Moser Scarabaeidae (COL)
Trichogomphus semmelinki Rits Scarabaeidae (COL) Rhinoceros beetle
Xylotrupes gideon (L.) Scarabaeidae (COL) Elephant beetle
Xylotrupes spp. Scarabaeidae (COL) Elephant beetle

Xyleborus exiguus Walk. Scolytidae (COL)
Xyleborus perforans (Wollastan) Scolytidae (COL) Coconut shot-hole borer
Xyleborus potens Schedl. Scolytidae (COL)

Actinus imperialis Fauvel Staphylinidae (COL)

Caedius demejerei Geb. Tenebrionidae (COL)
Gonocephalum ochthebioides Ful. Tenebrionidae (COL) False wireworm
FLIES

*Agromyza papuensis* Agromyzidae (DIPT)
*Lyriomyza brassicae* (Riley) Agromyzidae (DIPT) Cabbage leaf miner
*Ophiomyia phaseoli* (Tryon.) Agromyzidae (DIPT) Bean fly
*Contarinia sorghicola* (Coq) Cecidomyiidae (DIPT) Sorghum midge
*Scolioptthalmus sp.* Chloropidae (DIPT)

*Drosophila pararubida* Mather Drosophilidae (DIPT)
*Drosophila rubida* Mather Drosophilidae (DIPT)
*Drosophila setifemur* Malloch Drosophilidae (DIPT)

Silba sp. Lonchaeidae (DIPT)

*Atherigona orientalis* Schiner Muscidae (DIPT) Stem fly
*Atherigona oryzae* Mall. Muscidae (DIPT) Paddy stem fly

*Elassogaster lineata* de Meij Platystomatidae (DIPT)
*Elassogaster sepsoides* Walk. Platystomatidae (DIPT)

Fruit flies

*Bactrocera atrisetosus* Perkins Tephritidae (DIPT)
*Bactrocera bryoniae* Tryon Tephritidae (DIPT)
*Bactrocera cucurbitae* Coq Tephritidae (DIPT) Melon fruit fly
*Bactrocera curvifera* Walker Tephritidae (DIPT)
*Bactrocera decipiens* Drew Tephritidae (DIPT)
*Bactrocera dorsalis* Hendel Tephritidae (DIPT)
*Bactrocera frauenfeldi* Schiner Tephritidae (DIPT)
*Bactrocera fenchii* Tephritidae (DIPT)
*Bactrocera indecorus* Drew Tephritidae (DIPT) Banana fruit fly
*Bactrocera neohumeralis* Hardy Tephritidae (DIPT)
*Bactrocera obliquus* Tephritidae (DIPT)
*Bactrocera papuanensis* Tephritidae (DIPT)
*Bactrocera peculiaris* Tephritidae (DIPT)
*Bactrocera sequivi* Hering Tephritidae (DIPT)
*Bactrocera striigifinis* *atritus* May Tephritidae (DIPT)
*Bactrocera trivialis* Drew Tephritidae (DIPT)
*Bactrocera tryoni* Frogg Tephritidae (DIPT) Queensland fruit fly
*Bactrocera umbrosus* Fabricius Tephritidae (DIPT)
*Strumeta barringtoniae* (Tryon.) Tephritidae (DIPT)
*Strumeta recurrens* Her. Tephritidae (DIPT)

ParaBactrocera perplexus Trypetidae (DIPT)

BUGS

Whiteflies (Aleurodidae)

*Aleurodes comata* Aleurodidae (HEM)
*Aleurodicus destructor* Mackie Aleurodidae (HEM) Coconut whitefly
*Aleurodicus dispersus* Russel Aleurodidae (HEM) Spiralling whitefly
*Bemisia tabaci* (Genn.) Aleyrodidae (HEM) Tobacco white fly
*Neomaskellia bergii* (Signoret) Aleyrodidae (HEM) Sugarcane white fly
Leptocorisa acuta (Thunberg) Alydidae (HEM) paddy bugs
Leptocorisa discoidalis Alydidae (HEM) paddy bugs
Leptocorisa oratorius (Fab.) Alydidae (HEM) paddy bugs
Leptocorisa palawanensis Alydidae (HEM) paddy bugs
Leptocorisa solomonensis Ahmad Alydidae (HEM) paddy bugs
Melacanthus argineguttatus Alydidae (HEM)

Aphids (Aphididae)
Apis craccivora Koch Aphididae (HEM) Cowpea aphid
Aphis gossypii Glover Aphididae (HEM) Cotton aphid
Aphis sacchari Zehntner Aphididae (HEM) Sugarcane aphid
Ceratovacuna langiera Zehntner Aphididae (HEM) Sugarcane woolly aphid
Macrosiphum euphorbiae (Thomson) Aphididae (HEM) Potato aphid
Myzus ornatus Laing Aphididae (HEM)
Myzus persicae Sulzer Aphididae (HEM) Green peach aphid
Neotoxoptera formosana Takahashi Aphididae (HEM) Onion aphid
Pentalonia nigriceps Coq Aphididae (HEM) Banana aphid
Rhopalosiphum maidis (Fitch) Aphididae (HEM) Corn leaf aphid
Tetranoea nigriglandula (Sas.) Aphididae (HEM) Brown citrus aphid
Toxoptera aurantii B.de Fonsc. Aphididae (HEM) Black citrus aphid
Toxoptera citricidus (Kirk) Aphididae (HEM) Brown citrus aphid

Leafhoppers
Batrachamorphus sp. Cicadellidae (HEM)
Bothrogonia sp. Cicadellidae (HEM)
Cicadella spectra Dist. Cicadellidae (HEM) White jassid
Cofana spectra Distant [Cicadella] Cicadellidae (HEM) White leafhopper
Idioscopus clypealis (Leth.) Cicadellidae (HEM) Mango hopper
Idioscopus niveosparsus (Leth.) Cicadellidae (HEM) Mango hopper
Kolla sp. Cicadellidae (HEM)
Nephotettix apicalis Motsch.) Cicadellidae (HEM) Green rice leafhopper
Tettigella pasiphae Kirk Cicadellidae (HEM)
Tettigella sp. Cicadellidae (HEM)
Euryphlepsia sp. Cixiidae (HEM)

Soft Scales (Coccidae and others)* indicates more serious pest
*Icerya purchasi Maskell Margarodidae (HEM)
*Icerya seychellarum (Westwood) Margarodidae (HEM)
Promargarodes australis Jakubski Margarodidae (HEM)
Steatococcus samaraius Morrison Margarodidae (HEM)
Sangicoccus truncatispinus (Reyne) Eriococcidae (HEM)
Anthococcus kerevatae Williams Coccidae (HEM)
Ceroplastes ceriferus (F.) Coccidae (HEM)
*Ceroplastes destructor Newstead Coccidae (HEM)
Ceroplastes murrayi Froglott Coccidae (HEM)
*Ceroplastes rubens Maskell Coccidae (HEM) Pink wax scale
*Coccus celatus De Lotto Coccidae (HEM)
*Coccus hesperidium Linnaeus Coccidae (HEM) Soft brown scale
Coccus longulus (Douglas) Coccidae (HEM)
*Coccus viridis (Green) Coccidae (HEM) Green scale
Drepanococcus chiton (Green) Coccidae (HEM)
Eucalymnatus tessellatus (Signoret) Coccidae (HEM)

*Kilifia acuminata (Signoret) Coccidae (HEM)

Melanesicoccus kleinioviae Williams Coccidae (HEM)

Milviscutulus ciliatus Williams Coccidae (HEM)

*Milviscutulus mangiferae (Green) Coccidae (HEM)

Milviscutulus pilosus Williams Coccidae (HEM)

Milviscutulus spiculatus Williams Coccidae (HEM)

Neoplatyolecanium sp. Coccidae (HEM)

Neosaissetia keravatae Williams Coccidae (HEM)

*Parasaissetia nigra (Nietner) Coccidae (HEM) Nigra scale

Platylecanium cocotis Laing Coccidae (HEM)

Pulvinaria cacao Williams Coccidae (HEM)

Pulvinaria elongata Newstead Coccidae (HEM)

*Pulvinaria psidi Coccidae (HEM)

Pulvinaria ubicola (Cockerell) Coccidae (HEM)

*Saissetia coffeae (Walker) Coccidae (HEM) Coffee scale

Saissetia miranda (Cockerell & Parrott) Coccidae (HEM)

Saissetia neglecta De Lotto Coccidae (HEM)

*Vinsonia stellifera (Westwood) Coccidae (HEM)

Asterolecanium sp Asterolecaniidae (HEM)

*Bambusaspis bambusae (Boisduval) Asterolecaniidae (HEM)

Coelophora ripponi Crotch Coccinellidae (HEM)

Phena cantha spp. Colobathristidae (HEM)

Amorbus rhombeus Westw. Coreidae (HEM)

Amblypelta cocophaga China Coreidae (HEM) Green coconut bug

Amblypelta costalis szentivanyi Brown Coreidae (HEM)

Amblypelta gallegonis Lever Coreidae (HEM)

Amblypelta lutescens papuensis Br. Coreidae (HEM) Papuan tip wilt bug

Amblypelta theobromae Brown Coreidae (HEM) Tip wilt bug

Helopeltis clavifer (Walker) Coreidae (HEM) Cacao mirid

Leptoglossus australis (Fab.) Coreidae (HEM) Black leaf footed bug

Mictis profana F. Coreidae (HEM) Crusader bug

Pternistria sp. Coreidae (HEM)

Riptortus annulicornis Boisd. Coreidae (HEM) Pod sucking bug

Riptortus imperialis Kirk Coreidae (HEM) Bean bug

Riptortus obscuricornis Dallas Coreidae (HEM)

Riptortus spp. Coreidae (HEM)

Coronacella kirkaldyi Muir Delphacidae (HEM)

Eumetopina flavipes Muir Delphacidae (HEM)

Megamelus sp. Delphacidae (HEM)

Nilaparvata lugens Haseg Delphacidae (HEM) Brown backed rice plant hopper

Perkinsiella bicaloris Delphacidae (HEM) Sugarcane leafhoppers

Perkinsiella boreon Fennah Delphacidae (HEM)

Perkinsiella bulli Fennah Delphacidae (HEM)

Perkinsiella diagonas Fennah Delphacidae (HEM)

Perkinsiella falcipennis Fennah Delphacidae (HEM)

Perkinsiella lalokensis Muir Delphacidae (HEM)

Perkinsiella macrurus Fennah Delphacidae (HEM)

Perkinsiella mycon Fennah Delphacidae (HEM)

Perkinsiella papuensis Muir Delphacidae (HEM)

Perkinsiella rattlei Muir Delphacidae (HEM)

Perkinsiella saccharicida Kirkaldy Delphacidae (HEM)

Perkinsiella sinensis Kirkaldy Delphacidae (HEM)
<table>
<thead>
<tr>
<th>Species Name</th>
<th>Family</th>
<th>Host Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perkinsiella thompsoni Muir</td>
<td>Delphacidae</td>
<td></td>
</tr>
<tr>
<td>Perkinsiella vastatrix (Breddin)</td>
<td>Delphacidae</td>
<td></td>
</tr>
<tr>
<td>Sogatella furcifera Horvath</td>
<td>Delphacidae</td>
<td>White backed rice planthopper</td>
</tr>
<tr>
<td>Tarophagus colocasiae</td>
<td>Delphacidae</td>
<td>Taro leafhopper</td>
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<tr>
<td>Tarophagus persephone</td>
<td>Delphacidae</td>
<td>Taro leafhopper</td>
</tr>
<tr>
<td>Tarophagus proserpina (Kirk)</td>
<td>Delphacidae</td>
<td>Taro leafhopper</td>
</tr>
<tr>
<td>Phaciocephalus sp.</td>
<td>Derbidae</td>
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### Armoured scales (Diaspididae)

<table>
<thead>
<tr>
<th>Species Name</th>
<th>Family</th>
<th>Host Plant</th>
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</thead>
<tbody>
<tr>
<td>Abgrallaspis cyanophylli (Signoret)</td>
<td>Diaspididae</td>
<td></td>
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<tr>
<td>Andispis numerata Brimblecombe</td>
<td>Diaspididae</td>
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<tr>
<td>Andispis sinosa</td>
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<tr>
<td>Aonidiella aurantii (Maskell)</td>
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<td>Aonidiella comperei McKenzie</td>
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<td>Aonidiella eremocitri McKenzie</td>
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<td>Aonidiella inornata McKenzie</td>
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<td>Aonidiella orientalis (Newstead)</td>
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<td>Aspidiella hartii (Cockerell)</td>
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<td>Aspidiella sacchari (Cockerell)</td>
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<td>Aspidiotus destructor Signoret</td>
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<td>Aspidiotus excisus Green</td>
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<td>Aulacaspis tegalensis (Zehntner)</td>
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<td>Sugarcane scale</td>
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<td>Aulacaspis vitis (Green)</td>
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<td>Chrysomphalus aonidum (Linnaeus)</td>
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<td>Florida red scale.</td>
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<td>Chrysomphalus dictyospermi (Morgan)</td>
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<td>Chrysomphalus pinnulifer (Maskell)</td>
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<td>Duplaspidiotus claviger (Cockerell)</td>
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<td>Fiorinia coronata</td>
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<td>Fiorinia fioriniae (Targioni)</td>
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<td>Hemiberlesia lataniae (Signoret)</td>
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<td>Hemiberlesia palmae (Cockerell)</td>
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<td>Howardia bicalvis (Comstock)</td>
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<td>Ischnaspis longirostris (Signoret)</td>
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<td>Lepidosaphes beckii (Newman)</td>
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<td>Lepidosaphes karkarica</td>
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<td>Parlatoria crotonis Douglas</td>
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<td>Pinnaspis baxi (Bouche)</td>
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<td>Pinnaspis strachani (Cooley)</td>
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<td>Schizentaspidus silvicola</td>
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<td>Unaspis citri (Comstock)</td>
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<td>White louse scale</td>
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### Megymenum sp

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<tr>
<th>Species Name</th>
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<tr>
<td>Colgar tricolor Dist.</td>
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<tr>
<td>Paratella sp.</td>
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<td>Paratella miniata</td>
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<td>Dieuches finitimus Van Duzee</td>
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<td>Lygaeus hospes Fabr.</td>
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<td>Nysius epiensis China</td>
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<td>Orthaca cincticornis Walk.</td>
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<td>Pachybrachius nervosus Horv.</td>
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<td>Machaerota humboldti</td>
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<td>Terentius nubifasciatus Walker</td>
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<td>Cyrtopeltis modestus</td>
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<td>Halticus insularis Usinger</td>
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<td>Halticus minutus Reuter</td>
<td>Miridae (HEM) Fleahopper</td>
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<td>Halticus tibialis Reut.</td>
<td>Miridae (HEM) Grass bug</td>
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<td>Harpedona plana Poppius</td>
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<td>Platypeltocoris similis Popp</td>
<td>Miridae (HEM) Yam mirid sapsucker</td>
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<td>Prodromopsis octalatus</td>
<td>Miridae (HEM)</td>
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<td>Ragwellelus festivus Miller</td>
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<td>Ragwellellus horvathi Poppius</td>
<td>Miridae (HEM) Cardamom mirid</td>
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<td>Agapophyta bipunctata Boisd.</td>
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<tr>
<td>Agapophyta similis Blote</td>
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<td>Agapophyta viridula Blote</td>
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<td>Agonoscelis rutila</td>
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<td>Antestisopsis semiviridis (Walk.)</td>
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<td>Axiagastus cambelli Dist.</td>
<td>Pentatomidae (HEM) Coconut spathe bug</td>
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<td>Brachyplatis papius Guer.</td>
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<td>Brysica exigua Dist.</td>
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<td>Coptosoma pygmaeum Mont.</td>
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<td>Eysarcoris ventralis West.</td>
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<td>Nezara viridula (Linnaeus)</td>
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<td>Philia femorata Walk.</td>
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<td>Piezodorus rubrofasciatus Fab.</td>
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<td>Plautia sp.</td>
<td>Pentatomidae (HEM) Stink bugs</td>
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<td>Plautia brunneipennis</td>
<td>Pentatomidae (HEM) Stink bugs</td>
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**Mealybugs (Pseudococcidae)**

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<tr>
<th>Scientific Name</th>
<th>Family</th>
<th>Subfamily</th>
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<tr>
<td>Antonina graminis (Maskell)</td>
<td>Pseudococcidae (HEM) Rhodes grass mealybug</td>
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<tr>
<td>Brevennia rehi (Lindinger)</td>
<td>Pseudococcidae (HEM) Mealybug of rice</td>
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<tr>
<td>Cannococcus ikshu Williams</td>
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<td>Cannococcus palauensis (Beardsley)</td>
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<td>Chaecococcus bambusae (Maskell)</td>
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<td>Chorizococcus talipikanus Williams</td>
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<td>Criniticoccus theobromae Williams</td>
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</table>
Crisicoccus theobromae Williams Pseudococcidae (HEM)
Dysmicoccus boninis (Kuwana) Pseudococcidae (HEM) Gray sugarcane mealybug
Dysmicoccus brevipes (Cockerell) Pseudococcidae (HEM) Pineapple mealybug
Dysmicoccus nesophilus Williams Pseudococcidae (HEM)
Dysmicoccus papuanicus Williams Pseudococcidae (HEM)
Ferrisia consobrina Williams Pseudococcidae (HEM)
Ferrisia virgata (Cockerell) Pseudococcidae (HEM)
Geococcus coffeae Green Pseudococcidae (HEM)
Laingiococcus painei (Laing) Pseudococcidae (HEM)
Leptococcus metroxyli Reyne Pseudococcidae (HEM)
Macrolellicoccus hirsutus (Green) Pseudococcidae (HEM) Hibiscus mealybug
Maculicoccus malaiensis (Cockerell) Pseudococcidae (HEM)
Mutabilicoccus simmondsi (Laing) Pseudococcidae (HEM)
Mutabilicoccus vanheurni (Reyne) Pseudococcidae (HEM)
Nipaecoccus viridus (Newstead) Pseudococcidae (HEM)
Palmicultr browni (Williams) Pseudococcidae (HEM)
Paraputo leveri (Green) Pseudococcidae (HEM)
Planococcus citri (Risso) Pseudococcidae (HEM) Citrus mealybug
Planococcus dioscoreae Williams Pseudococcidae (HEM) Yam mealybug
Planococcus lilacinus (Cockerell) Pseudococcidae (HEM)
Planococcus pacificus Cox Pseudococcidae (HEM)
Pseudococcus elisae Borchsenius Pseudococcidae (HEM)
Pseudococcus longispinus (Targioni) Pseudococcidae (HEM) Longtailed mealybug
Pseudococcus sacharicola Takahashi Pseudococcidae (HEM)
Pseudococcus solomonensis Williams Pseudococcidae (HEM)
Rastrococcus neoguineensis Williams Pseudococcidae (HEM)
Rastrococcus vicorum Williams Pseudococcidae (HEM)
Saccharicoccus sacchari (Cockerell) Pseudococcidae (HEM) Pink sugarcane mealybug

Dindymus pyrochrous Boisd. Pyrrhocoridae (HEM)
Dysdercus cingulatus (F.) Pyrrhocoridae (HEM) Red cotton bugs
Dysdercus sidae Mont. Pyrrhocoridae (HEM)

Euricania discigutta (Walk.) Riciidae (HEM)
Euricania tristicula Stal Riciidae (HEM)
Euricania villica Riciidae (HEM)
Ricanula puncticosta Riciidae (HEM)

Stephanitis typica (Dist.) Tingidae (HEM) Banana lace-bug

WASPS
Eudecatoma sp. Eurytomidae (HYMEN)
Senoclidia purpurata (F.Sm.) Tenthredinidae (HYMEN) Yam sawfly

MOTHS AND BUTTERFLIES
Taenaris dimona Hew Amathusiidae (LEP)
Taenaris myops kirschi Stgr. Amathusiidae (LEP) Myops owl butterfly

Argina cribraria (Clerck) Arctiidae (LEP)
Asura crocota Hampson Arctiidae (LEP)
Creatonotus gangis (L.) Arctiidae (LEP)
Diacrisia niceta (Stal.) Arctiidae (LEP)
Diacrisia papauna Roth. Arctiidae (LEP)

Eupneusta solena Bradley Elachistidae (LEP) Leaf miner sugarcane
Idiophantis chirolaeta Meyr. Gelechiidae (LEP)
Phthorimaea operculella (Zell.) Gelechiidae (LEP) Potato tuber moth

Ectropis bhurmitra Walker Geometridae (LEP) Cacao looper
Hyposidra talaca Geometridae (LEP)

Acrocerops homalacta Meyr. Gracillariidae (LEP) Leaf miner

Arrhenes dschilus Plotz Hesperiidae (LEP)
Borbo cinnara Wallace Hesperiidae (LEP)
Borbo impar tetragraphus Mab. Hesperiidae (LEP) Borbo butterfly
Cephepes mosleyi (Butl.) Hesperiidae (LEP) Coconut skipper
Erionota thrax L. Hesperiidae (LEP) Banana skipper
Pamara amalia Semper Hesperiidae (LEP)
Pelopidas agna dingo Evans Hesperiidae (LEP)
Tagiades obscurus tindali Rbb Hesperiidae (LEP)
Tagiades trebellius canonicus Hesperiidae (LEP)
Tagiades tregellius Hopf. Hesperiidae (LEP)

Opogona fumiceps Hieroxestidae (LEP)
Opogona saccharella Hieroxestidae (LEP)

Scopelodes nitens B.Bak. Limacodidae (LEP) Cup moth
Thosea sinensis (Walk.) Limacodidae (LEP) Coconut cup moth

Lampides boeticus L. Lycanidae (LEP) Pea blue butterfly
Polyommatus boeticus (L) Lycanidae (LEP)
Ziza otis (F.) Lycanidae (LEP) Common grass blue butterfly

Calliteara horsfieldi Saunders Lymantriidae (LEP)
Dasychira mendosa Hubn. Lymantriidae (LEP) Leaf eating caterpillar
Euprostis sp Lymantriidae (LEP)
Lymnantria rosina Pag. Lymantriidae (LEP)

Bedelia somnulentaella (Zeller) Lyonetiidae (LEP) Sweet potato leaf miner
Leucopetera psophocarpella Brad & Cart Lyonetiidae (LEP) Winged bean blotch miner

Achaea janata (Linnaeus) Noctuidae (LEP) Cacao false looper
Agrotis interjectionis Guenee Noctuidae (LEP)
Agrotis ipsilon (Hufn.) Noctuidae (LEP) Black cutworm
Atleta iridia Myr. Noctuidae (LEP)
Anomis flavia Fabricius Noctuidae (LEP) Cotton semi-looper
Anticarsia irrorata Noctuidae (LEP)
Bathytricha truncata Walker Noctuidae (LEP) Cane-moth borer; Large sugarcane moth borer

Chlumetia transversa Walker Noctuidae (LEP)
Chrysodeixis eriosoma Doubleday Noctuidae (LEP) Green looper
Earias fabia Stoll [now E vittella] Noctuidae (LEP) Spotted bollworm
Earias vittella (F.)[Syn E fabia Stoll] Noctuidae (LEP) Aibika shoot boring grub
Helioverpa armigera (Hubner) Noctuidae (LEP) Corn earworm
Helioverpa assulta assulta Guenee Noctuidae (LEP) Cape gooseberry budworm
Helioverpa punctigera Wallengren Noctuidae (LEP)
Metania papuana Noctuidae (LEP)
Mythimna loreyi (Dup.) Noctuidae (LEP) Rice armyworms
Mythimna separata (Walk.) Noctuidae (LEP) Rice armyworms
Mythimna unipuncta Haworth Noctuidae (LEP)
Nagia episcopalis Hampson Noctuidae (LEP)
Penicillaria jocosatrix (Guen.) Noctuidae (LEP) Large mango tipborer
207

Phytometra orichalcea (F.)  Noctuidae (LEP)
Sesamia arfaki Bethune-Baker  Noctuidae (LEP)
Sesamia grisescens Walk.  Noctuidae (LEP)  Stem borer
Sesamia inferens (Walker)  Noctuidae (LEP)  Violet rice stem borer
Simplicia caeneusalis Walker  Noctuidae (LEP)
Spodoptera exempta (Waller)  Noctuidae (LEP)  African armyworm
Spodoptera litura (Fabricius)  Noctuidae (LEP)  Cluster caterpillar
Spodoptera mauritia (Boisduval)  Noctuidae (LEP)  Rice moth
Thysanoplusia orichalcea Fab  Noctuidae (LEP)  Flax caterpillar
Tiracola plagiata (Walker)  Noctuidae (LEP)  Cacao armyworm
Tiracola rufimargo  Noctuidae (LEP)
Xanthodes transversa Guenee  Noctuidae (LEP)

Clostera rubida Druce  Notodontidae (LEP)
Teleclita strigata cinnamomea Rothsch.  Notodontidae (LEP)
Melanitis constantia Cramer  Nymphalidae (LEP)
Melanitis ledabankia F.  Nymphalidae (LEP)  Evening brown butterfly
Mycalesis asophis Hew  Nymphalidae (LEP)
Graphium agamemnon L.  Papilionidae (LEP)  Green spotted triangle
Papilio aeacus Donovan  Papilionidae (LEP)  Citrus butterfly
Papilio aegeus ormenus Guerin  Papilionidae (LEP)  Citrus butterfly

Phyllocnistis citrella Staint  Phyllocnistidae (LEP)  Citrus leaf miner
Caunacea sera Meyrick  Plutellidae (LEP)
Plutella xylostella (L.)  Plutellidae (LEP)  Diamond back moth
Chilo auricilius (Dudg.)  Pyralidae (LEP)  Gold-fringed rice borer
Chilo suppressalis (Walker)  Pyralidae (LEP)  Purple lined rice stem borer
Chilo terrenellus Pag.  Pyralidae (LEP)  Sugarcane borer
Cnaphalocrocis medinalis (Gn.)  Pyralidae (LEP)  Rice leaf roller
Cnaphalocrocis poeyalis Boisduval  Pyralidae (LEP)  Rice leaf roller
Crocidolomia binotalis Zeller  Pyralidae (LEP)  Cabbage cluster caterpillar
Dichocrosis sp.nr punctiferalis Guenee  Pyralidae (LEP)
Lamprosema indica F. (Hedylepta)  Pyralidae (LEP)  Bean leaf roller
Malariapha separatella Rag.  Pyralidae (LEP)  White rice stem borer
Mampava bipunctella Rag.  Pyralidae (LEP)  Sorghum head caterpillar
Marasmia bilineata  Pyralidae (LEP)  rice leaf roller
Marasmia hexagona  Pyralidae (LEP)  rice leaf roller
Marasmius venilalis  Pyralidae (LEP)
Maruca vitrata Fabricius  Pyralidae (LEP)  Bean pod borer
Nacoleia octasema (Meyrick)  Pyralidae (LEP)  Banana scab moth
Deanolis albizonalis Hampson  Pyralidae (LEP)  Red banded mango borer
Omioodes indicata Fabricius  Pyralidae (LEP)  Bean leaf roller
Omioodes diemenalis Guenee  Pyralidae (LEP)  Bean leaf roller
Ostrinia furnacalis (Guen)  Pyralidae (LEP)  Maize stem borer
Scirpophaga excerptalis (Walker)  Pyralidae (LEP)  White tip borer
Scirpophaga innotata (Walker)  Pyralidae (LEP)  White rice borer
Scirpophaga rivulosa Fabricius  Pyralidae (LEP)
Spoladea recurvalis Fabricius  Pyralidae (LEP)  Beet webworm
Sylepte derogata Fabricius  Pyralidae (LEP)  Cotton leaf roller
Tabidia insulalis Snell  Pyralidae (LEP)
Tirathaba ignevana Hmps.  Pyralidae (LEP)
Tirathaba rufivena Walk.  Pyralidae (LEP)  Coconut spathe moth

Syntherata janetta White  Saturniidae (LEP)
Hawkmoths

Agrius convolvuli (L.) Sphingidae (LEP) Sweet potato hawkmoth
Hippotion boerhaviae Fab. Sphingidae (LEP)
Hippotion celerio (L.) Sphingidae (LEP) Grapevine hawkmoth
Theretra nessus Dry Sphingidae (LEP) Yam hawkmoth
Theretra oldenlandiae Fab. Sphingidae (LEP) Vine hawkmoth

Acleris sp. Tortricidae (LEP)
Adoxophyes melichron Tortricidae (LEP) Leaf roller
Homona coffearia Niet Tortricidae (LEP) Coffee leafroller

Cryptophasa setiotricha Meyr Xyloryctidae (LEP)
Cryptophasa sp. nr arithmologia Meyrick Xyloryctidae (LEP)

GRASSHOPPERS AND LOCUSTS

Atractomorpha crenaticeps Blanch Acrididae (ORTH)
Atractomorpha similis Acrididae (ORTH)
Australcris gutulosa (Walk.) Acrididae (ORTH) Spur throated locust
Gesonula mundata sanguinolenta Kraus Acrididae (ORTH)
Heteropternis obscurella (Blanch) Acrididae (ORTH)
Locusta migratoria (Linn.) Acrididae (ORTH) Migratory locust
Oxya gavisa (Walk.) Acrididae (ORTH)
Oxya japonica (Thnb.) Acrididae (ORTH)
Oxya vittigera (Blanch) Acrididae (ORTH)
Oxya sp. Acrididae (ORTH)
Patanga sp. Acrididae (ORTH)
Stenocatantops augustifrons (Walker) Acrididae (ORTH)
Tauchiridea adusta Bolivar Acrididae (ORTH)
Valanga irregularis (Walker) Acrididae (ORTH)
Valanga nigricornis (Burm.) Acrididae (ORTH) Javanese grasshopper
Valanga sp. Acrididae (ORTH)

Ananipa sp. Gryllidae (ORTH)
Euscyrtus hemelytrus (de Haan) Gryllidae (ORTH)
Homeoxipha fuscipennis Gryllidae (ORTH)

Gryllotalpa africana Beauv Gryllotalpidae (ORTH) Mole cricket

Desmopterella sp Pyrgomorphidae (ORTH)

Acauloplacella immunis Tettigoniidae (ORTH)
Euconeophalus sp Tettigoniidae (ORTH)
Eumossula gracilis Willemse Tettigoniidae (ORTH) Coconut treehopper
Hexacentrus mundar Walker Tettigoniidae (ORTH)
Phaneropelta brevis Serv. Tettigoniidae (ORTH)
Segestes decoratus Redt. Tettigoniidae (ORTH)
Segestidea defoliatrix defoliatrix Ulvavov Tettigoniidae (ORTH) Coconut treehopper
Segestidea gracilis Willemse Tettigoniidae (ORTH)
Segestidea hanoverana Willemse Tettigoniidae (ORTH) Coconut treehoppers
Segestidea insulana Willemse Tettigoniidae (ORTH)
Segestidea leefmansi (Willemse) Tettigoniidae (ORTH)
Segestidea montana Willemse Tettigoniidae (ORTH)
Segestidea novaehuineae Brancsik Tettigoniidae (ORTH) Coconut treehopper
Segestidea uniformis (Willemse) Tettigoniidae (ORTH)
Segetes cornelii Willemse Tettigoniidae (ORTH)
Segetes gracilis

THRIPS

<table>
<thead>
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<th>Species</th>
<th>Family</th>
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<tr>
<td>Chaetanaphthrips orchidii F.</td>
<td>Thripidae (THYS) Banana rust thrips</td>
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<tr>
<td>Chaetanaphthrips signipennis Bagn.</td>
<td>Thripidae (THYS)</td>
</tr>
<tr>
<td>Dendrothripoides ipomoeae Bagn.</td>
<td>Thripidae (THYS)</td>
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<td>Megalurothrips usitatus Bagnall</td>
<td>Thripidae (THYS)</td>
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<tr>
<td>Thrips tabaci Lind.</td>
<td>Thripidae (THYS) Onion thrips</td>
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<tr>
<td>Selenothrips rubrocinctus (Giard)</td>
<td>Thripidae (THYS) Red banded thrips</td>
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Armoured scales (Diaspididae)

The species listed are in Papua New Guinea and in the South Pacific region are known to damage the plants listed. The page references are from Williams, D.J. & Watson, G.N., Scale Insects of Trop S Pacific Part 1 Armoured scales. CAB.

<table>
<thead>
<tr>
<th>Species</th>
<th>Hosts</th>
</tr>
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<tbody>
<tr>
<td>Abgrallaspis cyanophylli (Signoret)</td>
<td>On banana, coconut, avocado, loquat, breadfruit, pao nut, tea, cardamom, laulau’s, figs, soursop, greater yam, cassava, macadamia, p22</td>
</tr>
<tr>
<td>Andaspis numerata Brimblecombe</td>
<td>On tea.</td>
</tr>
<tr>
<td>Andaspis sinosa</td>
<td>On fig.</td>
</tr>
<tr>
<td>Aonidiella aurantii (Maskell)</td>
<td>On grapefruit, sour orange, sweet orange, lime, mandarin, lemon, pomelo, breadfruit, marrow, paper mulberry, chilli, coconut, p 37.</td>
</tr>
<tr>
<td>Aonidiella comperei McKenzie</td>
<td>On Indian mulberry, banana, fig, velvet apple, p40.</td>
</tr>
<tr>
<td>Aonidiella eremocitri McKenzie</td>
<td>On pao trees, coconut, and citrus. p 40.</td>
</tr>
<tr>
<td>Aonidiella inornata McKenzie</td>
<td>On pao, banana, grapevine, pandanus, kava. p 42.</td>
</tr>
<tr>
<td>Aonidiella orientalis (Newstead)</td>
<td>On pawpaw. p 43.</td>
</tr>
<tr>
<td>Aspidiella hartii (Cockerell)</td>
<td>On yam, ginger, sweet potato. It particularly occurs on yams in storage. It can be on greater or lesser yam. p 45-47.</td>
</tr>
<tr>
<td>Aspidiella sacchari (Cockerell)</td>
<td>On giant taro, sugarcane, and grasses. It is mainly a pest of sugarcane. p 47</td>
</tr>
<tr>
<td>Aspidiotus destructor Signoret</td>
<td>On breadfruit, coconut, bullock’s heart, pawpaw, oil palm, laulua, banana, avocado, guava, cacao, cowpea, chinese taro, kava, pomelo and cycads. It also occurs on many other plants including yams, taro, mangoes, sugarcane. p 53</td>
</tr>
<tr>
<td>Aspidiotus excisus Green</td>
<td>On pawpaw, citrus. p 57 &amp; 58</td>
</tr>
<tr>
<td>Aspidiotus musae</td>
<td>On banana. p 64</td>
</tr>
<tr>
<td>Aulacaspis legaensis (Zehntner)</td>
<td>On sugarcane and pitpit. p76</td>
</tr>
<tr>
<td>Aulacaspis viti (Green)</td>
<td>On durian. p 77-79</td>
</tr>
<tr>
<td>Chrysomphalus aonidum (Linnaeus)</td>
<td>Florida red scale. On citrus, breadfruit, coconut, Indian mulberry, banana, pandanus, cycads. Also can occur on candle nut, soursop, sweet sop, bullock’s heart, tamarind. p 93.</td>
</tr>
<tr>
<td>Chrysomphalus dictyospermi (Morgan)</td>
<td>On jackfruit, asparagus, citrus, coconut, apple, mango, avocado, pao nut, tea, macadamia, guava, golden apple, laulau, pawpaw, Java almond, vanilla, dye fig, Chinese taro, betel nut, cycad, cassava, oil palm, eggplant, p 94.</td>
</tr>
<tr>
<td>Chrysomphalus pinnulifer (Maskell)</td>
<td>On citrus. p 97.</td>
</tr>
<tr>
<td>Duplaspidiotus claviger (Cockerell)</td>
<td>On citrus and figs. p 107.</td>
</tr>
<tr>
<td>Fiorinia coronata</td>
<td>On nipa, coconut and pandanus. p 116.</td>
</tr>
<tr>
<td>Fiorinia floriniiae (Targioni)</td>
<td>On avocado, coconut, citrus, tea and cycads. p 118</td>
</tr>
<tr>
<td>Hemiberlesia lataniae (Signoret)</td>
<td>On jackfruit, citrus, coconut, loquat, laulau, apple, cassava, swamp taro, avocado, madras thorn, guava, grapes, Indian mulberry, passionfruit, coffee, candle</td>
</tr>
</tbody>
</table>
**Hemiberlesia palmae** (Cockerell)  

**Howardia biclavis** (Comstock)  

**Ischnaspis longirostris** (Signoret)  

**Lepidosaphes beckii** (Newman)  
On **citrus**. p146.

**Lepidosaphes kaylorii** (Packard)  

**Lepidosaphes rubroviolata** Cockerell  
On **fig**, **Tahitian chestnut**, **Malay apple**. p161,162.

**Lepidosaphes tokionis** (Kuwana)  
On **citrus**. p170.

**Morganella longispina** (Morgan)  

**Odonasps rathaie** Kotinsky  
On **hibiscus and nypa**. p198, 199.

**Odonasps saccharicaulis** (Zehntner)  
On **Pandanus**, **coconut**, **Tahitian chestnut**. p206, 207.

**Parlatoria crotonis** Douglas  
On **Macadamia nut**, **cacao**, **citrus**, **coffee**, p210, 211.

**Pinnaspis aspidistrae** (Signoret)  

**Pinnaspis buxi** (Bouche)  

**Pinnaspis strachani** (Cooley)  

**Pseudaulacaspis cockerelli** (Cooley)  
On **coconut**, **pawpaw**, **mango**, p221, 222.

**Pseudaulacaspis pentagona** (Targioni)  

**Schizentaspidus silvicola**  
On cultivated **pandanus**. p238, 239, 241.

**Unaspis citri** (Comstock)  

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**Soft Scales (Coccidae and others)** *indicates more serious pest*

The species listed are in Papua New Guinea and in the South Pacific region are known to damage the plants listed. The page references are from Williams, D.J. & Watson, G.N., Scale Insects of Trop S Pacific Part 3 Soft scales. CAB.

**Margarodidae**

* **Icerya purchasi** Maskell  

* **Icerya seychellarum** (Westwood)  
pomegranate, grapes, wild ginger, giant taro, paper mulberry, chilli, yam, mango, chinese taro, pigeon pea, lablab bean, common bean, coconut, Surinam cherry, Malay apple, feijoa, strawberry, red raspberry, sweet potato, lettuce, litchi, macadamia nut, monsteria, mulberry, pandanus, radish, golden apple, blackberried nightshade, tomato, pepper, Polynesian arrowroot, betel nut, sapodilla, oil palm, dye fig, cinnamon, eggplant, pawpaw. p 24-28

Promargarodes australis Jakubski
Steatococcus samaraius Morrison

On sugarcane. p 29, 31.

Eriococcidae

Sangicoccus truncatispinus (Reyne)
On coconut, nipa. p 53, 54.

Coccidae

Anthococcus kerevatae Williams
On Malay apple, soursop, jackfruit, citrus, cacao. p62-64.

Ceroplastes ceriferus (F.)
* Ceroplastes destructor Newstead

Ceroplastes murrayi Froggatt
* Ceroplastes rubens Maskell
On breadfruit, citrus, coconut, rose apple, Tahitian chestnut, mango, guava, jackfruit, avocado, cashew, feijoa, monsteria, rambutan, nutmeg, pigeon pea, cherry guava, apple. p 76-78.

* Coccus celatus De Lotto
* Coccus hesperidium Linnaeus
On coffee, soursop. p 87-89.

Coccus longulus (Douglas)
On breadfruit, jackfruit, guava, lemon, Tahitian chestnut, avocado, pawpaw, swamp taro, Dye fig, soursop, bullock’s heart, sweet sop, taro, peanut, five corner, laulau, snake bean, candle nut. p 92-94.

* Coccus viridus (Green)
On citrus, coffee, pandanus, Tahitian chestnut, guava, Indian mulberry, pineapple, marrow. p 96-99.

Drepanococcus chiton (Green)
On soursop, pawpaw, citrus, cacao, eggplant. p102-105.

Eucalyminatus tessellatus (Signoret)

* Kilifia acuminata (Signoret)
On citrus, Malay apple, mango, breadfruit, cinnamom, pineapple. p 109-111.

Melanescococcus kleiniovae Williams
* Milviscutulus ciliatus Williams
On guava. p 120-12.

* Milviscutulus mangiferae (Green)
On breadfruit, sweet orange, jackfruit, coconut, Ton, Java almond, tu-lip, Malay apple, Dye fig, mango, monsteria, Indian mulberry, avocado. p122-126, 128.

Milviscutulus pilosus Williams
On coconut. p 127, 128.

Milviscutulus spiculatus Williams
On Indian mulberry, mango, avocado, p129,130.

Neoplatyolecanium sp.
Neosaissetia keravatae Williams
* Parasaisssetia nigra (Nietner)
On pepper. p132, 133.
amaranth, breadfruit, jackfruit, taro, aibika, okra, rosella, mulberry, Indian mulberry, Java almond, kava, dye fig, oil palm. p 135-140.

*Platylecanium cocotis* Laing

On coconut, betel nut. p 141-143.

*Pulvinaria cacao* Williams

On cacao. p 147-149.

*Pulvinaria elongata* Newstead

On sugarcane. p 149-151.

*Pulvinaria psidii* Maskell


*Pulvinaria ubicola* (Cockerell)

On chilli, giant taro, monstera, cape gooseberry, tomato, litchi, parsley, pineapple, capsicum, eggplant, blackberried nightshade. p 157-159.

*Saisssetia coffeae* (Walker)

On chilli, lemon, pomelo, coffee, kava, guava, cherry guava, eggplant, coconut, breadfruit, soursop, tea, snake bean, cycads, Indian mulberry, eggplant, blackberried nightshade, banana, pawpaw, Java almond, angled loofah, smooth loofah, avocado, yams, citrus. p 161-163. Numbers get worse in the dry season. Shade may reduce attack.

*Saissetia miranda* (Cockerell & Parrott)

On grapefruit, Indian mulberry, guava, pigeon pea, coconut. p 164,165.

*Saissetia neglecta* De Lotto

On mandarin, citrus, coffee, guava, cowpea. p 166,167.

*Vinsonia stellifera* (Westwood)

On pomelo, mango, coconut, Malay apple. p 172,173.

Asterolecaniidae

*Asterolecanium sp.*

On coffee, raspberry, pepper, Malay apple. p 192.

*Bambusaspis bambusae* (Boisduval)

On bamboo. p 200, 201.

Mealybugs (Pseudococcidae)

The mealybugs listed occur in Papua New Guinea and have been recorded on food plants in the South Pacific and Asia. They have not necessarily been recorded on all of these food plants in Papua New Guinea, but they presumably could be. The numbers refer to pages in Williams, D.J. & Watson, G.W., The scale insects of the South Pacific. Part 2 Mealybugs. CAB

*Antonina graminis* (Maskell)


*Brevennia rebi* (Lindinger)

On rice and sorghum. p8, 23, 24, 26. Kalshoven p191

*Cannoccus ikshu* Williams

On sugarcane and coastal pitpit. p25, 26, 28.

*Cannococcus palauensis* (Beardsley)

On sugarcane, and rice. p27-29.

*Chaeococcus bambusae* (Maskell)

On bamboo. p29-31. It is large - up to 6mm long.

*Chorizococcus talipikanus* Williams

On sugarcane. p 31-33. It is associated with ants.

*Criniticoccus theobromae* Williams

On cacao. p 39-41

*Criscococcus theobromae* Williams

On cacao. p 43-45

*Dysmicoccus boninsis* (Kuwana)


*Dysmicoccus brevipes* (Cockerell)


*Dysmicoccus nesophilus* Williams

On grapefruit, sweet orange, cacao, breadfruit, Indian mulberry, candle nut, giant taro, lemon, mango, avocado, guava, pawpaw, dye fig. p68-70, 72.

*Dysmicoccus papuanicus* Williams

On karuka, coconut. p71-73.
Ferrisia consobrina Williams  
On tomato, cassava potato. p76, 77, 79.

Ferrisia virgata (Cockerell)  
On soursop, pumpkin, banana, guava, bullock’s heart, breadfruit, cashew, tomato, lemon, swamp taro, ginger, sour orange, coconut, snake bean, cassava, cowpea, taro, pawpaw. p78-81

Geococcus coffeae Green  
On soil, leaf litter and taro. p 84, 85, 87.

Laingiococcus painei (Laing)  
On citrus, soursop, coconut, fig, cacao, Maesa sp. p 88-89.

Leptococcus metroxyli Reyna  
On sago, pineapple, coconut. p99, 100.

Maconellicoccus hirsutus (Green)  
On pineapple, hibiscus, cacao, aibika, breadfruit. p101, 102.

*Maculicoccus malaitensis (Cockerell)  
On Tahitian chestnut, coconut, cacao. p 103-105.

Mutabilicoccus simmondsi (Laing)  

Mutabilicoccus vanheurni (Reyne)  
On cacao and breadfruit. p 115-117.

*Nipaecoccus viridus (Newstead)  
On asparagus, citrus, aibika, mango, pomegranate. p123-125.

Palmiculitor browni (Williams)  
On coconut, oil palm. p 128-130.

*Paraputo leveri (Green)  

*Planococcus citri (Risso)  
On grapefruit, sweet orange, lemon, pomelo, pumpkin, swamp taro, sweet potato, basil, avocado, guava, cacao, cabbage. p162, 163, 165.

*Planococcus dioscorae Williams  
On yams and Chinese taro in storage. p164, 165.

*Planococcus lilacinus (Cockerell)  
On sweetpot, soursop, five corner, lemon, mango, cacao, citrus. p166, 167.

*Planococcus pacificus Cox  
On candle nut, giant taro, amaranth, cashew, pineapple, soursop, sweet sop, bullock’s heart, celery, peanut, breadfruit, jackfruit, asparagus, betel nut, chinese cabbage, cabbage, paper mulberry, pigeon pea, galip, capsicum, watermelon, citrus, taro, coconut, coffee, taro, pumpkin, yam, laulau, soybean, Tahitian chestnut, aibika, sweet potato, tomato, passionfruit, macadamia, mango, Indian mulberry, mulberry, banana, basil, Pandanus, beans, ton, guava, winged bean, radish, sugarcane, eggplant, potato, golden apple, Java almond, cacao, cowpea, Chinese taro, corn, ginger. p167-170.

*Pseudococcus elisae Borchsenius  
On cabbage, tomato, banana, lime, cassava. p181-183.

Pseudococcus longispinus (Targioni)  
On pineapple, sweet orange, breadfruit, pomelo, coffee, banana, cacao, cashew, taro, giant taro, potato, grapes, mango, elephant foot yam, Chinese taro. p190-192, 194

*Pseudococcus saccharicola Takahashi  
On rice, sugarcane, Saccharum robustum. p 201, 203.

Pseudococcus solomonensis Williams  
On coffee, galip, banana, cacao. p 202-204

Rastrococcus neoguineensis Williams  
On coconut, mangrove. p 209-211

Rastrococcus vicorum Williams  
On citrus, guava, coffee. p 211-213

*Saccharicoccus sacchari (Cockerell)  
Aibika pests

Acrocercops sp.
Amblypelta cocophaga China
Amblypelta lutescens papuensis Br.
Amblypelta theobromae Brown
Anomis flava F. (Syn. Cosmophila flava)
Aphis gossypii Glover
Cassena intermedia Jac.
Cassena papuana (Jac.)
Colgar tricolor Dist.
Dysdercus cingulatus (F.)
Earias vitella (F.)
Euricania discigutta (Walk.)
Nisotra sp.
Parasaissetia nigra
Phaneroptera brevis Serv
Pseudaulacaspis pentagona (Taeg)
Saissetia nigra (Nietner)
Spodoptera litura (F)
Sylepte derogata Fabricius
Valanga irregularis (Walker)
Valanga sp.

Amaranthus insect pests

Cletus sp.
Dysmicoccus brevipes (Cockerell)
Leptocorisa solomonensis Ahmad
Nisotra bassae Bry
Oribius spp.
Parasaissetia nigra (Nietner)
Planococcus pacificus Cox
Spoladea recurvalis Fabricius
Tiracola plagiata Walk

Avocado insect pests

Abgrallaspis cyanophylli (Signoret)
Adoxophyes sp.
Amblypelta ssp.
Aspidiotus destructor Signoret
Ceroplastes destructor Newstead
Ceroplastes rubens Maskell
Chrysomphalus dixyospermi (Morgan)
Coccus hesperidium Linnaeus
Coccus longulus (Douglas)
Colgar tricolor Dist.
Dysmicoccus nesophilus Williams
Eupholus ssp.
Euricania villica
Ferrisia virgata Cockerell
Fiorinia floriniae (Targioni)
Gascadera destructor De Lotto
Graphium agamemnon L.
Helopeltis clavifer (Walker)
Hemiberlesia lataniae (Signoret)
Hemiberlesia palmae (Cockerell)

Gracillariidae (LEP) Aibika leaf miner
Coreidae (HEM) Green coconut bug
Coreidae (HEM) Papua tip wilt bug
Coreidae (HEM)
Cotton looper or Cotton semi looper
Aphididae (HEM) Melon aphid
Galerucidae (COL)
Galerucidae (COL)
Flatidae (HOM.)
Pyrrhocoridae (HEM) Red cotton bug
Noctuidae (LEP) Aibika shoot boring grub
Rigonidiae

Coccidae (HEM) White scale
Coccidae (HEM) Nigra scale
Noctuidae (LEP) Cluster caterpillar
Pyralidae (LEP) Cotton leaf roller
Acrididae (ORTH)
Acrididae (ORTH)

Diaspididae (HEM) Armoured scales
Tortricidae (LEP) leaf roller
Coreidae (HEM) Amblypelta bugs
Diaspididae (HEM) Coconut scale
Coccidae (HEM) Soft scale
Coccidae (HEM) Pink wax scale
Diaspididae (HEM) Armoured scale
Coccidae (HEM) Soft brown scale
Coccidae (HEM) Soft scale
Flatidae (HOM.)
Pseudococcidae (HEM) mealy bug
Curculionidae (COL) Eupholus weevils
Riciiidae (HEM) plant hopper
Pseudococcidae (HEM) Striped mealy bug
Diaspididae (HEM) Armoured scale
Coccidae (HEM) Soft wax scale
Papilionidae (LEP) Green spotted triangle
Miriidae (HEM) Cacao mirid
Diaspididae (HEM) Armoured scale
Coccidae (HEM) Soft scale
Homeoxipha fuscipennis (Gryllidae (ORTH))
Hyposidra talaca (Wlk.) (Geometridae (LEP))
Icerya seychellarum (Westwood) (Margarodidae)
Idopsis grisea Faust. (Curculionidae (COL))
Milviscutalus mangiferae (Green) (Coccidae (HEM) Soft scale)
Milviscutalus spiculatus Williams (Coccidae (HEM) Soft scale)
Morganealla longispina (Morgan) (Diapсидidae (HEM) Armoured scale)
Oribius spp (Curculionidae (COL) Shot hole weevils)
Paratella miniata Mcl. (Flatidae (HEM.))
Perissopneumon (Diaspididae (HEM) Soft scale)
Pinnaspis strachani (Cooley) (Pseudococcidae (HEM) mealy bug)
Plocanoecus citri (Risso) (Miridae (HEM.))
Pseudodoniella typica (China & Carvalho) (Miridae (HEM.))
Saissetia coffeae (Walker) (Coccidae (HEM) Coffee scale)
Selentothrips rubropectus (Giard) (Thripidae (THYS) Cacao thrips)
Terentius nubifasciatus Walker (Membracidae (HOM))
Xyleborus perforans (Wollastan) (Scolytidae (COL) Island pinhole borer)

Banana insect pests

Apiraculus cornutus (Pascoe) (Curculionidae (COL) horned weevil)
Cosmopolites sordidus (Germar) (Curculionidae (COL) Banana weevil)
Bactrocera bryoniae (Try) (Tephritidae (DIPT) fruit fly)
Bactrocera musae (Try) (Tephritidae (DIPT) Banana fruit fly)
Dermolepida nigrum (Nonf) (Scarabeidae (COL) Chafer beetle)
Eumossula gracilis (Arctiidae (LEP))
Heliothis armiger Hubner (Noctuidae (LEP) Corn earworm)
Lema papuana Jac. (Chrysomelidae (COL))
Locust migratoria (Linnaeus) (Acrididae (ORTH) Migratory locust)
Myospila argentata Walker (Muscidae (DIPT.))
Nacoleia octasema (Meyrick) (Pyralidae (LEP) Banana scab moth)
Opagona sp. (Hieroxestidae (LEP))
Oribius cruciatus Fst. (Curculionidae (COL) Shot hole weevil)
Oribius inimicus Mshl (Curculionidae (COL))
Oryctes rhinoceros (L) (Scarabeidae (COL) Rhinoceros beetle)
Othreis fullonica (Cl) (Noctuidae (LEP))
Papuana huebneri Fairm. (Scarabeidae (COL) taro beetle)
Papuana laevipennis Arrow (Scarabeidae (COL) taro beetle)
Papuana japonensis Arrow (Scarabeidae (COL) taro beetle)
Papuana semistriata (Scarabeidae (COL) taro beetle)
Papuana woodlarkiana (Montr.) (Scarabeidae (COL) taro beetle)
Pentalonia nigronervosa Coq (Aphididae (HOM) Banana aphid)
Scapanes australis australis Boisd. (Scarabeidae (COL) Australian Rhinoceros beetle)
Scapanes australis gressepunctatus (Scarabeidae (COL) New Guinea rhinoceros beetle)
Scopelodes nitens B.Bak (Limocodidae (LEP))
Segestidea defoliata Uvarov (Tettigoniidae (ORTH))
Segestidea novaeguineae F.Willemse (Tettigoniidae (ORTH))
Taenaris dimona Hew (Amathusiidae (LEP))
Taenaris myops kirschi Stgr. (Amathusiidae (LEP) Banana butterfly)

Bean family plants insect pests

Acanthoscelides obtectus (Say.) (Bruchidae (COL) Bean weevil)
Acroceroples sp. (Gracillariidae (LEP) Aibika leaf miner)
Adoxophyes tetraphracta Meyrick (Tortricidae (LEP))
Adoxophyes sp. (Tortricidae (LEP) leaf roller)
Alticus tibialis Reut (Miridae (HEM) Grass bug)
Amblypelta spp. Coreidae (HEM) Amblypelta bugs
Anomis flava F. Noctuidae (LEP) Cotton semi-looper
Anticarsia irrorata F. Noctuidae (LEP.)
Aphis craccivora Koch Aphididae. (HEM) Cowpea aphid
Aphis gossypii Glover Aphididae (HEM) Melon aphid
Aphis sacchari Zehntner Aphididae (HEM) Sugarcane aphid
Apirocalus spp. Curculionidae (COL) Hormed weevil
Araecerus fasciculatus Degeer Anthribidae (COL) Coffee weevil
Araecorynus cumingi Jekel Anthribidae (COL)
Arsipoda tenimberensis Jacoby Chrysomelidae (COL) Black flea beetle
Atherigona orientalis Schiner Muscidae (DIPT) Shootfly
Aulacophora spp. Chrysomelidae (COL) Pumpkin beetles
Aulacorthum solani Kaltenbach Aphididae (HEM) Foxglove aphid
Bothrogonia sp. Coccinellidae (HEM)
Brachyplats papuus Guer. Coccinellidae (HEM)
Brachyplats sp. Coccinellidae (HEM)
Caedius demejerei Geb. Tenebrionidae (COL)
Cassena papuana (Jac.) Chrysomelidae/Galerucidae (COL)
Chauleognathus waroensis Wittmer Cantharidae (COL)
Chrysodeixis eriosoma Doubleday Noctuidae (LEP) Green looper
Coleophora inaequalis F. Coccinellidae (HEM)
Colposcelis vignaphila Bryant Coccinellidae (COL)
Demonax collaris Pascoe Cerambycidae (COL)
Epilachna signatipennis Boisd. Coccinellidae (COL) leaf eating beetle
Erythronoea sp. Coccinellidae [Jassidae] (HEM)
Euproctis sp. Lymantriidae (LEP)
Euricaria discigutta (Walk) Ricaniidae (HEM) plant hopper
Euricaria villica Ricaniidae (HEM) plant hopper
Halticus minutus Reuter Miridae (HEM) flea hopper.
Helicoverpa armigera (Hubner) Noctuidae (LEP) Corn earworm
Heloptelis clavifer (Walker) Miridae (HEM) Cacao mirid
Henselolachna haemorrhoea (Biel) Coccinellidae (COL) Leaf eating ladybird
Henselolachna signatipennis Boisd. Coccinellidae (COL) Leaf eating ladybird
Homeoxiphia fuscipennis Gryllidae (ORTH)
Homona coffearia Nietn. Tortricidae (LEP) Coffee leaf roller
Hyposidra talaca (Wlk.) Geometridae (LEP)
Lampides boeticus L. Lycaenidae (LEP) Pea Blue butterfly
Leptocorisa spp. Alydidae (HEM) Paddy bugs
Leucoptera psophocarpella Bradley & Carter Lyonetiidae (LEP) Winged bean blotch miner
Maruca vitrata Fabricius Pyralidae (LEP) Bean pod borer
Megaluromyris usitatus Bagnall Thripidae (THYS)
Melantheus argineguttatus Alydidae (HEM)
Monolepta spp. Chrysomelidae (COL) Monolepta beetles
Mythima loreyi (Dup.) Noctuidae (COL) Rice armyworms
Mythima separata (Walk) Noctuidae (COL) Rice armyworms
Myzus persicae Sulzer Aphididae (HEM) Green peach aphid
Nemata viridula (Linnaeus) Pentatomidae (HEM) Green Vegetable bug
Nyctemera baulus Boisduval Arctiidae (LEP)
Nysius epiensis China Lygaeidae (HEM)
Omiodes indicata Fabricius Pyralidae (LEP) Bean leaf rollers
Omiodes diemenalis Guenee Pyralidae (LEP) Bean leaf rollers
Ophiomyia phaseoli (Tryon.) Agromyzidae (DIPT) Bean fly
Orchomoeplatus mammaeferus (Quanitance & Baker) Aleyrodidae
Oribius spp. Curculionidae (COL) Shot hole weevils
Pachybrachius nervosus Horv. Lygaeidae (HEM)
Phaneroptera brevis Aud.-Serv Tettigoniidae (ORTH)
Phyllocnistis sp.
Piezodorus rubrafasciatus Fab.
Plautia brunneipennis Pentatomidae
Prosopis oblique plagiatus Breuning Cerambycidae
Psylliodes sp nr fulvipes Jacoby Chrysomelidae
Rhinoscapa funebris Chev. Curculionidae
Rhypaniopsis coriacea Jac. Chrysomelidae
Rhypaniella wauenesis
Riportus spp.
Ropica honesta Pascoe Coreidae
Spodoptera litura (Fab.) Noctuidae
Tetranychus marmoratus McGregor Tetranychidae
Tirathaba ignivena Hmps. Pyralidae
Tirathaba rufivena Walker. Pyralidae
Zizina otis (F.) Lycaenidae
Zygina sp.

Blackberried nightshade insect pests

Icerya seychellarum (Westwood) Margarodidae
Phthorimaea opercula (Zell.) Gelechiidae
Pulvinaria ubicola (Cockerell) Coccidae
Saissetia coffeae (Walker) Coccidae

Breadfruit insect pests

Abgrallaspis cyanophylli (Signoret) Diaspididae
Aonidiella aurantii (Maskell) Diaspididae
Aspidiotus destructor Sign. Diaspididae
Ceroplastes rubens Maskell Diaspididae
Chrysomphalus aonidum (Linnaeus) Diaspididae
Coccus hesperidum Linnaeus Diaspididae
Coccus longulus (Douglas) Diaspididae
Bactrocera umbrosus (F.) Tephritidae
Dysmicoccus brevipes (Cockerell) Pseudococcidae
Dysmicoccus nesophilus Williams Pseudococcidae
Ferrisia virgata (Cockerell) Pseudococcidae
Hemiberlesia palmae (Cockerell) Diaspididae
Icerya seychellarum (Westwood) Margarodidae
Icerya acuminata (Signoret) Coccidae
Maconellicoccus hirsutus (Green) Pseudococcidae
Milviscutulus mangiferae (Green) Coccidae
Mutabilicoccus vanhurni (Reyne) Pseudococcidae
Parasaissetia nigra (Nietner) Coccidae
Pimnanpis strachani (Cooley) Diaspididae
Planococcus pacificus Cox Pseudococcidae
Pseudococcus longispinus Targioni Pseudococcidae
Pseudaulacaspis pentagona (Targ.) Diaspididae
Saissetia coffeae (Walker) Coccidae
Telostylus sp. Coccidae
Xyleborus spp. Scolytidae

Cabbage family insect pests

Adoxophyes sp. Tortricidae
Agrotis ipsilon (Hufnagel) Noctuidae
Alticus tibialis Reut. Miridae
Apirocalus spp. Curculionidae

Pentatomidae (HEM) stink bugs
Cerambycidae (COL)
Chrysomelidae (COL)
Curculionidae (COL)
Chrysomelidae (COL)
Coreidae (HEM) Pod sucking bug
Cerambycidae (COL)
Noctuidae (LEP) Cluster caterpillar
Tetranychidae ACARINA Red spider mite
Noctuidae (LEP) Cacao armyworm
Pyralidae (LEP)
Pyralidae (LEP) Coconut spathe moth
Lycaenidae (LEP) Common grass blue butterfly
Cicadellidae (HEM.)

Margarodidae
Gelechiidae (LEP) Potato tuber moth
Coccidae

Diaspididae (HEM)
Diaspididae (HEM) Yellow scale
Diaspididae (HEM) Coconut scale
Coccidae (HEM) Pink wax scale
Diaspididae (HEM) Florida red scale
Coccidae (HEM) Soft brown scale
Coccidae (HEM)
Tephritidae (DIPT) fruit fly
Pseudococcidae (HEM) Pineapple mealybug
Pseudococcidae (HEM)
Pseudococcidae (HEM)
Diaspididae (HEM)
Margarodidae (HEM)
Coccidae (HEM)
Pseudococcidae (HEM) Hibiscus mealy bug
Coccidae (HEM)
Pseudococcidae (HEM)
Pseudococcidae (HEM) Ngira scale
Pseudococcidae (HEM) Longtailed mealybug
Diaspididae (HEM) White scale
Coccidae (HEM) Coffee scale
Neriidae (DIPT)
Scolytidae (COL) Island pinhole borer

Tortricidae (LEP) leaf roller
Noctuidae (LEP) Black cutworm
Miridae (HEM) Grass bug
Curculionidae (COL) Horned weevil
**Araecerus sp.** (See Oxyderes)  
**Chrysoideixis eriosoma** Doubleday  
**Colgar tricolor** Dist.  
**Coproporus sp.**  
**Crocidolomia binotalis** Zeller  
**Eurica canica discigutta** (Walk.)  
**Halticus minutus** Reuter  
**Helicoverpa armigera** (Hubner)  
**Lyriomyza brassicae** (Riley)  
**Myzus persicae** Sulzer  
**Nycteris balteus** Boisduval  
**Odontonyia sp.**  
**Onthophagus sp nr papuensis** Harold  
**Phaneroptera brevis**  
**Phormesa sp.**  
**Phytometra orichalcaea** (F.)  
**Plutella xylostella**  
**Sporodoptera litura** (Fab)  
**Spoladea recurvalis** Fabricius  
**Thysanoplusia orichalcaea** Fab  
**Tiracola plagiata** Walk  
**Valanga sp.**

**Candle nut insect pests**

**Chrysomphalus aonidum** (Linnaeus)  
**Hemiberlesia lataniae** (Signoret)  
**Hemiberlesia palmæ** (Cockerell)  
**Pinnaspis strachani** (Cooley)  
**Coccus longulus** (Douglas)  
**Eucalyptomatus tessellatus** (Signoret)  
**Dysmicoccus nesophilus** William  
**Planococcus pacificus** Cox  

**Capsicum insect pests**

**Atherigona orientalis** Schiner  
**Carpophilus maculatus** Murray  
**Bactrocera bryoniae** (Tryon.)  
**Bactrocera musae** (Try.)  
**Bactrocera trivialis** Drew  
**Euproctis sp.**  
**Helicoverpa armigera** (Hubner)  
**Homeoxus fuscipennis**  
**Macrocephus euphorbias** (Thomas)  
**Pinnaspis strachani** (Cooley)  
**Planococcus pacificus** Cox  
**Plautia brunneipennis**  
**Pseudaulacaspis pentagona** (Targioni)  
**Pulvinaria ubicola** (Cockerell)  
**Thrips tabaci** Lind.  
**Silva sp.**

**Cassava insect pests**

**Abgrallaspis cyanophylax** (Signoret)  
**Acalolepta hololephra** Boisd  

**Anthribidae** (COL)  
**Noctuidae** (LEP) Green looper  
**Flatiidae** (HOM)  
**Staphylinidae** (COL.)  
**Pyralidae** (LEP) Cabbage cluster caterpillar  
**Riciiidae** (HEM) plant hopper  
**Miridae** (HEM) flea hopper  
**Noctuidae** (LEP) Corn earworm  
**Aphidiidae** (HEM) Cabbage leaf miner  
**Arctiidae** (LEP) Green peach aphid  
**Stratiomyiidae** (DIPT)  
**Scarabaeidae** (COL)  
**Tettigoniidae** (ORTH)  
**Colydiidae** (COL)  
**Noctuidae** (LEP) A semi looper,  
**Plutellidae** (LEP) Diamond back moth  
**Arctiidae** (LEP)  
**Noctuidae** (LEP) Cluster caterpillar  
**Pyralidae** (LEP) Beet webworm  
**Noctuidae** (LEP) Flax caterpillar  
**Noctuidae** (LEP) Cacao armyworm  
**Acrididae** (ORTH)  

**Diaspididae** (HEM) Florida red scale  
**Diaspididae** (HEM)  
**Diaspididae** (HEM)  
**Diaspididae** (HEM)  
**Diaspididae** (HEM)  
**Coccidae** (HEM)  
**Coccidae** (HEM)  
**Pseudococcidae** (HEM)  
**Pseudococcidae** (HEM)  

**Muscidae** (DIPTERA) Shootfly  
**Nitidulidae** (COL) Damaging fruit  
**Tephritidae** (DIPT) fruit fly  
**Tephritidae** (DIPT) Banana fruit fly  
**Tephritidae** (DIPT) fruit fly larvae recorded destroying fruit  
**Lymantriidae** (LEP) Reported eating leaves  
**Noctuidae** (LEP) Corn earworm  
**Gryllidae** (ORTH) Reported chewing leaves  
**Aphidiidae** (HEM) Potato aphid  
**Diaspididae** (HEM) armoured scale  
**Pseudococcidae** (HEM) mealybug  
**Pentatomidae** (HEM) stink bugs  
**Diaspididae** (HEM) White scale  
**Coccidae** (HEM) Soft scale  
**Thripidae** (THYS) Onion thrips  
**Lonchaeidae** (DIPT) Larvae boring into fruit  

**Diaspididae** (HEM)  
**Cerambycidae** (COL)
### Chilli insect pests

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrotis ipsilon</td>
<td>Agrotis ipsilon (Hufnagel)</td>
</tr>
<tr>
<td>Amblypelta spp.</td>
<td>Noctuidae (LEP) Black cutworm</td>
</tr>
<tr>
<td>Apirocalus spp.</td>
<td>Coreidae (HEM) Amblypelta bugs</td>
</tr>
<tr>
<td>Aulacophora spp.</td>
<td>Curculionidae (COL) Horned weevil</td>
</tr>
<tr>
<td>Bemisia tabaci</td>
<td>Chrysomelidae (COL) Pumpkin beetles</td>
</tr>
<tr>
<td>Brysca exigua Dist.</td>
<td>Aleurodidae (HEM) Tobacco whitefly</td>
</tr>
<tr>
<td>Chrysophalbus dictyospermi (Morgan)</td>
<td>Pentatomidae (HEM. )</td>
</tr>
<tr>
<td>Dasychira mendosa Hubn.</td>
<td>Diaspididae (HEM)</td>
</tr>
<tr>
<td>Ectropis bhurmitra Walker</td>
<td>Lymantridae (LEP) leaf eating caterpillar</td>
</tr>
<tr>
<td>Eupholus spp.</td>
<td>Geometridae (LEP) Cacao looper</td>
</tr>
<tr>
<td>Ferrisia consobrina Williams</td>
<td>Curculionidae (COL) Eupholus weevils</td>
</tr>
<tr>
<td>Ferrisia virgata Cockerell</td>
<td>Psedococcidae (HEM)</td>
</tr>
<tr>
<td>Hemiberlesia latanata (Signoret)</td>
<td>Psedococcidae (HEM) Striped mealy bug</td>
</tr>
<tr>
<td>Hypotactus ruralis Fst.</td>
<td>Diaspididae (COL)</td>
</tr>
<tr>
<td>Leptoglossus australis (Fab.)</td>
<td>Coreidae (HEM) Black leaf footed bug</td>
</tr>
<tr>
<td>Monolepta spp.</td>
<td>Chrysomelidae (COL) Monolepta beetles</td>
</tr>
<tr>
<td>Orihius spp.</td>
<td>Curculionidae (COL) Shot hole weevils</td>
</tr>
<tr>
<td>Parasaissetia nigra (Nietner)</td>
<td>Coccidae (HEM) Nigra scale</td>
</tr>
<tr>
<td>Pinnaspis strachani (Cooley)</td>
<td>Diaspididae (HEM)</td>
</tr>
<tr>
<td>Protoaeta papuana Moser</td>
<td>Scarabaeidae (COL)</td>
</tr>
<tr>
<td>Pseudaulacaspis pentagona (Taeg)</td>
<td>Diaspididae (HEM) Cassava scale</td>
</tr>
<tr>
<td>Pseudoccoccus elisae Borchsenius</td>
<td>Psedococcidae (HEM)</td>
</tr>
<tr>
<td>Spodoptera litura</td>
<td>Noctuidae (LEP)</td>
</tr>
<tr>
<td>Tetranychus marianae McGregor</td>
<td>Tetranychidae ACARINA Red spider mite</td>
</tr>
</tbody>
</table>

### Chinese taro insect pests

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrotis spp.</td>
<td>Cutworms</td>
</tr>
<tr>
<td>Aonidiella aurantii (Maskell)</td>
<td>Diaspididae (HEM) Red scale</td>
</tr>
<tr>
<td>Apirocalus spp.</td>
<td>Curculionidae (COL) Horned weevil</td>
</tr>
<tr>
<td>Coccus hesperidium Linnaeus</td>
<td>Coccidae (HEM) Soft brown scale</td>
</tr>
<tr>
<td>Bactrocera bryoniae (Try.)</td>
<td>Tephritidae (DIPT) Fruit fly</td>
</tr>
<tr>
<td>Bactrocera musae (Try.)</td>
<td>Tephritidae (DIPT) Banana fruit fly</td>
</tr>
<tr>
<td>Idopsis coerulea Faust.</td>
<td>Curculionidae (COL)</td>
</tr>
<tr>
<td>Icerya seychellarum (Westwood)</td>
<td>Margarodidae (HEM)</td>
</tr>
<tr>
<td>Myzus persicae Sulzer</td>
<td>Aphididae (HEM) Green peach aphid</td>
</tr>
<tr>
<td>Parasaissa seta nigra (Nietner)</td>
<td>Coccidae (HEM) Nigra scale</td>
</tr>
<tr>
<td>Pulvinaria psidii Maskell</td>
<td>Coccidae (HEM)</td>
</tr>
<tr>
<td>Pulvinaria ubicola (Cockerell)</td>
<td>Coccidae (HEM)</td>
</tr>
<tr>
<td>Saissetia coffeeae (Walker)</td>
<td>Coccidae (HEM) Coffee scale</td>
</tr>
<tr>
<td>Solenopsis geminata v rufa Jend</td>
<td>Formicidae (HYM) Fire ant</td>
</tr>
<tr>
<td>Zeuzera coffeae Nietner</td>
<td>Coccidae (LEP) Red twig borer</td>
</tr>
</tbody>
</table>

### Citrus insect pests.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aonidiella aurantii Mask.</td>
<td>Diaspididae (HEM) Coconut scale</td>
</tr>
<tr>
<td>Coccus viridis (Green)</td>
<td>Diaspididae (HEM) Armoured scale</td>
</tr>
<tr>
<td>Planococcus dioscoreae Williams</td>
<td>Diaspididae (HEM) armoured scale</td>
</tr>
<tr>
<td>Planococcus pacificus Cox</td>
<td>Margarodidae (HEM) Soft scales</td>
</tr>
<tr>
<td>Pseudoccoccus longispinus (Targioni)</td>
<td>Scarabaeidae (COL) Taro beetles</td>
</tr>
</tbody>
</table>

### Citrus insect pests.

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<tbody>
<tr>
<td>Aonidiella aurantii Mask.</td>
<td>Coccidae (HEM) Red scale</td>
</tr>
<tr>
<td>Coccus viridis (Green)</td>
<td>Coccidae (HEM) Green scale</td>
</tr>
</tbody>
</table>
Bactrocera cucurbitae Coq.
Bactrocera tryoni Frogg
Homona coffearia Nietn.
Mictis profana F.
Oribius cinereus Mshl.
Oribius cruciatus Fst.
Oribius destructor Mshl.
Oribius inimicus Mshl
Papilio aegeus ormenus Guerin
Phyllocnistis citrella Staint
Planococcus citri (Risso)
Rhinoscaptha thomsoni Wterh.
Rhopalosiphum maidis (Fitch.)
Saisettia coffeeae Walker
Spodoptera litura (Fab)
Toxoptera aurantii B.de Fonsc.
Toxoptera citricidus (Kirk)

Coconut insect pests
Agapophyta bipunctata Boisd.
Aleurodicus destructor (Mackie)
Amblypelta cocophaga China
Amblypelta costalis szentivanyi Brown
Amblypelta gallegonis Lever
Amblypelta lutescens papuensis Br.
Amblypelta theobromae Brown
Aspidiotus destructor Sign.
Astacops dorycus Boisd.
Axiagastus cambelli Dist.
Brontispa longissima Gestro
Brontispa palmivora Gres
Brontispa simmondsi Mk.
Cephrnes mosleyi (Butl.)
Ceroplastes rubens Mask.
Chrysomphalus aonidum (L.)
Coccus hesperidium L.
Darala rubeda Feld.
Diocalandra frumenti (F.)
Diocalandra taitense (Guer.)
Dynastes gideon (L.)
Dysmicoccus brevipes (Cockerell)
Eriophyes thrax (L.)
Eumussia gracilis Willemse
Ischiosopha ignatipennis Boisd.
Lophotectes penicilliger (Heller)
Meredolus cocotis Marshall
Microtermes biroi Desneaux
Oryctes centaurus Sternb
Oryctes rhinoceros (L.)
Oxya japonica (Thnnb.)
Papuanus sp.
Promecotheca papuana Csiki
Psammoecus sp.
Pseudologota sp.
Rhabdoscelus obscurus Boisduval
Rhynchophorus bilineatus (Montr.)
Rhynchophorus ferrugineus (Oliv.)
Common bean insect pests

- *Arsipoda tenimberensis* Jacoby
- *Atherigona orientalis* Schiner
- *Aulacophora* spp. Olivier
- *Cassena intermedia* Jac.
- *Cassena papuana* (Jac.)
- *Colposcelis vignaphila* Bryant
- *Epilachna signatipennis* Boisd.
- *Euricania villica*
- *Halictus minutus* Reuter
- *Henosepilachna signatipennis* Boisd.
- *Henosepilachna haemorrhoea* (Biel)
- *Hyposidra talaca* (Wlk.)
- *Icerya seychellarum* (Westwood)
- *Ophiomyia phaseoli* (Tryon.)
- *Riptortus* spp.
- *Pseudaulacaspis pentagona* (Targioni)
- *Tiracola plagiata* Walk

Corn insect pests

- *Aphis sacchari* Zehntner
- *Arsipoda tenimberensis* Jacoby
- *Atherigona orientalis* Schiner
- *Aulacophora* spp.
- *Cassena intermedia* Jac.
- *Cassena papuana* (Jac.)
- *Chaetocnema basalis* (Baly)
- *Cicadella spectra* (Dist.)
- *Cnaphalocrocis medinalis* (Gn.)
- *Coelophora ripponi* Crotch
- *Compsolacon gracilis* Candeze
- *Bactrocera cucurbitae* Coq
- *Bactrocera papuensis* Malloch
- *Dysdercus cingulatus* (F.)
- *Dysdercus sidae* Montr.
- *Euricania discigutta* (Walk.)
- *Gonocephalum ochthebioides* Ful.
Helicoverpa armigera (Hubner)  Noctuidae (LEP) Corn earworm
Helicoverpa assulta assulta Guenee Noctuidae (LEP) Cape gooseberry budworm
Hypolixus mastersi Pascoe Curculionidae (COL)
Menolepta spp Chrysomelidae (COL) Monolepta beetles
Mythima loreyi (Dup.) Noctuidae (COL) Rice armyworms
Mythima separata (Walk.) Noctuidae (COL) Rice armyworms
Oribius spp. Curculionidae (COL) Shot hole weevils
Ostrinia furnacalis (Guen.) Pyralidae (LEP) Maize stem borer
Peregrinus maidis (Ashmead) Delphacidae (HEM) Corn leafhopper
Prosoplius grisescens Breuning Cerambycidae (COL)
Protaetia fusca Herbst. Scarabaeidae (COL) Mango flower beetle
Rhopalo siphum maidis (Fitch.) Aphididae (HEM) Corn leaf aphid
Sesamia inferens (Walker) Noctuidae (LEP) Violet rice stem borer
Spioracaria bissellata Mulsant Coccinellidae (COL)
Spodoptera exempta (Walker) Noctuidae (LEP) African armyworm
Spodoptera mauritia (Boisduval) Noctuidae (LEP) Paddy armyworm

Cowpea insect pests

Aphis craccivora Koch Aphididae (HEM) Cowpea aphid
Aspidiotus destructor Signoret Diaspididae (HEM) Coconut scale
Dysdercus cingulatus (F.) Pyrrhocoridae (HEM) Red cotton bug
Dysdercus sidae Montr. Pyrrhocoridae (HEM) Red cotton bug
Epilachna signatipennis Boisd. Coccinellidae (COL) leaf eating beetle
Ferrisia virgata (Cockerell) Pseudococcidae (HEM)
Lampides boeticus L. Lycaenidae (LEP) Pea Blue butterfly
Maruca vitrata Fabricius Pyralidae (LEP) Bean pod borer
Omiodes indicata Fabricius Pyralidae (LEP) Bean leaf rollers
Omiodes diemenalis Guenee Pyralidae (LEP) Bean leaf rollers
Phodoryctis caerulea Meyrick Gracillariidae (LEP) leaf miner
Planococcus pacificus Cox Pseudococcidae (HEM)
Saissetia neglecta De Lotto Coccidae (HEM)

Cucumber pests (See also pumpkin pests)

Bactrocera atrisetosus Perkins Tephritidae (DIPT) fruit fly
Homona coffearia Nietn. Tortricidae (LEP) Coffee leaf roller
Telostylinus sp. Neriiidae (DIPT)

Custard apple family insect pests

Abgrallaspis cyanophylli (Signoret) Diaspididae (HEM)
Adoxophyes sp. Tortricidae (LEP) leaf roller
Aleurodicus destructor (Mackie) Aleurodidae (HEM) Coconut white fly
Amblypelta spp. Coreidae (HEM) Amblypelta bugs
Anthococcus kerevatae Williams Coccidae (HEM)
Apirocalus spp. Curculionidae (COL) Horned weevil
Aspidiotus destructor Sign. Diaspididae (HEM) Coconut scale
Chrysomphalus aonidum (Linnaeus) Diaspididae (HEM) Florida red scale
Coccus celatus De Lotto Coccidae (HEM)
Coccus longulus (Douglas) Coccidae (HEM)
Dasychira mendoza Hubn. Lymantriidae (LEP) leaf eating caterpillar
Drepanococcus chiton (Green) Coccidae (HEM) wax scales
Dysmiccoccus brevipes (Cockerell) Pseudococcidae (HEM) Pineapple mealybug
Eurica tia villica Ricanthidae (HEM) plant hopper
Ferrisia virgata (Cockerell) Pseudococcidae (HEM)
Graphium agamemon L. Papilionidae (LEP) Green spotted triangle
Hemisphaerinus sp
Issidae (HEM)
Hemiberlesia palmae (Cockerell)
Diaspididae (HEM)
Homona coffearia Nietn.
Tortricidae (LEP) Coffee roller
Howardia biclavis (Comstock)
Diaspididae (HEM)
Hyposidra talaca (Wlk.)
Geometridae (LEP)
Icerya seychellarum (Westwood)
Margarodidae (HEM)
Laingiococcus painei (Laing)
Pseudococcidae (HEM)
Oribius cinereus Mshl.
Curculionidae (COL) Shot hole weevils
Parasaissetia nigra (Nietner)
Coccidae (HEM) Nigra scale
Pinnaspis strachani (Cooley)
Pseudococcidae (HEM)
Planococcus lilacinus (Cockerell)
Pseudococcidae (HEM)
Planococcus pacificus Cox
Pseudococcidae (HEM)
Pseudococcus longispinus Targioni
Pseudococcidae (HEM) Longtailed mealybug
Saissetia coffeae (Walker)
Pseudococcidae (HEM) Coffee scale
Steatococcus samaraius Morrison
Margarodidae (HEM)
Terentius nubifasciatus Walker
Membracidae (HOM)
Unaspis citri (Comstock)
Diaspididae (HEM) White louse scale

Elephant foot yam insects
Pseudococcus longispinus (Targioni) Pseudococcidae (HEM) Longtailed mealybug

Giant taro insect pests
Aspidiella sacchari (Cockerell) Diaspididae, Armoured scale
Chaetanaphothrips orchidi F. Banana rust thrips
Dysmicoccus nesophilus Williams Pseudococcidae (HEM)
Eucalyrnatus tessellatus (Signoret) Coccidae (HEM)
Icerya seychellarum (Westwood) Margarodidae (HEM)
Lepidosaphes gloverii (Packard) Diaspididae (HEM)
Papuana spp.
Planococcus pacificus Cox Scarabaeidae (COL) Taro beetles
Pseudococcus longispinus (Targioni) Pseudococcidae (HEM) Longtailed mealybug
Pulvinaria ubicola (Cockerell) Coccidae (HEM) Soft scale

Ginger insect pests
Aspidiella hartii (Cockerell) Diaspididae (HEM)
Dichocrosis sp nr punctiferalis Guenee Pyralidae (LEP) Peach yellow moth
Dindymus pyrochrous Boisd. Pyrrhocoridae (HEM.)
Ferrisia virgata (Cockerell) Pseudococcidae (HEM)
Henosepilachna haemorrhoea (Biel) Coccinellidae (COL) Leaf eating ladybird
Henosepilachna signatipennis Boisd. Coccinellidae (COL) Leaf eating ladybird
Icerya seychellarum (Westwood) Margarodidae (HEM)
Lema wauensis Gres. Chrysomelidae (COL)
Meijerella inaequalis Becker Chloropidae (DIPT)
Pentalonia nigronervosa Coq Aphididae (HEM) Banana aphid
Pinnaspis strachani (Cooley) Diaspididae (HEM)
Planococcus pacificus Cox Pseudococcidae (HEM)
Ragwelellus horvathi Poppius Miridae (HEM) Cardamom mirid
Thressa punctifera de Meijere Chloropidae (DIPT)

Guava insect pests
Abgrallaspis cyanophylli Diaspididae (HEM) Armoured scales
Aleurodicus dispersus Aleurodidae (HEM) Spiralling whitefly
Amblypelta spp. Coreidae (HET) Amblypelta bugs
Aprocalus cornutus Curculionidae (COL) Horned weevil
Aspidiotus destructor Diaspididae (HEM) Coconut scale
Bactrocera bryoniae
Bactrocera frauenfeldi
Bactrocera musae
Bactrocera trivialis
Ceroplastes destructor
Chrysomphalus dictyospherimi
Coccus longulus
Dysmicoccus brevipes
Dysmicoccus nesophilus
Eucalymnatus tessellatus
Ferrisia virgata
Helopeltis clavifer
Hemiberlesia lataniae
Hemiberlesia palmae
Icerya purchasi
Lymandra rosina
Parasaissetia nigra
Perissopneumon sp.
Planococcus citri
Planococcus pacificus
Pulvinaria psidii
Ragwelledus festivus
Rastrococcus vicorum
Saissetia neglecta
Saissetia coffeae
Steatococcus samaraius
Syntherata janeteta
Unaspis citri

Indian mulberry insect pests

Aonidiella comperei McKenzie
Chrysomphalus aonidum (Linnaeus)
Coccus viridis (Green)
Dysmicoccus nesophilus Williams
Eucalymnatus tessellatus (Signoret)
Hemiberlesia lataniae (Signoret)
Hemiberlesia palmae (Cockerell)
Milviscutulus mangiferae (Green)
Milviscutulus spiculosus Williams
Parasaissetia nigra (Nietner)
Pinnaspis buxi (Bouche)
Pinnaspis strachani (Cooley)
Planococcus pacificus Cox
Pseudaulacaspis pentagona (Targioni)
Pulvinaria psidii Maskell
Saissetia coffeae (Walker)
Saissetia miranda (Cockerell & Parrott)

Jackfruit insect pests

Anthococcus kerevatae Williams
Ceroplastes rubens Maskell
Chrysomphalus dictyospherimi (Morgan)
Coccus longulus (Douglas)
Hemiberlesia lataniae (Signoret)
Hemiberlesia palmae (Cockerell)
Icerya seychellarum (Westwood)
Parasaissetia nigra (Nietner)
Parastasia guttulata (Fairmaire)  
*Scarabaeidae* (COL)

*Pinnaspis buxi* (Bouche)  
*Diaspididae* (HEM)

*Planococcus Pacificus* (Cox)  
*Pseudococcidae* (HEM)

*Unaspis Citri* (Comstock)  
*Diaspididae* (HEM) White louse scale

*Milviscutulus mangiferae* (Green)  
*Coccidae* (HEM)

Lesser yam insect pests (See also yam insects)

*Aspidiella hartii* (Cockerell)  
*Diaspididae* (HEM) Armoured scales

*Chrysodeixis eriosoma* Doubleday  
*Noctuidae* (LEP) Green looper

Mango insect pests

*Aleurodicus dispersus* Russel  
*Aleyrodidae* (HEM) Spiralling whitefly

*Amblypelta spp*  
*Coreidae* (HEM) Tip wilt bugs

*Aspidiotus destructor* Sign.  
*Diaspididae* (HEM) Coconut scale

*Ceroplastes rubens* Mask.  
*Coccidae* (HEM) Pink wax scale

*Chloracia transversa* Walker  
*Noctuidae* (LEP) Mango shoot caterpillar

*Coccus viridis* (Green)  
*Coccidae* (HEM) Green scale

*Bactrocera hyroamiae* (Tryon.)  
*Tephritidae* (DIPT) fruit fly

*Bactrocera frauenfeldi* Schiner  
*Tephritidae* (DIPT) fruit fly

*Deanolis albizonalis* Hampson  
*Pyralidae* (LEP) Red banded mango borer

*Dysmicoccus brevipes* (Cockerell)  
*Pseudococcidae* (HEM) Pineapple mealy bug

*Helopeltis clavifer* (Walker)  
*Miridae* (HEM) Cacao mirid

*Idioscopus clupealis* (Leth.)  
*Cicadellidae* (HEM) Mango hopper

*Idioscopus niveosparsus* (Leth.)  
*Cicadellidae* (HEM) Mango hopper

*Ischnaspis longirostris* (Sign.)  
*Diaspididae* (HEM) armoured scale

*Penicillaria jocosatrix* (Guen.)  
*Noctuidae* (LEP) Large mango tip borer

*Protaetia fuscata* Herbst.  
*Scarabaeidae* (COL) Mango flower beetle

*Rhyparida eleyptea* Jacoby  
*Chrysomelidae* (COL)

*Saisettia coffeae* Walker  
*Coccidae* (HEM) Brown coffee scale

*Scopelodes dinawa* B.Bak  
*Limacodidae* (LEP) Cup moth

*Scopelodes nitens* B.Bak  
*Limacodidae* (LEP) Cup moth

*Selenothrips rubrocinctus* (Giard)  
*Thripidae* (THYS) Cacao thrips

Mulberry insect pests

*Howardia biclavis* (Comstock)  
*Diaspididae* (HEM)

*Icerya seychellarum* (Westwood)  
*Margarodidae* (HEM)

*Lagria sp.*  
*Chrysomelidae* (COL)

*Maconellicoccus hirsutus* (Green)  
*Pseudococcidae* (HEM) Hibiscus mealy bug

*Parasaissetta nigra* (Nietner)  
*Coccidae* (HEM) Nigra scale

*Planococcus pacificus* Cox  
*Pseudococcidae* (HEM)

*Rhysaphera coriacea* Jac.  
*Chrysomelidae* (COL)

*Tiracola plagiata* Walk  
*Noctuidae* (LEP) Cacao armyworm

Mung bean insect pests

*Alticus tibialis* Reut  
*Miridae* (HEM) Grass bug

*Amblypelta spp.*  
*Coreidae* (HEM) Tip wilt bug

*Anticarsia irrorata* F.  
*Noctuidae* (LEP)

*Aphis craccivora* Koch  
*Aphididae* (HEM) Cowpea aphid

*Aprocalus spp*  
*Cerculionidae* (COL) Horned weevil

*Aulacophora similis* Olivier  
*Chrysomelidae* (COL) Pumpkin beetles

*Cassena intermedia* Jac.  
*Chrysomelidae* (COL) Leaf beetles

*Cassena papuana* (Jac.)  
*Chrysomelidae* (COL) Leaf beetles

*Henosepilachna signatipennis* Boisd.  
*Coccinellidae* (COL) Leaf eating ladybirds

*Henosepilachna haemorrhoea* (Biel)  
*Coccinellidae* (COL) Leaf eating ladybirds
Homona coffearia Nietn.
Lampides boeticus L.
Maruca vitrata Fabricius
Megaluothrips usitatissimus Bagnall
Melacanthus arginiguttatus
Monolepta semiovatae Fauvel
Nezara viridula (Linnaeus)
Omioidea indicata Fabricius
Omiode diemenalis Guenee
Ophiomyia phaseoli (Tryon.)
Orbizus spp.
Piezodorus rubrofasciatus Fab.
Rhyanarida coriacea Jac.
Rhyanaridae wavaensis
Riptortus spp.

Coffee leaf roller
Pea blue butterfly
Bean pod borer

Lampides boeticus L.
Lycaenidae (LEP) Pea blue butterfly

Maruca vitrata Fabricius
Pyralidae (LEP) Bean pod borer

Meulacanthus arginiguttatus
Alydidae (HEM)

Monolepta semiovatae Fauvel
Chrysomelidae (COL) Beetles

Nezara viridula (Linnaeus)
Pentatomidae (HEM) Green vegetable bug

Omioidea indicata Fabricius
Pyralidae (LEP) Bean leaf roller

Omiode diemenalis Guenee
Pyralidae (LEP) Bean leaf roller

Ophiomyia phaseoli (Tryon.)
Agromyzidae (DIPT) Bean fly

Orbizus spp.
Pentatomidae (HEM)

Piezodorus rubrofasciatus Fab.
Pentatomidae (HEM)

Rhyanarida coriacea Jac.
Chrysomelidae (COL)

Riptortus spp.
Coreidae (HEM) Pod sucking bug

Onion family insect pests

Agrotis ipsilon (Hufnagel)
Noctuidae (LEP) Black cutworm

Helicoverpa assulta assulta Guenee
Noctuidae (LEP) Cape gooseberry budworm

Neotoxoptera formosana (Takahashi)
Aphididae (HEM) Onion aphid

Thrips tabaci Lind.
Thripidae (THYS) Onion thrips

Pandanus insect pests

Aonidiella inornata McKenzie
Diaspididae (HEM)

Aspidiotus destructor Sign.
Diaspididae (HEM) Coconut scale

ChrysophalSus aonidum (Linnaeus)
Diaspididae (HEM) Florida red scale

Coccus viridus (Green)
Coccidae (HEM) Green scale

Dysmicoccus boninensis (Kuwana)
Pseudococcidae (HEM) Gray sugarcane mealybug

Dysmicoccus brevipes (Cockerell)
Pseudococcidae (HEM) Pineapple mealybug

Eucalyptus tessellatus (Signoret)
Coccidae (HEM)

Fiorinia coronata
Diaspididae (HEM)

Hemiberlesia palmata (Cockerell)
Diaspididae (HEM)

Icerya seychellarum (Westwood)
Margarodidae (HEM)

Nacoleia octasema (Meyrick)
Pyralidae (LEP) Banana scab moth

Oryctes rhinoceros (L.)
Scarabaeidae (COL) Asiatic rhinoceros beetle

Parlatoria crotonis Douglas
Diaspididae (HEM)

Phyllophora boshmai de Jong
Tettigoniidae (ORTH)

Pinnaspis aspidistrae (Signoret)
Diaspididae (HEM)

Pinnaspis buxi (Bouche)
Diaspididae (HEM)

Pinnaspis strachani (Cooley)
Diaspididae (HEM)

Planococcus pacificus Cox
Pseudococcidae (HEM)

Pulvinaria psidi Maskell
Coccidae (HEM)

Schizentaspidus silvicola
Diaspididae (HEM)

Segestidea defoliatrix defoliatrix Ulvavov
Tettigoniidae (ORTH) Coconut treehoppers

Segestidea gracilis (Willemse)
Tettigoniidae (ORTH)

Segestidea hanoverana Willemse
Tettigoniidae (ORTH)

Segestidea insulana Willemse
Tettigoniidae (ORTH)

Segestidea montana Willemse
Tettigoniidae (ORTH)

Segestidea novaeguineae Brancesik
Tettigoniidae (ORTH)

Segetes cornelii Willemse
Tettigoniidae (ORTH)

Trachycentra chlorogramma Meyrick
Tineidae (LEP) Case moth causing moderate damage to karuka and marita leaves.

Passionfruit family insect pests

Helopeltis clavifer (Walker)
Coreidae (HEM) Cacao mirid

Hemiberlesia lataniae (Signoret)
Diaspididae (HEM)
Hemiberlesia palmae (Cockerell)  Diaspididae (HEM)
Idopsis grisea Faust.  Curculionidae (COL)
Leptoglossus australis (Fab.)  Coreidae (HEM) Black leaf-footed bug
Orbius cinereus Mshl.  Curculionidae (COL) Shot hole weevils
Planococcus citri (Risso)  Pseudococcidae (HEM) Citrus mealy bug
Planococcus pacificus Cox  Pseudococcidae (HEM)
Pseudaulacaspis pentagona (Targioni)  Diaspididae (HEM)
Tiracola plagiata Walk  Noctuidae (LEP) Cacao armyworm

Pawpaw insect pests
Adoxophyes melichron  Tortricidae (LEP) leaf roller
Amblypelta spp.  Coreidae (HEM) Amblypelta bugs
Aonidiella orientalis (Newstead)  Diaspididae (HEM)
Araecerus sp. (See Oxyderes)  Anthribidae (COL)
Aspidiotus destructor Sign.  Diaspididae (HEM) Coconut scale
Aspidiotus excisus Green  Diaspididae (HEM)
Chrysomphalus dictyospermi (Morgan)  Diaspididae (HEM)
Coccus hesperidium Linnaeus  Coccidae (HEM) Soft brown scale
Coccus longulus (Douglas)  Coccidae (HEM)
Bactrocera musae (Try.)  Tephritidae (DIPT) Banana fruit fly
Bactrocera bryoniae (Try.)  Tephritidae (DIPT) fruit fly
Bactrocera neohumeralis Hardy  Tephritidae (DIPT) fruit fly
Drepanococcus chiton (Green)  Coccidae (HEM)
Dysmicoccus nesophilus Williams  Pseudococcidae (HEM)
Ferrisia virgata (Cockerell)  Pseudococcidae (HEM)
Howardia biclavis (Comstock)  Diaspididae (HEM)
Icerya seychellarum (Westwood)  Margarodidae (HEM)
Macroisphum euphorbiae (Thomas)  Aphididae (HEM) Potato aphid
Morganella longispina (Morgan)  Diaspididae (HEM)
Oxyderes cyrtus Jordan [ex Araecerus]  Anthribidae (COL)
Pseudaulacaspis cockerelli (Cooley)  Diaspididae (HEM)
Pseudaulacaspis pentagona (Targ.)  Diaspididae (HEM) White scale
Ischiopsopha bifasciata Quoy & Gaim var. hyla Heller  Cetoniinae (COL)
Rhabdoscelus obscurus Boisduval  Curculionidae (COL) Cane weevil borer
Rhinoscapha maclayi MacLeay  Curculionidae (COL)
Saissetia coffeae (Walker)  Coccidae (HEM) Coffee scale
Steatococcus samaraius Morrison  Margarodidae (HEM)
Tiracola plagiata Walk  Noctuidae (LEP) Cacao armyworm

Pea insect pests
Adoxophyes melichron  Tortricidae (LEP) leaf roller
Cassena intermedia Jac.  Chrysomelidae/Galerucidae (COL) Leaf beetles
Cassena papha (Jac.)  Chrysomelidae/Galerucidae (COL) Leaf beetles
Helicoverpa armigera (Hubner)  Noctuidae (LEP) Corn earworm
Homona coffearia Nietm.  Tortricidae (LEP) Coffee leaf roller
Lampides boeticus L.  Lycaeinae (LEP) Pea blue butterfly
Lyriomyza brassicace (Riley)  Agromyzidae (DIPT) Cabbage leaf miner
Omiodes diemenalis Guenee  Pyralidae (LEP) Bean leaf rollers
Omiodes indicata Fabricius  Pyralidae (LEP) Bean leaf rollers
Phaneroptera brevis Aud.-Serv  Tettigoniidae (ORTH)
Riptortus spp.  Coreidae (HEM) Pod sucking bug
Spodoptera exempta (Walker)  Noctuidae (LEP) African armyworm
Spodoptera litura (Fab)  Noctuidae (LEP) Cluster caterpillar
Tetranychus marianae McGregor  Tetranychidae ACARINA Red spider mite
### Peanut insect pests

<table>
<thead>
<tr>
<th>Insect Name</th>
<th>Family</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achaea janata (Linnaeus)</td>
<td>Noctuidae (LEP)</td>
<td>Cacao false looper</td>
</tr>
<tr>
<td>Adoxophyes melichron</td>
<td>Tortricidae (LEP)</td>
<td>Leaf roller</td>
</tr>
<tr>
<td>Alitius minutus Reut</td>
<td>Miridae (HEM)</td>
<td>Grass bug</td>
</tr>
<tr>
<td>Alitius tibialis Reut</td>
<td>Miridae (HEM)</td>
<td>Grass bug</td>
</tr>
<tr>
<td>Aphisc craccivora Koch</td>
<td>Aphididae (HEM)</td>
<td>Cowpea aphid</td>
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<tr>
<td>Apirocalus spp.</td>
<td>Curculionidae (COL)</td>
<td>Pumpkin beetles</td>
</tr>
<tr>
<td>Aulacophora spp.</td>
<td>Chrysomelidae (COL)</td>
<td>Mole crickets</td>
</tr>
<tr>
<td>Coccus longulus (Douglas)</td>
<td>Coccidae (HEM)</td>
<td></td>
</tr>
<tr>
<td>Dysmicoccus brevipes (Cockerell)</td>
<td>Pseudococcidae (HEM)</td>
<td>Pineapple mealy bug</td>
</tr>
<tr>
<td>Ectropis bhurmton Walker</td>
<td>Geometridae (LEP)</td>
<td>Cacao looper</td>
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<tr>
<td>Euborellia annulipes Lucas</td>
<td>Labiduridae (DERM)</td>
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<tr>
<td>Gryllotalpa africana Pal.</td>
<td>Gryllotalpidae (ORTH)</td>
<td>Mole crickets</td>
</tr>
<tr>
<td>Homona coffearia Nientn.</td>
<td>Tortricidae (LEP)</td>
<td>Coffee leaf roller</td>
</tr>
<tr>
<td>Megalurothrips usitatus Bagnall</td>
<td>Thripidae (THYS)</td>
<td></td>
</tr>
<tr>
<td>Nysius episiens China</td>
<td>Lygaeidae (HEM)</td>
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</tr>
<tr>
<td>Omiodes indicata Fabricius</td>
<td>Pyralidae (LEP)</td>
<td>Bean leaf rollers</td>
</tr>
<tr>
<td>Omiodes diemenalis Guenee</td>
<td>Pyralidae (LEP)</td>
<td>Bean leaf rollers</td>
</tr>
<tr>
<td>Orosius argentatus Evans</td>
<td>Cicadellidae (HEM)</td>
<td></td>
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<tr>
<td>Oxiidus gacilis</td>
<td>Scarabaeidae (COL)</td>
<td>Taro beetles</td>
</tr>
<tr>
<td>Papuanu spp.</td>
<td>Pentatomidae (HEM)</td>
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<tr>
<td>Philia femorata Walk.</td>
<td>Pseudococcidae (HEM)</td>
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<tr>
<td>Planococcus pacificus Cox</td>
<td>Noctuidae (LEP)</td>
<td>Cluster caterpillar</td>
</tr>
<tr>
<td>Spodoptera litura (Fab)</td>
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### Pigeon pea insect pests

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<thead>
<tr>
<th>Insect Name</th>
<th>Family</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Agapophyta viridula Blote</td>
<td>Pentatomidae (HEM)</td>
<td></td>
</tr>
<tr>
<td>Ceroplastes rubens Maskell</td>
<td>Coccidae (HEM)</td>
<td>Pink wax scale</td>
</tr>
<tr>
<td>Clavigralloides acantharis Fabricius</td>
<td>Coreidae (HEM)</td>
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<tr>
<td>Coptosoma sygmaeum Mont.</td>
<td>Pentatomaide (HEM)</td>
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<tr>
<td>Depsages granulosa Guerin-Meneville</td>
<td>Cerambycidae (COL)</td>
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<tr>
<td>Dysmicoccus brevipes (Cockerell)</td>
<td>Pseudococcidae (HEM)</td>
<td>Pineapple mealy bug</td>
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<td>Helicoerpa armiger (Hubner)</td>
<td>Noctuidae (LEP)</td>
<td>Corn earworm</td>
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<tr>
<td>Icerya purchasi Maskell</td>
<td>Margarodidae (HOM)</td>
<td>Cushion scale</td>
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<tr>
<td>Icerya seychellares (Westwood)</td>
<td>Margarodidae (HOM)</td>
<td>Seychelles scale</td>
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<tr>
<td>Lampides boeticus L.</td>
<td>Lycaenidae (LEP)</td>
<td>Pea Blue butterfly</td>
</tr>
<tr>
<td>Marusca vitrata Fabricius</td>
<td>Pyralidae (LEP)</td>
<td>Common grass blue butterfly</td>
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<tr>
<td>Mictis profana F.</td>
<td>Coreidae (HEM)</td>
<td>Crusader bug</td>
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<tr>
<td>Omiodes indicata Fabricius</td>
<td>Pyralidae (LEP)</td>
<td>Bean leaf rollers</td>
</tr>
<tr>
<td>Omiodes diemenalis Guenee</td>
<td>Pyralidae (LEP)</td>
<td>Bean leaf rollers</td>
</tr>
<tr>
<td>Phaneroptera brevis Aud.-Serv</td>
<td>Tettigonidae (ORTH)</td>
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<tr>
<td>Planococcus pacificus Cox</td>
<td>Pseudococcidae (HEM)</td>
<td>Mealy bug</td>
</tr>
<tr>
<td>Platystrumus wallacei Pascoe</td>
<td>Anthribidae (COL)</td>
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<tr>
<td>Polyononatus boeticus (L)</td>
<td>Lycaenidae (LEP)</td>
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<tr>
<td>Pterophila grisescens Pascoe</td>
<td>Cerambycidae (COL)</td>
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<tr>
<td>Saissetia miranda (Cockerell &amp; Parrott)</td>
<td>Margarodidae (HEM)</td>
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<tr>
<td>Steatococcus samaratus Morrison</td>
<td>Lycaenidae (LEP)</td>
<td>Common grass blue butterfly</td>
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<td>Zizina otis (F.)</td>
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### Pineapple insect pests

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<thead>
<tr>
<th>Insect Name</th>
<th>Family</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Coccus viridus (Green)</td>
<td>Coccidae (HEM)</td>
<td>Soft scale</td>
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<tr>
<td>Dysmicoccus brevipes (Cockerell)</td>
<td>Pseudococcidae (HEM)</td>
<td>Pineapple mealy bug</td>
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<tr>
<td>Kilifia acuminata (Signoret)</td>
<td>Coccidae (HEM)</td>
<td>Soft scale</td>
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<tr>
<td>Leptococcus metroyli Reine</td>
<td>Pseudococcidae (HEM)</td>
<td>Mealy bug</td>
</tr>
<tr>
<td>Locusta migratoria (Linnaeus)</td>
<td>Acrididae (ORTH)</td>
<td>Migratory locust</td>
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<tr>
<td>Macronellicoccus hirsutus (Green)</td>
<td>Pseudococcidae (HEM)</td>
<td>Hibiscus mealy bug</td>
</tr>
</tbody>
</table>
Planococcus pacificus Cox
Pseudococcus longispinus (Targioni)  Pseudococcidae (HEM) mealy bug
Pulvinaria ubicola (Cockerell)  Coccidae (HEM) Soft scale
Scapanes australis grossepunctatus Sternb  Dynastidae (COL) NG Rhinoceros beetle
Scapanes australis australis (Boisd.)  Dynastidae (COL) New Guinea Rhinoceros beetle

Polynesian arrowroot insect pests

Icerya seychellarum (Westwood)  Margarodidae (HEM) soft scale

Potato insect pests

Acyrthosiphon solani Kaltenbach  Aphididae (HEM)
Agrotis ipsilon (Hufnagel)  Noctuidae (LEP) Black cutworm
Apachynus beccarii Dubrony  Apachyidae (DERM)
Aphis gossypii Glover  Melon aphid
Araecerus sp. (See Oxydera)  Anthribidae (COL)
Aulacorthum solani Kaltenbach  Foxglove aphid
Brachylas dimorphus  Small brown bug
Cassida diomma Boisduval  Chrysomelidae (COL) Small tortoise beetle
Cassida papuana Spaeth  Chrysomelidae (COL) Small tortoise beetle
Cassida sexguttata Boisduval  Chrysomelidae (COL) Small tortoise beetle
Cicadella sp.  Cicadellidae (HEM)
Conocephalus macronatus Candele  Elateridae (COL)
Crocidopus sp.  Miridae (HEM)
Dasychira mendoza Hubn.  Lymantriidae (LEP) Leaf eating caterpillar
Elanom bipattis Kirby  Forficulidae (DERM)
Henosepilachna haemorrhoea (Biel)  Coccinellidae (COL) Leaf eating ladybird
Henosepilachna signatipennis Boisd.  Coccinellidae (COL) Leaf eating ladybird
Homeoxipha fuscipennis  Gryllidae (0RTH)
Idopsis coerulea Faust.  Curculionidae (COL)
Macroisium euphorbiae (Thomson)  Aphididae (HEM) Potato aphid
Monolepta semiviolacea Fauvel  Chrysomelidae (COL)
Myzus ornatus Laing  Aphididae (HEM)
Myzus persicae Sulzer  Aphididae (HEM) Green peach aphid
Nysius villicus Van Duze  Lygaeidae (HEM)
Papua aninodalis Prell  Scaraeidae (COL) Taro beetles
Phaenacantha spp.  Colobathristidae/Pyrrocoridae (HEM) Sugarcane bug
Phthorimaea operculella (Zell.)  Gelechiidae (LEP) Potato tuber moth
Simplicia caeneusalis Walker  Noctuidae (LEP)

Pumpkin family insect pests

Achaea janata (Linnaeus)  Noctuidae (LEP) Cacao false looper
Altica sp  Chrysomelidae (COL)
Alticus tibialis Reut  Chrysomelidae (COL) Grass bug
Aphis gossypii Glover  Aphididae (HEM) Melon aphid
Aphthona bicolorata Jacoby  Chrysomelidae (COL)
Aphthona sp nr scutellata Baly  Chrysomelidae (COL)
Atherigona orientalis Schiner  Muscidae (DIPT) Shootfly
Aulacophora spp.  Chrysomelidae (COL) Pumpkin beetles
Chrysodeixis eriosoma Doubleday  Noctuidae (LEP) Green looper
Crioerus clarkii Baly  Crioceridae (COL)
Bactrocera cucurbitae Coq  Tephritidae (DIPT) Melon fruit fly
Bactrocera decipiens Drew  Tephritidae (DIPT) Fruit fly
Bactrocera striginis atritus May  Tephritidae (DIPT) Fruit fly
Dysmicoccus brevipes (Cockerell)  Pseudococcidae (HEM) Pineapple mealybug
Epilachna cucurbitae Richards  Coccinellidae (COL) Leaf eating ladybird
Ferrisia virgata (Cockerell)  Pseudococcidae (HEM)
Henosepilachna spp.  Coccinellidae (COL) Leaf eating ladybird
<table>
<thead>
<tr>
<th>Insect Family</th>
<th>Species</th>
<th>Common Name</th>
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<tbody>
<tr>
<td>Coreidae (HEM)</td>
<td>Leptoglossus australis (Fab.)</td>
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<td>Leptothea ciskii Weise</td>
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<td>Macrosiphum euphorbiae (Thomas)</td>
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<td>Micis profana F.</td>
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<td>Monolepta beetles</td>
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<td>Coreidae (HEM)</td>
<td>Oribis spp.</td>
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<td>Planococcus citri (Risso)</td>
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<td>Planococcus pacificus Cox</td>
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<td>Psylliodes sp nr fulvipes Jacoby</td>
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<td>Rhyparidella waiveness</td>
<td>Shot hole weevils</td>
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<tr>
<td>Trypetidae (DIPT)</td>
<td>Pinnaspis strachani (Cooley)</td>
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<td>Trypetidae (DIPT)</td>
<td>Pinnaspis strachani (Cooley)</td>
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</table>

**Rice insect pests**

- *Amorbus rhombeus* Westw.
- *Arsipoda tenenberensis* Jacoby
- *Atherigona oryzae* Malloch
- *Blissus sp*
- *Borbo cinnara* Wallace
- *Borbo impar tetragraphus* Mab.
- *Bothrichara palliata* Macleay
- *Brevennia rehi* (Lindinger)
- *Caenobissus pilosus* (Barber)
- *Chaetocnema basalis* (Baly)
- *Chilo auricilius* (Dugd.)
- *Chilo infuscatus* Snellin
- *Chilo suppressalis* (Walker)
- *Cicadella spectra* (Dist.)
- *Cicindela decec-guttata urvillei* Dejean
- *Cnaphalocrocis medinalis* (Gn.)
- *Cnaphalocrocis poeyalis* Boisduval
- *Coronacella kirkaldyi* Muir
- *Cyrtorhinus lividipennis* Reuter
- *Dimorphopterus cornutus* Slater
- *Dimorphopterus sp.*
- *Eysarcoris ventralis* West.
- *Gonocephalum ochthebioides* Ful.
- *Gryllotalpa africana* Pal.
- *Helicoverpa armigera* (Hubner)
- *Leptocorisa acuta* (Thunberg)
- *Leptocorisa discozalis*
- *Leptocorisa oratorius* (Fab.)
- *Leptocorisa palawanensis*
- *Leptocorisa solomonensis* Ahmad
- *Locusta migratoria* (Linnaeus)
- *Lophops sp.*
- *Maliarpha separatella* Rag.
- *Marasmiia spp.*
- *Marasmiia bilineatis*
- *Marasmiia hexagona*
- *Meijerella inaequalis* Becker
- *Melanitis ledabankia* F.
- *Meninda bisignata* Walker
- *Mythimna loreyi* (Dup.)
- *Mythimna separata* (Walk.)
- *Neophettix apicalis* (Motsch.)


Nezara viridula (Linnaeus)  
*Pentatomidae (HEM)* Green vegetable bug

Nilaparvata lugens Haseg  
*Delphacidae (HEM)* Brown backed rice planthopper

Ostrinia furnacalis (Guen.)  
*Pyralidae (LEP)* Maize stem borer

Oxya japonica (Thn.)  
*Acrididae (ORTH)*

Oxya vittigera (Blanch)  
*Acrididae (ORTH)*

Pachybrachius nervosus Horv.  
*Lygaeidae (HEM)*

Pelopidas agna dingo Evans  
*Hesperiidae (LEP)*

Rhopalosiphum maidis (Fitch.)  
*Aphididae (HEM)* Corn leaf aphid

Saccharicoccus sacchari (Cockerell)  
*Pseudococcidae (HEM)* Sugarcane mealy bug

Scirphaga innotata (Walker)  
*Pyralidae (LEP)* White rice borer

Sesamia inferens (Walker)  
*Noctuidae (LEP)* Violet rice stem borer

Sogatella furcifera Horvath  
*Delphacidae (HEM)* White backed rice planthopper

Spodoptera exempta (Walker)  
*Noctuidae (LEP)* African armyworm

Spodoptera litura (Fab)  
*Noctuidae (LEP)* Cluster caterpillar

Spodoptera mauritia (Boisduval)  
*Noctuidae (LEP)* Paddy armyworm

Stenocatantops augustifrons (Walker)  
*Acrididae (ORTH)*

Tetraneura nigriabdominalis (Sas.)  
*Aphididae (HEM)* Rice root aphid

Trypopsilopa chinensis Wiedimann  
*Ephydridae (DIPT)*

Valanga irregularis (Walker)  
*Acrididae (ORTH)* Javanese grasshopper

Valanga sp.  
*Acrididae (ORTH)*

Rorippa insect pests

Agrotis ipsilon (Hufnagel)  
*Noctuidae (LEP)* Black cutworm

Crocidolomia binotalis Zeller  
*Pyralidae (LEP)* Cabbage cluster caterpillar

Plutella xylostella (L.)  
*Plutellidae (LEP)* Diamond back moth

Sago insect pests

Agapophyta bipunctata Boisd.  
*Pentatomidae (HEM.) a bug*

Oryctes rhinoceros (L.)  
*Scarabaeidae (COL)* Asiatic rhinoceros beetle

Papuana spp.  
*Scarabaeidae (COL)* Taro beetles

Promecotheca papuana Csiki  
*Hispidae (COL)* Coconut leaf miner

Rhabdoscelus obscurus Boisduval  
*Curculionidae (COL)* Cane weevil borer

Rhynchophorus bilineatus (Montr.)  
*Curculionidae (COL)* Palm weevils

Rhynchophorus ferrugineus (Oliv.)  
*Curculionidae (COL)* Palm weevils

Rhynchophorus papuanus Kirsch  
*Curculionidae (COL)* Palm weevils

Trochorhopalus strangulatus Gyllenhal  
*Curculionidae (COL)* a weevil

Leptococcus metroxyli Reyne  
*Pseudococcidae (HEM)*

Snake bean insect pests

Anticarsia irrorata F.  
*Noctuidae (LEP)*

Aphis craccivora Koch  
*Aphididae (HEM)* Cowpea aphid

Cassena intermedia Jac.  
*Chrysomelidae/Galerucidae (COL)* Leaf beetles

Cassena papuana (Jac.)  
*Chrysomelidae/Galerucidae (COL)* Leaf beetles

Chrysodeixis eriosoma Doubleday  
*Noctuidae (LEP)* Green looper

Coccus longulus (Douglas)  
*Coccidae*

Ferrisia virgata (Cockerell)  
*Pseudococcidae (HEM)*

Helopelitis clavifer (Walker)  
*Miridae (HEM)* Cacao mirid

Homona coffearia Nietn.  
*Tortricidae (LEP)* Coffee leaf roller

Lampides boeticus L.  
*Lycaenidae (LEP)* Pea Blue butterfly

Maruca vitrata Fabricius  
*Pyralidae (LEP)* Bean pod borer

Nezara viridula (Linnaeus)  
*Pentatomidae (HEM)* Green Vegetable bug

Omiodes indicata Fabricius  
*Pyralidae (LEP)* Bean leaf rollers

Omiodes diemensalis Guenee  
*Pyralidae (LEP)* Bean leaf rollers

Ophiomyia phaseoli (Tryon.)  
*Agromyzidae (DIPT)* Bean fly

Oribius spp.  
*Curculionidae (COL)* Shot hole weevils
Plautia brunneipennis
Riptortus spp.
Saissetia coffeae (Walker)
Zizina otis (F.)

Soybean insect pests
Acrocercops sp.
Adoxophyes sp.
Alticus tibialis Reut
Arisipoda teninberensis Jacoby
Aulacophora spp.
Cassena intermedia Jac.
Cassena papuana (Jac.)
Chrysodeixis eriosoma Doubleday
Coelophora inaequalis F.
Demonax collaris Pascoe
Dysmicoccus brevipes (Cockerill)
Halictus minutus Reuter
Henosepilachna signatipennis Boisd.
Henosepilachna haemorrhhoa (Biel)
Homona coffearia Nieten.
Omioodes diemenalis Guenee
Maruca vitrata Fabriecius
Megalurothrips usitatus Bagnall
Nezara viridula (Linnaeus)
Ophiomyia phaseoli (Tryon.)
Planococcus pacificus Cox
Pseudaulacaspis pentagona (Targioni)
Rhynocapha funebris Chev.
Rhyparidella wauensis
Riptortus spp.

Soybean insect pests
Gracillariidae (LEP) Aibika leaf miner
Tortricidae (LEP)-leaf roller
Miridae (HEM) Grass bug
Chrysomelidae (COL) Black flea beetle
Chrysomelidae (COL) Pumpkin beetles
Chrysomelidae/Galerucidae (COL)
Chrysomelidae/Galerucidae (COL)
Noctuidae (LEP) Green looper
Coccinellidae (HEM)
Cerambycidae (COL)
Pseudococcidae (HEM) Pineapple mealybug
Miridae (HEM) flea hopper
Coccinellidae (COL) Leaf eating ladybird
Coccinellidae (COL) Leaf eating ladybird
Tortricidae (LEP) Coffee leaf roller
Pyralidae (LEP) Bean leaf rollers
Pyralidae (LEP) Bean pod borer
Thripidae (THYS)
Pentatomidae (HEM) Green Vegetable bug
Agromyzidae (DIPT) Bean fly
Pseudococcidae (HEM)
Diaspididae (HEM)
Curculionidae (COL)
Chrysomelidae (COL)
Coreidae (HEM) Pod sucking bug

Sugarcane insect pests
Aleurodes comata
Amblypelta cocophaga China
Amblypelta costalis szentivanyi Brown
Amblypelta gallegonis Lever
Amblypelta lutescens papuensis Br.
Amblypelta theobromae Brown
Anomala anoguttata Burm.
Aphis gossypii Glover
Aphis sacchari Zehntner
Araeocerus sp. (See Oxyderes)
Araeocorys sp.
Arrhenes dschilus Plotz.
Aspidiotus destructor Sign.
Atractomorpha crenaticeps Blanch
Australacris guttulosa Walk
Bathytricha truncata Walker

Sugarcane insect pests
Aleurodidae (HEM.)
Coreidae (HEM) Green coconut bug
Coreidae (HEM)
Coreidae (HEM)
Coreidae (HEM) Papuan tip wilt bug
Coreidae (HEM) Tip wilt bug
Rutelidae (COL)
Aphididae (HEM) Melon aphid
Aphididae (HEM) Sugarcane aphid
Anthribidae (COL)
Anthribidae (COL)
Hesperiidae (LEP)
Diaspididae (HEM) Coconut scale
Acrididae (ORTH)
Acrididae (ORTH) Spur throated locust
Noctuidae (LEP) Cane-moth borer; Large sugarcane moth borer
Chrysomelidae (COL)
Lymantariidae (LEP)
Aphididae (HEM) Sugarcane woolly aphid
Pyralidae (LEP) Sugarcane borer
Cicadellidae (HEM)
Diaspididae (HEM)
Pseudococcidae (HEM) Pineapple mealy bug
Platystomidae (DIPT)
<table>
<thead>
<tr>
<th>Taxonomy</th>
<th>Common Name</th>
<th>Family</th>
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<td>Tephritidae (DIPT)</td>
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<td>Gryllotalpa africana Pal.</td>
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<td>Gryllotalpidae (ORTH) African mole cricket</td>
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<td>Heteropternis obscurella (Blanch)</td>
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<td>Hylipolius ritsemae Pasc.</td>
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<td>Scarabaeidae (COL) Ramu canegrub</td>
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<td>Leptocorisa acuta (Thunberg)</td>
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<td>Alydidae (HEM) Paddy bugs</td>
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<td>Leptocorisa oratorius (Fab.)</td>
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<td>Leptocorisa solomonensis Ahmad</td>
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<td>Alydidae (HEM)</td>
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<td>Locusta migratoria (Linnaeus)</td>
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<td>Acrididae (ORTH) Migratory locust</td>
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<td>Lophops saccharicida Kirk.</td>
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<td>Satyridae/Nymphalidae (LEP)</td>
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<td>Noctuidae (LEP) Rice armyworms</td>
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<td>Mythisma unipuncta Haw</td>
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<td>Mythisma persicae Sulzer</td>
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<td>Neomaskella bergii (Signoret)</td>
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<td>Scarabaeidae (COL) Asiatic rhinoceros beetle</td>
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<td>Papuana uninodes Prell</td>
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<tr>
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<td>Delphacidae (HEM)</td>
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<tr>
<td>Phaenacantha spp.</td>
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<td>Colobathristidae/ Pyrrocoridae (HEM) Sugarcane bug</td>
</tr>
<tr>
<td>Plautia brunneipennis</td>
<td></td>
<td>Pentatomidae (HEM) stink bugs</td>
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<tr>
<td>Protea etia fusca Herbst.</td>
<td></td>
<td>Scarabaeidae (COL) Mango flower beetle</td>
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<td>Rhabdoscels obscurus (Boisduval)</td>
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<td>Curculionidae (COL) NG sugarcane weevil</td>
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<td>Rhopalosiphum maidis (Fitch.)</td>
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<td>Aphididae (HEM) Corn leaf aphid</td>
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<td>Rhyparida coriacea Jac.</td>
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<td>Saccharicoccus sacchari (Cockerell)</td>
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<tr>
<td>Scoliothlamus sp.</td>
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<td>Sesamia grisescens Walker</td>
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<td>Noctuidae (LEP) stem borer</td>
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<td>Sesamia inferens (Walker)</td>
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<td>Noctuidae (LEP) Violet rice stem borer</td>
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<td>Silba sp.</td>
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<td>Spodoptera exempta (Walker)</td>
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<td>Stenocatantops augustifrons (Walker)</td>
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<td>Acrididae (ORTH)</td>
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</table>
Tauchiridea adusta Bolivar
Tettigella pasiphae Kirk
Tettigella sp.
Trochorhopalus strangulatus
Valanga irregularis (Walker)
Valanga sp.
Xyleborus perforans (Wollastan)

Sweet potato insect pests
Achaea janata (Linnaeus)
Agrius convolvuli (L.)
Aphis sacchari Zehntner
Apirocalus cornutus (Pascoe)
Argina cribraria (Clerck)
Atractomorpha crenateces Blanch
Aulacophora spp.
Bedellia sommetalenta (Zeller)
Bemisia tabaci (Guen.)
Cylas formicarius elegantulus (Summers)
Ectropis bhurnitra Walker
Epilachna signatipennis Boisd.
Halticus tibialis Reut
Helopeltis claviuer (Walker)
Hippotion celerio (L.)
Omphispora spp.
Phaneroptera brevis Serv
Solephyma papuana
Tiracola plagiata Walk

Taro insect pests
Acrocercops sp.
Agrius convolvuli L.
Aphis gossypii Glover
Astacops flavicollis Walk.
Astacops villicollis (Stal.)
Bemisia tabaci (Guen.)
Dermolepida nigrum (Non f.)
Dermolepida noxium Britton
Ectropis bhurnitra Walker
Gesonula mundata sanguinolenta Kraus
Heliothis armiger Huebner
Hippotion celerio (L.)
Oribius cinereus Mshl.
Oribius cruciatus Fst.
Oribius destructor Mshl.
Oribius inimicus Mshl.
Papuana biroi End.
Papuana huebneri Fairm.
Papuana japonensis Arrow
Papuana laevipennis
Papuana semistriata
Papuana trinodosa Prell.
Papuana woodlarkiana (Montr.)
Pentalonia nigronervosa Coq
Spodoptera littura (Fab)
Tarophagus colocasiae
**Terminalia insect pests - Okari, Java almond, Talis**

<table>
<thead>
<tr>
<th>Insect Name</th>
<th>Family</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrocercops sp nr. phaedeta Meyr</td>
<td>Gracillariidae (LEP)</td>
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<tr>
<td>Agrilus spp.</td>
<td>Buprestidae (COL) Agrilus</td>
<td>Agilus beetles</td>
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<td>Aiteta iridias</td>
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<td>Badamia exclamationis Fabricius</td>
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<td>Chrysophalbus dictyospermi (Morgan)</td>
<td>Diaspididae (HEM)</td>
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<tr>
<td>Dysmicoccus brevipes (Cockerell)</td>
<td>Pseudococcidae (HEM)</td>
<td>Pineapple mealybug, Citrus mealybug</td>
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<tr>
<td>Howaria bicalvis (Comstock)</td>
<td>Diaspididae (HEM)</td>
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<td>Milvisculus mangiferae (Green)</td>
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<td>Nagia episcopalis Hampson</td>
<td>Noctuidae (LEP)</td>
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<td>Parasaissetia nigra (Nietsner)</td>
<td>Coccidae (HEM)</td>
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<tr>
<td>Perissopneum</td>
<td>mealy bug</td>
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<td>Pinnaspis aspidistrae (Signoret)</td>
<td>Diaspididae (HEM)</td>
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<tr>
<td>Pinnaspis strachani (Cooley)</td>
<td>Diaspididae (HEM)</td>
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<tr>
<td>Planococcus pacificus Cox</td>
<td>Pseudococcidae (HEM)</td>
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<td>Saccalaemus longiceps Pascoe</td>
<td>Curculionidae (COL)</td>
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<td>Saissetia coffeae (Walker)</td>
<td>Coccidae (HEM) Coffee scale</td>
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<tr>
<td>Teleclita strigata cinnamomea Rothsch.</td>
<td>Notodontidae (LEP)</td>
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**Tomato insect pests**

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<thead>
<tr>
<th>Insect Name</th>
<th>Family</th>
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<tbody>
<tr>
<td>Agrotis interjectionis Guenee</td>
<td>Noctuidae (LEP)</td>
<td>Black cutworm</td>
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<tr>
<td>Agrotis ipsilon (Hufnagel)</td>
<td>Noctuidae (LEP)</td>
<td>Sugarcane aphid</td>
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<td>Aphis sacchari Zehntner</td>
<td>Aphididae (HEM)</td>
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<tr>
<td>Atherigona orientalis Schiner</td>
<td>Muscidae (DIPT) Shootfly</td>
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<tr>
<td>Aulacorthum solani Kaltenbach</td>
<td>Aphididae (HEM) Foxglove aphid</td>
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<tr>
<td>Bemisia tabaci (Guen.)</td>
<td>Noctuidae (LEP) Green looper</td>
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<tr>
<td>Chrysodeixis eriosoma Doubleday</td>
<td>Miridae (HEM.)</td>
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<tr>
<td>Cyrtopeltis modestus</td>
<td>Tephritidae (DIPT) Queensland fruit fly</td>
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<tr>
<td>Bactrocera tryoni Frogg</td>
<td>Pseudococcidae (HEM)</td>
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<td>Ferrisia consobrina Williams</td>
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<td>Ferrisia virgata (Cockerell)</td>
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<td>Helicoverpa armigeria (Hubner)</td>
<td>Noctuidae (LEP) Tomato grub</td>
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<tr>
<td>Helicoverpa assulta assulta Guenee</td>
<td>Noctuidae (LEP) Cape gooseberry budworm</td>
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<td>Henosepilachna signatipennis Boisd.</td>
<td>Coccinellidae (COL) Leaf eating ladybird</td>
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<tr>
<td>Henosepilachna haemorrhoea (Biel)</td>
<td>Coccinellidae (COL) Leaf eating ladybird</td>
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<td>Howardia bicalvis (Comstock)</td>
<td>Diaspididae (HEM)</td>
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<td>Icerya seychellarum (Westwood)</td>
<td>Margarodidae (HEM)</td>
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<td>Leptoglossus australis (Fab.)</td>
<td>Coreidae (HEM) Black leaf-footed bug</td>
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<td>Macrosiphum euphorbiae (Thomas)</td>
<td>Aphididae (HEM) Potato aphid</td>
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<td>Myzus persicae Sulzer</td>
<td>Aphididae (HEM) Green peach aphid</td>
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<td>Phthorimaea operculella (Zell.)</td>
<td>Gelechiidae (LEP) Potato tuber moth</td>
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<td>Phytometra orichalcaea (F.)</td>
<td>Noctuidae (LEP) semi looper</td>
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<td>Pinnaspis aspidistrae (Signoret)</td>
<td>Diaspididae (HEM)</td>
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<td>Pinnaspis buxi (Bouche)</td>
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<td>Planococcus pacificus Cox</td>
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<td>Pseudaulacaspis pentagona (Targioni)</td>
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<td>Pseudococcus elisae Borchsenius</td>
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<td>Pylliodes sp</td>
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<td>Pulvinaria ubiquola (Cockerell)</td>
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<td>Spodoptera litura (Fab)</td>
<td>Noctuidae (LEP) Cluster caterpillar</td>
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<td>Thrips tabaci Lind.</td>
<td>Thripidae (THYS) Onion thrips</td>
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<tr>
<td>Tiracola plagiata Walk</td>
<td>Noctuidae (LEP) Cacao armyworm</td>
<td></td>
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</tbody>
</table>
### Tree tomato insect pests

*Bactrocera tryoni* Frogg

Tephritidae (DIPT) Queensland fruit fly

### Tu-lip insect pests

*Eucalyynatus tessellatus* (Signoret)

Coccidae (HEM) soft scale

*Milviscutulus mangiferae* (Green)

Coccidae (HEM) soft scale

### Watermelon insect pests

*Bactrocera cucurbitae* Coq

Tephritidae (DIPT) Melon fruit fly

*Planococcus pacificus* Cox

Pseudococcidae (HEM)

*Tiracola plagiata* Walk

Noctuidae (LEP) Cacao armyworm

### Winged bean insect pests

*Amblypelta spp*

Coreidae (HEM) Amblypelta bugs

*Aphis craccivora* Koch

Aphididae (HEM) Cowpea aphid

*Aphis gossypii* Glover

Aphididae (HEM) Melon aphid

*Araecerus fasciculatus* Degeer

Anthribidae (COL)

*Araeocorynus cumingi* Jekel

Anthribidae (COL)

*Erythroneura sp.*

Cicadellidae (HEM)

*Eurythromera sp.*

Lymantriidae (LEP)

*Euproctis sp.*

Gryllidae (ORTH)

*Homeoxipha fuscipennis* Guenee

Coccinellidae (COL) Leaf eating ladybird

*Henosepilachna haemorrhhoea* (Biel)

Coccinellidae (COL) Leaf eating ladybird

*Henosepilachna signatipennis* Boisd.

Lycaenidae (LEP) Pea Blue butterfly

*Maruca vitrata* Fabricius

Pyralidae (LEP) Bean leaf rollers

*Omiodes diemenalis* Guenee

Lyconitidae (LEP) Winged bean blotch miner

*Leucoptera psophocarpella* Brad. & Cart.

Pyralidae (LEP) Bean pod borer

*Mythimna loreyi* (Dup.)

Noctuidae (LEP) Rice armyworms

*Mythimna separata* (Walk.)

Noctuidae (LEP) Rice armyworms

*Nezara viridula* (Linnaeus)

Pentatomidae (HEM) Green Vegetable bug

*Nyctemera baltus* Boisduval

Arctiidae (LEP)

*Omiodes indicata* Fabricius

Pyralidae (LEP) Bean leaf rollers

*Phaneroptera brevis* Aud.-Serv

Tettigoniidae (ORTH) Grasshopper

*Planococcus pacificus* Cox

Pseudococcidae (HEM)

*Prosopius oblique plagiata* Breuning

Cerambycidae (COL)

*Rhopica honesta* Pascoe

Cerambycidae (COL)

*Tiracola plagiata* Walk

Noctuidae (LEP) Cacao armyworm

*Zizina otis* (F.)

Lycaenidae (LEP) Common grass blue butterfly

*Zygina sp.*

Cicadellidae (HEM)

### Yam insect pests

*Abgrallaspis cyanophylli* (Signoret)

Diaspididae (HEM) Armoured scales

*Alcidodes australis* Boisduval

Curculionidae (COL)

*Aspidiella hartii* (Cockerell)

Diaspididae (HEM) Armoured scales

*Aspidiotus destructor* Signoret

Diaspididae (HEM) Armoured scales

*Chrysodeixis eriosoma* Doubleday

Noctuidae (LEP) Green looper

*Coccus hesperidium* Linnaeus

Coccidae (HEM) soft scales

*Gymnapholus weiskei* HIlr.

Curculionidae (COL)

*Harpedona plana* Poppius

Miridae (HEM)

*Hypolixus mastersi* Pascoe

Curculionidae (COL)

*Hyposidra talaca*

Geometridae (LEP)

*Icerya seychellarm* (Westwood)

Margarodidae (HEM) soft scales
Liliocerus sp nr. bakewelli Baly
Liliocerus papuana (Jac.)
Planococcus dioscoreae Williams
Planococcus pacificus Cox
Platypletocoris similis Popp
Senoclida purpurata (F.Sm.)
Tagiades obscurus tindali Rbb
Tagiades tregellius Hopf.
Tagiades tregellius canonicus
Theretra nessus Dry.

Sweet potato insect pests Common name first

Sweet potato hornworm
Sweet potato hawkmoth
Sweet potato leaf miner
Sweet potato weevil
Cacao armyworm
Cacao false looper
Cacao looper
Cacao mirid
Grass bug
Horned weevil
Pumpkin beetles
Sugarcane aphid
Taro hawkmoth
Tobacco whitefly

Taro insect pests Common name first

Taro beetles
Taro hornworm
Taro hawkmoth
Taro leafhopper
Aibika leaf miner
Banana aphid
Cacao armyworm
Cacao looper
Cluster caterpillar
Corn earworm
Dermolepida beetles (Or chafer beetles)
Melon aphid
Shot hole weevils

Agrius convolvuli (L.)
Agrius convolvuli (L.)
Bedellia somnulentella (Zeller)
Cylas formicarius elegantulus (Summers)
Tiracola plagiata Walk
Achaea janata (Linnaeus)
Ectropis bhurmitra Walker
Helopeltis clavifer (Walker)
Halticus tibialis Reut
Aphrocalus cornutus (Pascoe)
Phaneroptera brevis Serv
Aulacophora spp.
Aphis sacchari Zehntner
Hippotion celerio (L.)
Bemisia tabaci (Guen.)
Argina cribaria (Clerck)
Epilachna signatipennis Boisd.
Omphisa spp.
Solephyma papuana

Papuana biroi End.
Papuana huebneri Fairm.
Papuana japonensis Arrow
Papuana laevipennis
Papuana semistriata
Papuana trinodosa Prell.
Papuana woodlarkiana (Montr.)
Hippotion celerio (L.)
Hippotion celerio (L.)
Tarophagus colocasiae
Tarophagus persephone
Tarophagus proserpina (Kirk)
Acrocercops sp.
Pentalonia nigrornervosa Coq
Tiracola plagiata Walk
Ectropis bhurmitra Walker
Spodoptera litura (Fab)
Helicoverpa armigera (Hubner)
Dermolepida nigrum (Non f.)
Dermolepida noxium Britton
Aphis gossypii Glover
Oribius cinereus Mshl.
Oribius cruciatus Fst.
Oribius destructor Mshl.
Oribius inimicus Mshl
Agrius convolvuli L.
Bemisia tabaci (Guen.)
Astacops flavicollis Walk.
Astacops villicollis (Stal.)
Gesonula mundata sanguinolenta Kraus

Sweet potato hawkmoth
Tobacco whitefly
Insects list Scientific names in alphabetical order

*Abgrallaspis cyanophylli* (Signoret) Diaspididae (HEM)
*Acalolepta holotephra* Boisd. Cerambycidae (COL)
*Acanthoscelides obtectus* Bruchidae (COL) Bean weevil
*Acauloplacella immunis* Tettigonidae (ORTH)
*Achaea janata* (Linnaeus) Noctuidae (LEP) Cacao false looper
*Acleris sp.* Gracillariidae (LEP) Cocoa pod borer
*Acrocercops cramerella* (Snellen) See
*Acrocercops homalacta* Meyr. 
*Adoxyphyes melichron* Tortricidae (LEP) leaf roller
*Aganisia bipunctata* Boisd. Pentatomidae (HEM)
*Agapophyta similis* Blote Pentatominidae (HEM)
*Agapophyta viridula* Blote Pentatominidae (HEM)
*Agnocelis rutilus* Pentatominidae (HEM)
*Agrillus occipitalis* Esch. Buprestidae (COL)
*Agrius convoluli* (L.) Gracillariidae (LEP) Sweet potato hawkmoth
*Agromyza papuensis* Agromyzidae (DIPT)
*Agrotis interjectionis* Guenee Noctuidae (LEP) Black cutworm
*Agrotis ipsilon* (Hufn.) Noctuidae (LEP) Black cutworm
*Agrypnus sp.* Elateridae (COL)
*Aiteta iridias* Myr. Noctuidae (LEP)
*Alcidodes australis* Boisduval Curculionidae (COL)
*Alcidodes elegans* Guerin-Meneville Curculionidae (COL)
*Aleurodomyia comata* Aleurodidae (HEM)
*Alleurodis destructor* Mackie Aleurodidae (HEM) Coconut whitefly
*Alleurodis dispersus* Russel Aleurodidae (HEM) Spiralling whitefly
*Altica sp.* Chrysomelidae (COL)
*Alosticella cucurbitae* China Coreidae (HEM) Green coconut bug
*Amblypelta costalis* (Kirkaldy) Brown Coreidae (HEM)
*Amblypelta gallegonis* Lever Coreidae (HEM)
*Amblypelta lutescens* (Buckton) Brown Coreidae (HEM)
*Amblypelta theobromae* Brown Coreidae (HEM) Papuan tip wilt bug
*Amorbus rhombeus* Westw. Coreidae (HEM)
*Amrasca devastans* Distant Cicadellidae (HEM) Indian cotton jassid
*Anadastus albertisi* Harold Languridae (COL)
*Andaspis numerata* Brimblecombe Diapriidae (HEM)
*Andaspis sinosa* Diapriidae (HEM)
*Anomala anoguttata* Burm. Diapriidae (HEM)
*Anomis flavia* Fabr. Coreidae (HEM)
*Antestiopsis chambereti* Le Guillon Noctuidae (LEP) Cotton semi-looper
*Antestiopsis semiviridis* (Walk.) Pentatomidae (HEM) coffee bugs
*Anthococcus kerevatae* Williams Coccidae (HEM)
*Anticarsia irrorata* Fabr. Noctuidae (LEP)
*Antonina graminis* (Maskell) Pseudococcidae (HEM) Rhodes grass mealybug
*Aonidiella aurantii* Mask. Diaspididae (HEM) Red scale
*Aonidiella citrina* (Coq.) Diaspididae (HEM) Yellow scale
*Aonidiella comperei* McKenzie Diaspididae (HEM)
*Aonidiella eremicriti* McKenzie Diaspididae (HEM)
*Aonidiella inornata* McKenzie Diaspididae (HEM)
Aonidiella orientalis (Newstead) Diaspididae (HEM)
Apachynus beccarii Dubrony Apachiidae (DERM)
Aphis craccivora Koch Aphididae (HEM) Cowpea aphid
Aphis gossypii Glover Aphididae (HEM) Cotton aphid
Aphis sacchari Zehntner Aphididae (HEM) Sugarcane aphid
Aphodius lividus Olivier Scarabaeidae (COL)
Apirocalus cornutus (Pascoe) Curculionidae (COL) horned weevil
Apirocalus ebiulus Faust Curculionidae (COL) horned weevil
Apirocalus terrestris Thompson Curculionidae (COL) horned weevil
Aphthona bicolorata Jacoby Chrysomelidae (COL)
Araeocorynus cumingi Jekel Anthribidae (COL)
Araecerus sp. (See Oxyderes) Anthribidae (COL)
Araecerus fasciculatis Degeer Anthribidae (COL)
Argina astrea Drury Arctiidae (LEP) Orange sann moth
Argina cribraria (Clerck) Arctiidae (LEP) Orange sann moth
Asterolecanium sp. Aulacaspis tegalensis (Zehntner) Diaspididae (HEM) Sugarcane scale
Asterolecanium sp. Aulacaspis vitis (Green) Diaspididae (HEM)
Aulacorthum solani Kaltenbach Aulacaspis tegalensis (Zehntner) Diaspididae (HEM) Sugarcane scale
Aulacorthum solani Kaltenbach Aulacaspis vitis (Green) Diaspididae (HEM)
Aulacephala abdominalis (Fabricius) Aulacaspis tegalensis (Zehntner) Diaspididae (HEM) Sugarcane scale
Aulacephala coffeae Hornstedt Chrysomelidae (COL)
Aulacephala culicivora Blackburn Chrysomelidae (COL)
Aulacephala femoralis (Mots.) Chrysomelidae (COL)
Aulacephala melanopus Blanchard Chrysomelidae (COL)
Aulacephala pallidifasciata Jacoby Chrysomelidae (COL)
Aulacephala papuanica Jac. Chrysomelidae (COL)
Aulacephala pygidialis Baly Chrysomelidae (COL)
Aulacephala rigensis Jacoby Chrysomelidae (COL)
Aulacephala similis Oliv. Chrysomelidae (COL)
Aulacephala wallacii Baly Chrysomelidae (COL)
Aulacophrys fascialis Marsh.  Curculionidae (COL)
Austracris guttulosa (Walk.)  Acrididae (ORTH) Spur throated locust
Axiagastus cambelli Dist.  Pentatomidae (HEM) Coconut spathe bug
Badamia exclamationis Fabricius  Hesperiidae (LEP)
Bambusaspis bambusae (Boisduval)  Asteroecanidae (HEM)
Bathytricha truncata Walker  Noctuidae (LEP) Cane-moth borer; Large sugarcane moth borer
Batrachamorphus sp.  Cicadellidae (HEM)
Batrachedra arenosella Walker  Cosmopterigidae (LEP) Lesser coconut spike moth
Bactrocera atrisetosus Perkins  Tephritidae (DIPT) fruit fly
Bactrocera bryoniae (Tryon.)  Tephritidae (DIPT) fruit fly
Bactrocera cucurbitae Coq  Tephritidae (DIPT) Melon fruit fly
Bactrocera decipiens Drew  Tephritidae (DIPT) fruit fly
Bactrocera dorsalis Hendel  Tephritidae (DIPT) fruit fly
Bactrocera frauenfeldi Schiner  Tephritidae (DIPT) fruit fly
Bactrocera frenchi  Tephritidae (DIPT) fruit fly
Bactrocera musae (Try.)  Tephritidae (DIPT) Banana fruit fly
Bactrocera neohumeralis Hardy  Tephritidae (DIPT) fruit fly
Bactrocera obliquus  Tephritidae (DIPT) fruit fly
Bactrocera peculiaris  Tephritidae (DIPT) fruit fly
Bactrocera strigifinis atritus May  Tephritidae (DIPT) fruit fly
Bactrocera trivialis Drew  Tephritidae (DIPT) fruit fly
Bactrocera tryoni Frogg  Tephritidae (DIPT) fruit fly
Baculita sommulentella (Zeller)  Lyconetidae (LEP) Sweet potato leaf miner
Bemisia tabaci (Genn.)  Aleyrodidae (HEM) Tobacco white fly
Blissus sp  Lygaeidae (HEM)
Borbo cinnara Wallace  Hesperiidae (LEP)
Borbo impar tetragnathus Mab.  Hesperiidae (LEP) Borbo butterfly
Bothrichara palliata Macleay  Cerambycidae (COL)
Bothrogonia sp  Cicadellidae (HEM)
Brachyplatis papuus Guer.  Pentatomidae (HEM)
Brachyplatis translineatus Walker  Pentatomidae (HEM)
Brevennia rehi (Lindinger)  Pseudococcidae (HEM) mealybug of rice
Brontispa lateralis  Chrysomelidae (COL)
Brontispa longissima Gestro  Chrysomelidae (COL) Coconut hispid
Brontispa palmivora Gres  Chrysomelidae (COL)
Bryscia exigua Dist.  Pentatomidae (HEM)
Caedius demeijerei Geb.  Tenebrionidae (COL)
Caenobius pilosus (Barber)  Lugaecidae (HEM) chinchi bugs
Calliteara horsfieldi Saunders  Lymantridae (LEP) Large yellow tussock caterpillar
Cannococcus ikshu Williams  Pseudococcidae (HEM)
Cannococcus palaense (Beardsley)  Pseudococcidae (HEM)
Carphophilus sp nr. tenuis Murray  Nitulidae (COL)
Carphophilus maculatus Murray  Nitulidae (COL)
Cassena intermedia Jac.  Chrysomelidae (COL)
Cassena papuana (Jac.)  Galerucidae (COL)
Cassida diomma Bois.  Chrysomelidae (COL)
Cassida papuana Spaeth  Chrysomelidae (COL)
Cassida sexguttata Boisduval  Chrysomelidae (COL)
Caunacea sera Meyrick  Plutellidae (LEP)
Cepheus mosleyi (ButL.)  Hesperiidae (LEP) Coconut skipper
Cepheus oceanica Mabille  Hesperiidae (LEP)
Ceratovacuna lanigera Zehntner  Aphididae (HEM) Sugarcane woolly aphid
Ceresimum pachynumerum (Pascoe)  Cerambycidae (COL)
Ceroplastes ceriferus (F.)  Coccidae (HEM)
Ceroplastes destructor Newstead  Coccidae (HEM)
Ceroplastes murrayi Froggatt  Coccidae (HEM)
<table>
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<tr>
<th>Scientific Name</th>
<th>Common Name</th>
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<tr>
<td>Ceroplastes rubens Maskell</td>
<td>Pink wax scale</td>
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<td>Chaeococcus bambusae (Maskell)</td>
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<tr>
<td>Chaetanapothrips orchidii F.</td>
<td>Banana rust thrips</td>
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<tr>
<td>Chaetanapothrips signipennis Bagn.</td>
<td>Banana thrips</td>
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<td>Chauliognathus waroensis Wittmer</td>
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<tr>
<td>Chelisoches morio Fabricius</td>
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<tr>
<td>Chilo auricilus (Dug.)</td>
<td></td>
</tr>
<tr>
<td>Chilo infuscatus Snellen</td>
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</tr>
<tr>
<td>Chilo suppressalis (Walker)</td>
<td>Purple lined rice stem borer</td>
</tr>
<tr>
<td>Chilo terrenellus Pag.</td>
<td>Sugarcane borer</td>
</tr>
<tr>
<td>Chilometra transversa Walker</td>
<td></td>
</tr>
<tr>
<td>Chorizoccus talipikanus Williams</td>
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</tr>
<tr>
<td>Chrysodeixis chalcites Esp.</td>
<td>Green looper</td>
</tr>
<tr>
<td>Chrysodeixis eriosoma Doubleday</td>
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</tr>
<tr>
<td>Chrysomphalus aonidum (Linnaeus)</td>
<td>Florida red scale</td>
</tr>
<tr>
<td>Chrysomphalus dictyospermi (Morgan)</td>
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</tr>
<tr>
<td>Chrysomphalus pinulifer (Maskell)</td>
<td></td>
</tr>
<tr>
<td>Cicadella sp.</td>
<td></td>
</tr>
<tr>
<td>Cicadella spectra Dist.</td>
<td></td>
</tr>
<tr>
<td>Cicadella wallacei Distant</td>
<td>White jassid</td>
</tr>
<tr>
<td>Cicindela decem-guttata urvillei Dejean</td>
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</tr>
<tr>
<td>Circopes sp.</td>
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<tr>
<td>Clavigralloides acantharis Fabricius</td>
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<tr>
<td>Cletus sp.</td>
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<tr>
<td>Clostera rubida Druce</td>
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<td>Clysterus angustus Arrow</td>
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<tr>
<td>Cnaphalocrocis medinalis (Gn.)</td>
<td>Rice leaf roller</td>
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<tr>
<td>Cnaphalocrocis poeyalis Boisduval</td>
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<tr>
<td>Coccus celatus De Lotto</td>
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<tr>
<td>Coccus hesperidium Linnaeus</td>
<td>Soft brown scale</td>
</tr>
<tr>
<td>Coccus longulus (Douglas)</td>
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<tr>
<td>Coccus viridus (Green)</td>
<td>Green scale</td>
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<tr>
<td>Coelophora inaequalis F.</td>
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<tr>
<td>Coelophora ripponi Crotch</td>
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<tr>
<td>Cofana spectra Distant [Cicadella]</td>
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</tr>
<tr>
<td>Colasposoma regulare Jacoby</td>
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<tr>
<td>Colgar tricolor Dist.</td>
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<td>Colposcelis vignaphila Bryant</td>
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<td>Compsolacon gracilis Candeze</td>
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<td>Conoderus micronatus Candeze</td>
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<td>Cononemia sp.</td>
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<td>Conomorpha cramerella Snellen</td>
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<td>Contarinia sorghicola (Coq)</td>
<td>Sorghum midge</td>
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<td>Coproporus sp.</td>
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<td>Coptosoma pygmaeum Mont.</td>
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<tr>
<td>Coptosoma variegata Herrich-Schaffer</td>
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<tr>
<td>Coptotermes hyaloapex Holmg.</td>
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<tr>
<td>Coronacella kirkaldyi Muir</td>
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<td>Cosmopolites sordidus (Germar)</td>
<td>Banana weevil borer</td>
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<tr>
<td>Creatonotus gangis (L.)</td>
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<tr>
<td>Crinitecticus theobromae Williams</td>
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<tr>
<td>Criocerus sp.</td>
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<td>Crioceris clarkii Baly</td>
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<tr>
<td>Crioniidae sp.</td>
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<tr>
<td>Crisiococcus theobromae Williams</td>
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<tr>
<td>Crocidolomia binotalis Zeller</td>
<td>Cabbage cluster caterpillar</td>
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</tbody>
</table>

Coccidae (HEM) - Pink wax scale |
Pseudococcidae (HEM) -  |
Thripidae (THYS) - Banana rust thrips |
Thripidae (THYS) - Banana thrips |
Chrysomelidae (COL) -  |
Chelisocidae (DERM) -  |
Pyralidae (LEP) - Gold-fringed rice borer |
Pyralidae (LEP) - Early shoot-borer |
Pyralidae (LEP) - Purple lined rice stem borer |
Pyralidae (LEP) - Sugarcane borer |
Noctuidae (LEP) -  |
Pseudococcidae (HEM) -  |
Noctuidae (LEP) - Green looper |
Diaspididae (HEM) - Florida red scale |
Diaspididae (HEM) -  |
Cicadellidae (HEM) -  |
Cicadellidae (HEM) - White jassid |
Cicindellidae (COL) -  |
Nitidulidae (COL) -  |
Coreidae (HEM) -  |
Notodontidae (LEP) -  |
Scarabaeidae (COL) -  |
Pyralidae (LEP) - Rice leaf roller |
Pyralidae (LEP) -  |
Coccidae (HEM) -  |
Coccidae (HEM) - Soft brown scale |
Coccidae (HEM) -  |
Coccidae (HEM) - Green scale |
Coccinellidae (HEM) -  |
Coccinellidae (HEM) -  |
Cicadellidae (HEM) - White leafhopper |
Chrysomelidae (COL) -  |
Flatidae (HOM) -  |
Chrysomelidae (COL) -  |
Elateridae (COL) -  |
Elateridae (COL) -  |
Cicadellidae (HEM) -  |
Gracillariidae (LEP) -  |
Cecidomyiidae (DIPT) -  |
Staphylinidae (COL) -  |
Penatotomidae (HEM) -  |
Penatotomidae (HEM) -  |
Rhinotermitidae (ISOP) -  |
Delphacidae (HEM) -  |
Curculionidae (COL) -  |
Arctidae (LEP) -  |
Pseudococcidae (HEM) -  |
Crioceridae (COL) -  |
Pseuococcidae (HEM) -  |
Colobathristidae (COL) -  |
Epitryidae (HOM) -  |
Epitryidae (HOM) -  |
Coreidae (HEM) -  |
Epiphanidae (HOM) -  |
Epiphanidae (HOM) -  |
Blattodea (HEM) -  |
Scirtidae (HOM) -  |
Aphididae (HOM) -  |
Aphididae (HOM) -  |
Cryptophasa setiotricha Meyr
Cryptophasa sp. nr arithmologia Meyrick
Cylas formicarius elegans (Summers)
Cyrtopeltis modestus
Cyrtorhinus lividipennis Reuter
Darala ruboea Feld
Dasychira horsfieldi Saunders
See Calliteara horsfieldi
Dasychira mendoza Hubn.

Deanolis albizonalis Hampson
Demonax collaris Pascoe
Dendrothripoides ipomoeae Bagn.
Dentilius sus venosus Breddin
Depages granulosa Guerin-Meneville
Deraecoris sp
Dermolepida nigrum (Non f.)
Dermolepida noxium Britton
Desmopterella sp
Diacrisia niceta (Stal.)
Diacrisia papuana Roth.
Diaphania indica Saunders
Diapis rutherfordi
Dichocrosis sp. nr punctiferalis Guenee
Dieuches finitimus Van Duze
Dimorphopterus cornutus Slater
Dindymus pyrochrous Boisd.
Diocandra taitense (Guer.)
Drepanococcus chiton (Green)
Duplaspidiotus claviger (Cockerell)
Dysdercus cingulatus (F.)
Dysdercus sidae Mont.
Dysmicoccus boninis (Kuwana)
Dysmicoccus brevipes (Cockerell)
Dysmicoccus nesophilus Williams
Dysmicoccus papuanicus Williams
Earias fabia Stoll [Now E vittella]
Earias vittella (F.) [Syn E fabia]
Ectatorhinus magicus Gerstaecker
Ectropis bhurmitra Walker
Elassogaster lineata de Meij
Elassogaster sepsoides Walk.
Elaunon bipatitus Kirby
Enopllepteron ?heiroglyphicum de Meij
Epilachna cucurbitae Richards
Epilachna guttatopustulata Fabricius
Epilachna signatipennis Boisd.
Epilachna vigintisextunctata doryca Boisd
Erionota thrax L.
Erythroneura sp.
Euborellia annulipes Lucas
Eucalyptus fulctellatus (Signoret)
Eucnephalus sp
Eudefacoma sp.
Eumetopina flavipes Muir
Eumosula gracilis Willemse
Eupneusta solena Bradley
Eupholus nickerli Hllr.

Xyloryctidae (LEP)
Xyloryctidae (LEP)
Curculionidae (COL) Sweet potato weevil
Miridae (HEM)
Miridae (HEM)
Lasiocampidae (LEP)
Lymantriidae (LEP)
Lymantriidae (LEP)
Lymantriidae (LEP) leaf eating caterpillar; Tea tussock moth
Pyralidae (LEP) Red banded mango borer
Cerambycidae (COL)
Thripidae (THYS)
Lygaeidae (HEM)
Cerambycidae (COL)
Miridae (HEM)
Scarabaeidae (COL)
Scarabaeidae (COL)
Pyrgomorphidae (ORTH)
Arctiidae (LEP)
Arctiidae (LEP)
Pyralidae (LEP) Pumpkin caterpillar; Melon moth
Diaspididae (HEM)
Pyralidae (LEP)
Pyralidae (LEP)
Diaspididae (HEM)
Pyrrhocoridiae (HEM) Red cotton bugs
Pyrrhocoridiae (HEM)
Pseudococcidae (HEM) Gray sugarcane mealybug
Pseudococcidae (HEM) Pineapple mealybug
Pseudococcidae (HEM)
Pseudococcidae (HEM)
Noctuidae (LEP) Spotted bollworm
Noctuidae (LEP) Aibika shoot boring grub
Curculionidae (COL)
Geometridae (LEP) Cacao looper
Platystomatidae (DIPT)
Platystomidae (DIPT)
Forficulidae (DERM)
Tephritidae (DIPT)
Coccinellidae (COL)
Coccinellidae (COL)
Coccinellidae (COL)
Coccinellidae (COL)
Coccinellidae (COL)
Hesperidiae (LEP) Banana skipper
Coccdidae (HEM)
Labiduridae (DERM)
Coccidae (HEM)
Tettigoniidae (ORTH)
Eurytomidae (HYMEN)
Delphacidae (HEM)
Tettigoniidae (ORTH) Coconut tree hopper
Elachistidae (LEP) leaf miner sugarcane
Curculionidae (COL) eupholus weevils
Eupholus schonherri Guer
Euproctis sp
Euricania discigutta (Walk.)
Euricania tristicula Stal
Euricania villica
Euronotobrachys sp.
Euscyrtus hemelytrus (de Haan)
Eysarcoris ventralis West.
Ferrisia consobrina Williams
Ferrisia virgata (Cockerell)
Fiornia coronata
Fiornia fioriniae (Targioni)
Ganae pulchella Pascoe
Geococcus coffeeae Green
Gesomula mundata sanguinolenta Kraus
Glenea aluensis Gahan
Glyptoporopterus sharpi Faust.
Gonocephalum ochthebioides Ful.
Graphium agamemnon L.
Gryllotalpa africana Beavo
Gymnopholus interpres Hillr.
Gymnopholus marquardti Hillr.
Gymnopholus weiskei Hillr.
Halticus insularis Usinger
Halticus minutus Reuter
Halticus tibialis Reut.
Hapatesus tropicus Neboiss
Haptoncus sp nr concolor
Harpedona plana Poppius
Hedylepta indica (F) [Lamprosema]
Helicoverpa armigera Hubner
Helicoverpa assulta assulta Guenée
Helicoverpa punctigera Wallengren
Helopeltis clavifer (Walker)
Hemiberlesia lataniae (Signoret)
Hemiberlesia palmae (Cockerell)
Hemipteraeus sp
Henosepilachna haemorrhoea (Biel)
Henosepilachna signatipennis Boisd
Heteropternis obscurella (Blanch)
Hexacentrus mundar Walker
Hippotion boerhaviae Fab.
Hippotion celerio (L.)
Homeoxipha fuscipennis
Homona coffearia Niet
Howardia biclavis (Comstock)
Hypolixus mastersi Pascoe
Hypolixus ritsemae Pasc.
Hyposidra talaca
Hypothactus ruralis Fst.
Icerya purchasi Maskell
Icerya sychellarum (Westwood)
Idiophasis chirodaeta Meyr.
Idiophasis eugeniae Bradley
Idopsis caerulea Faust.
Euricania discigutta (Walk.) Ricaniidae (HEM) planthopper
Euricania tristicula Stal Ricaniidae (HEM)
Euricania villica Ricaniidae (HEM) planthopper
Euronotobrachys sp. Eurybrachidae (HEM)
Euscyrtus hemelytrus (de Haan) Gryllidae (ORTH)
Eysarcoris ventralis West. Pentatomidae (HEM)
Ferrisia consobrina Williams Pseudococcidae (HEM)
Ferrisia virgata (Cockerell) Pseudococcidae (HEM)
Fiornia coronata Diaspididae (HEM)
Fiornia fioriniae (Targioni) Diaspididae (HEM)
Ganae pulchella Curculionidae (COL)
Geococcus coffeeae Pseudococcidae (HEM)
Gesomula mundata sanguinolenta Acriidae (ORTH)
Glenea aluensis Cerambycidae (COL)
Glyptoporopterus sharpi Faust. Curculionidae (COL)
Gonocephalum ochthebioides Tenebrionidae (COL) False wireworm
Graphium agamemnon Papilionidae (LEP) Green spotted triangle
Gryllotalpa africana Gryllidae (ORTH) Mole cricket
Gymnopholus interpres Curculionidae (COL)
Gymnopholus marquardti Curculionidae (COL)
Gymnopholus weiskei Curculionidae (COL)
Halticus insularis Miridae (HEM)
Halticus minutus Miridae (HEM) fleahopper
Halticus tibialis Miridae (HEM) Grass bug
Hapatesus tropicus Elateridae (COL)
Haptoncus sp nr concolor Nitisulidae (COL)
Harpedona plana Miridae (HEM)
Hedylepta indica (F) [Lamprosema] Pyralidae (LEP) Bean leaf roller
Helicoverpa armigera Noctuidae (LEP) Corn earworm
Helicoverpa assulta assulta Noctuidae (LEP) Cape gooseberry budworm
Helicoverpa punctigera Noctuidae (LEP) Native budworm
Helopeltis clavifer (Walker) Coreidae (HEM) Cacao mirid
Hemiberlesia lataniae Diaspididae (HEM)
Hemiberlesia palmae Diaspididae (HEM)
Hemipteraeus sp Issidae (HEM)
Henosepilachna haemorrhoea (Biel) Coccinellidae (COL) leaf eating ladybird
Henosepilachna signatipennis (Boisd) Coccinellidae (COL) leaf eating ladybird
Heteropternis obscurella Acrididae (ORTH)
Hexacentrus mundar Tettigoniidae (ORTH)
Hippotion boerhaviae Sphingidae (LEP)
Hippotion celerio Sphingidae (LEP) Grapevine hawkmoth; Silver-striped hawkmoth
Homeoxipha fuscipennis Gryllidae (ORTH)
Homona coffearia Tortricidae (LEP) Coffee leafroller
Howardia biclavis Diaspididae (HEM)
Hypolixus mastersi Curculionidae (COL)
Hypolixus ritsemae Curculionidae (COL)
Hyposidra talaca Geometridae (LEP)
Hypothactus ruralis Curculionidae (COL)
Icerya purchasi Margarodidae (HEM)
Icerya sychellarum Margarodidae (HEM)
Idiophasis chirodaeta Gelechiidae (LEP)
Idiophasis eugeniae Gelechiidae (LEP)
Idopsis caerulea Curculionidae (COL)
Idopsis excellens Faust. Curculionidae (COL)
Idopsis grisea Faust. Curculionidae (COL)
Idioscopsus clypealis (Leth.) Cicadellidae (HEM) Mango hopper
Idioscopsus niveosparsus (Leth.) Cicadellidae (HEM) Mango hopper
Ischiopsopha bifasciata Quoy & Gaim var. hyla Heller Cetoniinae (COL)
Ischiopsopha ignatipennis Boisd Cetoniinae (COL)
Ischnaspis longirostris (Signoret) Dic SIPIDiae (HEM) Black thread scale
Kilifia acuminata (Signoret) Coccidae (HEM)
Kolla sp. Cicadellidae (HEM)
Laccoptera impressa Blanchard Chrysomelidae (COL)
Lagria sp. Coccidae (HEM)
Laingiococcus painei (Laing) Pseudococcidae (HEM)
Lampides boeticus L. Lycaenidae (LEP) Pea blue butterfly
Lamprosema charesalis Walker Pyralidae (LEP) Banana scab moth
Lasiodactylum notabilis Oliff Nitidulidae (COL)
Lepidosaphes beckii (Newman) Diaspididae (HEM)
Lepidosaphes gloverii (Packard) Diaspididae (HEM)
Lepidosaphes karkarica Diaspididae (HEM)
Lepidosaphes rubrovittata Cockerell Diaspididae (HEM)
Lepidosaphes tokionis (Kuwana) Diaspididae (HEM)
Leptococcus metroxyli Reyne Pseudococcidae (HEM)
Leptocorisa acuta (Thunberg) Alydidae (HEM) paddy bugs
Leptocorisa discoidalis Alydidae (HEM)
Leptocorisa oratorius (Fab.) Alydidae (HEM) paddy bugs
Leptocorisa palawanensis Alydidae (HEM)
Leptocorisa solomonensis Ahmad Alydidae (HEM) paddy bugs
Leptoglossus australis (Fab.) Coreidae (HEM) Black leaf footed bug
Leptothea ciskii Weise Coccinellidae (COL)
Leucoptera psophocarpella Brad & Cart Lyconetiidae (LEP) Winged bean blotch miner
Licyllus albicollis Fab. Chrysomelidae (COL)
Liliocerus sp nr bakewelli Baly Crioceridae (COL)
Liliocerus papuana (Jac.) Crioceridae (COL)
Locusta migratoria (Linn.) Acrididae (ORTH) Migratory locust
Lopholeucaspis baluanensis Diaspididae (HEM)
Lophops saccharicida Kirk. Lophopidae (HEM)
Lophotectes penicilliger (Heller) Curculionidae (COL)
Lygaeus sp. Lygaeidae (HEM)
Lygaeus hospes Fabr. Lygaeidae (HEM)
Lymgrantria rosina Pag. Lymantriidae (LEP)
Lyriomyza brassicae (Riley) Agromyzidae (DIPT) Cabbage leaf miner
Machaerota humboldti Machaerotidae (HEM)
Maconellicoccus hirsutus (Green) Pseudococcidae (HEM) Hibiscus mealy bug
Macrospirum euphorbiae (Thomson) Aphididae (HEM) Potato aphid
Maculicoccus malaiensis (Cockerell) Pseudococcidae (HEM)
Maliarpha separatella Rag. Pyralidae (LEP) White rice stem borer
Mampava bipunctella Rag Pyralidae (LEP) Sorghum head caterpillar
Marasmia bilinealis Hampson Pyralidae (LEP) Rice leaf roller
Marasmia hexagona Pyralidae (LEP) Rice leaf roller
Marasmius ventilalis Walker Pyralidae (LEP)
Maruca vitrata Fabricius Pyralidae (LEP) Bean pod borer
Megalurothrips usitatus Bagnall Thripidae (THYS)
Megamelus sp. Delphacidae (HEM)
Megymenum sp. Dinidoridae (HEM)
Meijerella inaequalis becker Chloropidae (DIPT)
Melacanthus argineguttatus Alydidae (HEM)
Melaniscococcus kleinioviae Williams Coccidae (HEM)
Melanhydrus clupealis Arrow Scarabaeidae (COL)
Melanitis constantia Cramer Nymphalidae (LEP)
Melanitis ledabankia F. Nymphalidae (LEP) Evening brown butterfly
Meninda bisignata Walker Pentatomidae (HEM)
Menochilus sex-masculatus Fab. Coccinellidae (COL)
Meredolus sp. Curculionidae (COL)
Meredolus cocotis Marshall Curculionidae (COL)
Meroleptus cinctor Marshall Curculionidae (COL)
Metrania papuana Noctuidae (LEP)
Metria sp. Chrysomelidae (COL)
Mictis profana F. Coreidae (HEM) Crusader bug
Microtermes biroi Desneaux Rhinotermitidae (ISOP)
Milviscutalus ciliatus Williams Coccidae (HEM)
Milviscutalus mangiferae (Green) Coccidae (HEM)
Milviscutalus pilosus Williams Coccidae (HEM)
Milviscutalus spiculatus Williams Coccidae (HEM)
Monolepta nigroapicata Bry. Chrysomelidae (COL) Monolepta beetle
Monolepta semiviolacea Fab. Chrysomelidae (COL)
Monolepta sp nr bifasciata Hornstedt Chrysomelidae (COL)
Morganella longispira (Morgan) Diaspididae (HEM)
Mulciber linnaei Thoms Cerambycidae (COL)
Mutabilicoccus simmondsi (Laing) Pseudococcidae (HEM)
Mutabilicoccus vanheurni (Reyne) Pseudococcidae (HEM)
Mycalesis asophis Hew Nymphalidae (LEP)
Mythimna loryei (Dup.) Noctuidae (LEP) Rice armyworms
Mythimna separata (Walk.) Noctuidae (LEP) Rice armyworms
Mythimna unipuncta Haworth Noctuidae (LEP)
Myzus ornatus Laing Aphididae (HEM)
Myzus persicae Sulzer Aphididae (HEM) Green peach aphid
Nacoleia octasema (Meyrick) Pyralidae (LEP) Banana scab moth
Nagia episcopalis Hampsom Noctuidae (LEP)
Neomaskellia bergii (Signoret) Aleyrodidae (HEM) Sugarcane white fly
Neoplatyvellacium sp. Coccidae (HEM)
Neosaissetia keravatae Williams Coccidae (HEM)
Neoteremes sp. Colotermitidae (ISOPTERA)
Neotocoptera formosana Takahashi Aphididae (HEM) Onion aphid
Nephotettix apicalis (Motsch.) Cicadellidae (HEM) Green rice leafhopper
Nesocypselas piperica (HEM) Pepper bug
Nesocypselas piperica Pentatomidae (HEM) Green vegetable bug
Nelapavata lugens Haseg Delphacidae (HEM) Brown backed rice planthopper
Nipaecoccus vastator (Mask.) Pseudococcidae (HEM)
Nipaecoccus viridis (Newstead) Pseudococcidae (HEM)
Nisia sp. Meenopilidae (HEM)
Nisotra basselae Bry Chrysomelidae (COL)
Nisotra obliterata Jacoby Chrysomelidae (COL)
Nisotra sp. Chrysomelidae (COL)
Nyctemera baulus Boisduval Arctiidae (LEP)
Nysius epiensis China Lygaeidae (HEM)
Nysius femoratus Van Duzee Lygaeidae (HEM)
Nysius villicus Van Duzee Lygaeidae (HEM)
Odonaaspis ruthae Kotinsky Diaspididae (HEM)
Odonaaspis saccharicus (Zehntner) Diaspididae (HEM)
Odontomyia sp. Stratiomyiidae (DIPT)
Olethreutes (Argyroplane) sp. Tortricidae (LEP)
Omiodes blackburnii Butler Pyralidae (LEP) Coconut leaf roller
Omiodes diemenalis Guenee
Omiodes indicata Fabricius
Omphisa anastomosalis Guenee
Omphisa spp.
Onchytrotica concursa Walker
Onthophagus latinasutus Arrow
Onthophagus sp nr papuensis Harold
Opogona fumiceps
Opogona saccharella
Opioniomyia phaseoli (Tryon.)
Orchamoplatus mammaeferus (Quan. & Bak)
Oribius cinereus Mshl.
Oribius cruciatus Fst.
Oribius destructor Mshl.
Oribius improvidus Marshall
Oribius inimicus Mshl.
Orinaeme sp.
Orostus argentatus Evans
Orthaca cincticornis Walk.
Oryctes centaurus Sternb
Oryctes rhinoceros (L.)
Ostrinia furnacalis (Guen)
Oxya gavisa (Walk.)
Oxya japonica (Thnb.)
Oxya vittigera (Blanch)
Oxya sp.
Oxyderes cyrtus Jordan
Pachybrachius nervosus Horv.
Palmicultor browni (Williams)
Pamara amalia Semper
Papilio aegeus Donovan
Papilio aegeus ormenus Guerin
Papuana biroi End.
Papuana huebneri Fairm.
Papuana japonensis Arrow
Papuana laevipennis
Papuana semistrata
Papuana trinodosa Prell.
Papuana woodlarkiana (Montr.)
Papuanella sp
ParaBactrocera perplexus
Paraputo leveri (Green)
Parasaissetia nigra (Nietner)
Parastasia guttulata Fairm.
Paratella sp.
Paratella miniatu Mcl.
Parlatoria crotonis Douglas
Parlatoria proteus (Curtis)
Paromius gracilis Rambur
Patanga sp.
Pelepodas agna dingo Evans
Penicillaria jocosatrix Guenee
Pentalonia nigronervosa Coq
Peregrinus maidis Ashm.
Perissopeneum
Perkinsiella bicloris

Pyralidae (LEP)
Pyralidae (LEP)
Pyralidae (LEP) Sweet potato stem borer
Pyralidae (LEP) Sweet potato stem borer
Pterophoridae
Cupridae (COL)
Scarabaeidae (COL)
Hieroxestidae (LEP)
Hieroxestidae (LEP)
Agromyzidae (DIPT) Bean fly
Aleyrodidae
Curculionidae (COL) Shot hole weevils
Curculionidae (COL)
Curculionidae (COL)
Curculionidae (COL)
Curculionidae (COL)
Cerambycidae (COL)
Cicadellidae (HEM)
Lygaeidae (HEM)
Scarabaeidae (COL)
Scarabaeidae (COL) Asiatic rhinoceros beetle
Pyralidae (LEP) Maize stem borer; Asian corn borer
Acrididae (ORTH)
Acrididae (ORTH)
Acrididae (ORTH)
Acrididae (ORTH)
Anthribidae (COL)
Lygaeidae (HEM)
Pseudococcidae (HEM)
Hesperidae (LEP)
Papilionidae (LEP) Citrus butterfly; Orange butterfly
Papilionidae (LEP) Citrus butterfly
Scarabaeidae (COL) taro beetles
Scarabaeidae (COL) taro beetles
Scarabaeidae (COL) taro beetles
Scarabaeidae (COL) taro beetles
Scarabaeidae (COL) taro beetles
Scarabaeidae (COL) taro beetles
Scarabaeidae (COL) taro beetles
Flatidae (HEM)
Trypetidae (DIPT)
Pseudococcidae (HEM)
Coccidae (HEM) Nigra scale
Scarabaeidae (COL)
Flatidae (HEM)
Flatidae (HEM)
Diaspididae (HEM)
Diaspididae (HEM)
Lygaeidae (HEM)
Acrididae (ORTH)
Hesperidae (LEP)
Noctuidae (LEP) Large mango tip borer
Aphididae (HEM) Banana aphid
Delphacidae (HEM) Corn laternfly
mealybug
Delphacidae (HEM) sugarcane leafhoppers
Perkinsiella boreon Fennah Delphacidae (HEM)
Perkinsiella bulli Fennah Delphacidae (HEM)
Perkinsiella diagoras Fennah Delphacidae (HEM)
Perkinsiella falcipennis Fennah Delphacidae (HEM)
Perkinsiella lalokensis Muir Delphacidae (HEM)
Perkinsiella macrinus Fennah Delphacidae (HEM)
Perkinsiella mycon Fennah Delphacidae (HEM)
Perkinsiella papuensis Muir Delphacidae (HEM)
Perkinsiella rattlei Muir Delphacidae (HEM)
Perkinsiella saecharica Kirkaldy Delphacidae (HEM)
Perkinsiella sinensis Kirkaldy Delphacidae (HEM)
Perkinsiella thompsoni Muir Delphacidae (HEM)
Perkinsiella vastatrix (Breddin) Delphacidae (HEM)
Phaciocephalus sp. Derbidae (HEM)
Phaenacantha spp. Colobathristidae (HEM)
Phaneroptera brevis Serv. Tettigoniidae (ORTH)
Pharotes torvus Mshl. Curculionidae (COL)
Philia femorata Walk. Pentatomidae (ORTH)
Phodoryctis caerulea Meyrick Gracillariidae (LEP)
Phomesa sp. Colydiidae (COL)
Phthorimaea operculella (Zell.) Gelechiidae (LEP) Potato tuber moth
Phyllocnistis citrella Staint Phyllocnistidae (LEP) Citrus leaf miner
Phyllocnistis sp. Phyllocnistidae (LEP) Winged bean miner
Phylliphora boshmai de Jong Tettigoniidae (ORTH)
Piezodorus rubrofasciatus Fab. Pentatomidae (HEM)
Pinnaspis aspidistrae (Signoret) Diaspididae (HEM)
Pinnaspis buxi (Bouche) Diaspididae (HEM)
Pinnaspis strachani (Cooley) Diaspididae (HEM)
Planococcus citri (Risso) Pseudococcidae (HEM) Citrus mealy bug
Planococcus dioscoreae Williams Pseudococcidae (HEM) Yam mealy bug
Planococcus lilacinus (Cockerell) Pseudococcidae (HEM)
Planococcus pacificus Cox Pseudococcidae (HEM)
Platylecanium cocotis Laing Coccidae (HEM)
Platypeltocoris similis Popp Miridae (HEM) Yam mirid sap sucker
Platystomus wallacei pascoe Anthribidae (COL)
Plautia sp. Pentatomidae (HEM) Stink bugs
Plautia brunneipennis Pentatomidae (HEM) Stink bugs
Plutella xylostella (L.) Plutellidae (LEP) Diamond back moth
Promecotheca papuana Csiki Hispidae (COL) Coconut leaf miner
Protaetia fusca Herbst. Scarabaeidae (COL) Mango flower beetle
Protaetia papuana Moser Scarabaeidae (COL)
Psammeucus sp. Silvanidae (COL)
Pseudaulacaspis cockerelli (Cooley) Diaspididae (HEM)
Pseudaulacaspis pentagona (Targioni) Diaspididae (HEM) White scale
Pseudococcus elisae Borchsenius Pseudococcidae (HEM)
Pseudococcus longispinus (Targioni) Pseudococcidae (HEM) Longtailed mealybug
Pseudococcus saccharicola Takahashi Pseudococcidae (HEM)
Pseudococcus solomonensis Williams Pseudococcidae (HEM)
Pseudodoeiella typica China & Carvalho Miridae (HEM)
Pseudoligota sp. Staphylinidae (COL)
Psylliodes loriae Jac. Chrysomelidae (COL)
Psylliodes sp. Chrysomelidae (COL)
Psylliodes sp nr fulvipes Jacoby Chrysomelidae (COL)
Pternistria sp. Coreidae (HEM)
Pterolophia grisescens Pascoe Cerambycidae (COL)
Pulvinaria cacao Williams Coccidae (HEM)
Pulvinaria elongata Newstead Coccidae (HEM)
Pulvinaria psidii Maskell Coccidae (HEM)
Pulvinaria ubicola (Cockerell) Coccidae (HEM)
Pyroderces amphirisar Pascoe Cosmopterigidae (LEP) Vine bud moth
Ragwelesseus festivus Miller Miridae (HEM)
Ragwelellus horvathi Poppius Miridae (HEM) Cardamom mirid
Rastrococcus neoguineensis Williams Pseudococcidae (HEM)
Rastrococcus vicorum Williams Pseudococcidae (HEM)
Rhabdoscelus obscursus (Boisdual) Curculionidae (COL) Cane weevil borer
Rhinoscapha cobaltinata Heller Curculionidae (COL)
Rhinoscapha funebris Chev. Curculionidae (COL)
Rhinoscapha maclayi Macleay Curculionidae (COL)
Rhinoscapha thomsoni Wterh. Curculionidae (COL) Citrus leaf eating weevil
Rhinoscapha thomsoni Wterh. Coccididae (HEM) Corn leaf aphid
Rhynchophorus bilineatus (Montr.) Curculionidae (COL) Palm weevil
Rhynchophorus ferrugineus (Oliv.) Curculionidae (COL)
Rhynchophorus papuanus Kirsch Curculionidae (COL)
Rhynchotola wallaci Crotch Curculionidae (COL)
Rhynarida cacaona Gressitt Chrysomelidae (COL)
Rhynarida clypeata Jacoby Chrysomelidae (COL)
Rhynarida coriacea Jac. Chrysomelidae (COL)
Rhynarida ?fasciata Baly Chrysomelidae (COL)
Rhynarida morosa Jac Chrysomelidae (COL)
Rhynaridella casuarinae Chrysomelidae (COL)
Rhynaridella sobrina Bryant Chrysomelidae (COL)
Rhynaridella wauensis Chrysomelidae (COL)
Ricanula puncticosta Ricanidae (HEM)
Riptortus annulicornis Boisd. Coreidae (HEM) Pod sucking bug
Riptortus imperialis Kirk Coreidae (HEM) Bean bug
Riptortus obscuricornis Dallas Coreidae (HEM)
Riptortus spp. Coreidae (HEM)
Ropica honesta Pascoe Cerambycidae (COL)
Rosenbergia weiskei Heller Cerambycidae (COL)
Saccharicoccus sacchari (Cockerell) Pseudococcidae (HEM) Pink sugarcane mealybug
Saccolaemus longiceps Pascoe Curculionidae (COL)
Saissetia coffeae (Walker) Coccidae (HEM) Coffee scale
Saissetia miranda (Cockerell & Parrott) Coccidae (HEM)
Saissetia neglecta De Lotto Coccidae (HEM)
Sangicoccus truncatispinus (Reyne) Eriococcidae (HEM)
Scapanes australis australis Boisd. Dynastidae (COL)
Scapanes australis grossepunctatus Stern Dynastidae (COL) NG rhinoceros beetle
Schizentaspidius silvicola Diaspididae (HEM)
Sciophyrus diminutus Horvath Coreidae (HEM)
Scirpophaga excerptalis (Walker) Pyralidae (LEP) White tip borer
Scirpophaga innotata (Walker) Pyralidae (LEP) White rice borer
Scirpophaga nivella Fabricius Pyralidae (LEP)
Scoliophthalmus sp Chloropidae (DIPT)
Scopelodes dinawa B.Bak Lymacocidae (LEP)
Scopelodes nitens B.Bak. Lymacocidae (LEP) Cup moth
Segestidea defoliatrix defoliatrix Ulvavov Tettigonidae (ORTH) Coconut treehopper
Segestidea hanoverana Willems Tettigonidae (ORTH) coconut treehoppers
Segestidea insulana Willems Tettigonidae (ORTH)
Segestidea montana Willems Tettigonidae (ORTH)
Segestidea novaehuinea Brancsik Tettigonidae (ORTH) coconut treehopper
Segetes cornelii Willems Tettigonidae (ORTH)
Segetes gracilis  
Selenothrips rubrocinctus (Giard)  
Senoclidia purpurata (F.Sm.)  
Sesamia arfaki Bethune-Baker  
Sesamia griseascens Warren  
Sesamia inferens (Walker)  
Silba sp.  
Simodactylus sp  
Simplicia caeneusalis Walker  
Sogatella furcifera Horvath  
Solephyma papuanum  
Sparganobasis subcruciat us Marsh.  
Spilosoma ogwarra Bethune-Baker  
Spirocaria bissellata Mulsant  
Spodoptera exempta (Walker)  
Spodoptera litura (Fabricius)  
Spodoptera mauritia (Boisduval)  
Spodoptera mauritia (Boisduval)  
Spodoptera recurvalis Fabricius  
Steatococcus samarae Morrison  
Stenocatantops augustifrons (Walker)  
Stephanitis typica (Distant)  
Strumeta barringtoniae (Tryon.)  
Strumeta bryoniae (Tryon.)  
Strumeta frauenfeldii (Schiner)  
Strumeta musae (Tryon.)  
Strumeta recurrens Her.  
Strumeta tryoni (Frogh)  
Sylepte derogata Fabricius  
Symphilites sp.  
Syncratos (Syncrattles) similis Ghauri  
Syntherata janetta White  
Tabidia insuralsis Snell  
Taenaris butleri Oberth  
Taenaris dimona Hew  
Taenaris myops kirschi Stgr.  
Tagiades obscurus tindali Rbb  
Tagiades trebellius canonicus  
Tagiades tregellius Hopf.  
Tarophagus coloscaiae  
Tarophagus persephone  
Tarophagus proserpina (Kirk)  
Tauchiridea adusta Bolivar  
Teleclita strigata cinnamomea Rothschi.  
Teleogryllus commodus Wlk.  
Telostylinus sp.  
Terentius nubifasciatus Walker  
Tetereura migriabdominalis (Sas.)  
Tetranychus marianae McGregor  
Tettigella pasiphae Kirk  
Tettigella sp.  
Theretra nessus Dry  
Theretra oldenlandiae Fab.  
Thosea sinensis (Walk.)  
Thressa punctifera de Meijere  
Thrips tabaci Lind.  
Thysanoplusia orichalcea Fabricius  
Tiracola plagiata (Walker)

Tettigoniidae (ORTH)  
Thripidae-Cacao thrips or Redbanded thrips  
Tenthredinidae (HYM) Yam sawfly  
Noctuidae (LEP)  
Noctuidae (LEP) stem borer  
Noctuidae (LEP) Violet rice stem borer  
Lonchaeidae (DIPT)  
Elateridae (COL)  
Noctuidae (LEP)  
Delphacidae (HEM) White backed rice plant hopper  
Galerucidae (COL)  
Curculionidae (COL) Coconut bole weevil  
Arctiidae (LEP)  
Coccinellidae (COL)  
Noctuidae (LEP) African armyworm  
Noctuidae (LEP) Cluster caterpillar  
Noctuidae (LEP) Rice moth  
Pyralidae (LEP) Beet webworm  
Margarodidae (HEM)  
Acrididae (ORTH)  
Tingidae (HEM) Banana lace-bug  
Tephritidae (DIPT)  
Tephritidae (DIPT)  
Tephritidae (DIPT)  
Tephritidae (DIPT)  
Tephritidae (DIPT)  
Tephritidae (DIPT)  
Tephritidae (DIPT)  
Tephritidae (DIPT)  
Tephritidae (DIPT)  
Cerambycidae (COL)  
Pyrrhocoridae (HEM)  
Saturniidae (LEP)  
Pyralidae (LEP)  
Amathusiidae (LEP)  
Amathusiidae (LEP)  
Amathusiidae (LEP) Myops owl butterfly  
Hesperiidae (LEP)  
Hesperiidae (LEP)  
Hesperiidae (LEP)  
Delphacidae (HEM) Taro leafhopper  
Delphacidae (HEM) Taro leafhopper  
Delphacidae (HEM) Taro leafhopper  
Delphacidae (HEM) Taro leafhopper  
Acridiidae (ORTH.)  
Notodontidae (LEP.)  
Gryllidae  
Neriidae (DIPT)  
Membracidae (HOM)  
Aphididae (HEM)  
Tetranychidae (ACAR) Red spider mite  
Cicadellidae (HEM)  
Cicadellidae (HEM)  
Cicadellidae (HEM)  
Cicadellidae (HEM)  
Cicadellidae (HEM)  
Cicadellidae (HEM)  
Cicadellidae (HEM)  
Cicadellidae (HEM)  
Cicadellidae (HEM)  
Sphingidae (LEP) Yam hawkmoth  
Sphingidae (LEP) Vine hawkmoth  
Limacodidae (LEP) Coconut cup moth; Slug caterpillar  
Chloropidae (DIPT)  
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Noctuidae (LEP) Flax caterpillar  
Noctuidae (LEP) Cacao armyworm
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Family</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiracola rufimargo</td>
<td>Noctuidae (LEP)</td>
<td>Pyralidae (LEP) Coconut spathe moth; Greater coconut spike moth</td>
</tr>
<tr>
<td>Tirathaba rufivena Walk.</td>
<td></td>
<td>Pyralidae (LEP)</td>
</tr>
<tr>
<td>Toxoptera aurantii B.de Fonsc.</td>
<td>Pyralidae (LEP)</td>
<td>Black citrus aphid</td>
</tr>
<tr>
<td>Toxoptera citricidus (Kirk)</td>
<td>Pyralidae (LEP)</td>
<td>Brown citrus aphid</td>
</tr>
<tr>
<td>Trachycentra chlorogramma Meyrick</td>
<td>Tineidae (LEP)</td>
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<tr>
<td>Trachylepidia fructicassiella Ragonot</td>
<td>Pyralidae (LEP)</td>
<td></td>
</tr>
<tr>
<td>Trichogomphus semmelinki Rits</td>
<td>Curculionidae (COL)</td>
<td>Rhinoceros beetle</td>
</tr>
<tr>
<td>Trochorhopalus strangulatus Gyllenhal</td>
<td>Scarabaeidae (COL)</td>
<td></td>
</tr>
<tr>
<td>Trypopsilopa chinesis Weidimann</td>
<td>Ephydridae (DIPT)</td>
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<tr>
<td>Unaspis citri (Comst.)</td>
<td>Diaspididae (HEM)</td>
<td>White louse scale</td>
</tr>
<tr>
<td>Valanga irregularis (Walker)</td>
<td>Acrididae (ORTH)</td>
<td>Giant grasshopper</td>
</tr>
<tr>
<td>Valanga nigricornis (Burm.)</td>
<td>Acrididae (ORTH)</td>
<td>Javanese grasshopper</td>
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<tr>
<td>Valanga sp.</td>
<td>Acrididae (ORTH)</td>
<td></td>
</tr>
<tr>
<td>Vinsonia stellifera (Westwood)</td>
<td>Coccidae (HEM)</td>
<td></td>
</tr>
<tr>
<td>Xanthodes transversa Guenee</td>
<td>Noctuidae (LEP)</td>
<td></td>
</tr>
<tr>
<td>Xyleborus exiguus Walk.</td>
<td>Scolytidae (COL)</td>
<td></td>
</tr>
<tr>
<td>Xyleborus perforans (Wollastan)</td>
<td>Scolytidae (COL)</td>
<td>Coconut shot-hole borer</td>
</tr>
<tr>
<td>Xyleborus potens Schedl.</td>
<td>Scolytidae (COL)</td>
<td></td>
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<tr>
<td>Xyleutes ceramicus Walker</td>
<td>Cossidae (LEP)</td>
<td></td>
</tr>
<tr>
<td>Xylotrupes gideon (L.)</td>
<td>Dynastidae (COL)</td>
<td>Elephant beetle</td>
</tr>
<tr>
<td>Xylotrupes spp.</td>
<td>Dynastidae (COL)</td>
<td>Elephant beetle</td>
</tr>
<tr>
<td>Zeuzera coffeae Nietner</td>
<td>Cossidae (LEP)</td>
<td>Red twig borer</td>
</tr>
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<td>Zophiuma lobulata Ghauri</td>
<td>Lophopidae (HEM)</td>
<td>Lophopid treehopper</td>
</tr>
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<td>Zigina sp</td>
<td>Cicadellidae (HEM)</td>
<td></td>
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<tr>
<td>Zigina medioborealis Ghauri</td>
<td>Cicadellidae (HEM)</td>
<td></td>
</tr>
<tr>
<td>Zizina otis (F.)</td>
<td>Lycaenidae (LEP)</td>
<td>Common grass blue butterfly</td>
</tr>
</tbody>
</table>
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List of names for insects and plants on which they occur

*Abgrallaspis cyanophylli* (Signoret)
Banana, coconut, avocado, guava, loquat, breadfruit, pao nut, tea, cardamom, laulau’s, figs, soursop, greater yam, cassava, macadamia,

*Acalolepta holotepha* Boisd
Ficus, cassava,

*Acanthoscelides obtectus*
Beans,

*Acauloplacella immunis*
Coastal pitpit,

*Achaea janata* (Linnaeus)
Sweet potato, peanuts, citrus, cacao, rubber, pumpkins etc

*Acleris sp.*
Brussels sprouts,

*Acerocercops homalacta* Meyr.
Sweet potato,

*Acerocercops sp.*
Aibika, taro, okra, soybean, cacao,

*Actinus imperialis* Fauvel
Cardamom,

*Acythosiphon solani* Kaltenbach
Potato

*Adoxophyes melichron*
Peanuts, okra, sugar pea, cacao, pawpaw,

*Adoxophyes tetraphracta* Meyrick
Velvet bean

*Aedia sericea* Butler
Sweet potato

*Agapophyta bipunctata* Boisd.
Coconut, sago,

*Agapophyta similis* Blote
Pigeon pea

*Agapophyta viridula* Blote
Pigeon pea,

*Agonoscelis rutila*
Basil

*Agrilus occipitalis* Esch
Okari, Java almond, Talis,

*Agris convolvuli* (L.)
Sweet potato, taro, sunflower,

*Agromyza papaensis*
Coastal pitpit,

*Agrotis interjectionis* Guenee
Lettuce, tomato,

*Agrotis ipsilon* (Hufn.)
Cabbage, cauliflower, cassava, onion, potato, rorippa, tomato, corn, carrot,

*Sugarcane*

*Aiteta iridias* Myr.
Java almond,

*Alcidodes australis* Boisduval
Yam,

*Alcidodes elegans* Guerin-Meneville
Ficus

*Aleurodicus comata*
Sugarcane

*Aleurodicus destructor* Mackie
Coconut, bananas, soursop,

*Aleurodicus dispersus* Russel
Guava, mango

*Altica sp.*
Pumpkin

*Alticus sp.*
Raspberry

*Alticus insularis* (Usinger)
Sweet potato, peanuts

*Alticus minutus* (Reuter)
Sweet potato, parsnip, chinese cabbage, okra, mung bean and soybean, peanuts, pumpkin, cucumbers

*Alticus tibialis*
Coconut, aibika, avocado, bean, cassava, custard apple, soursop, guava, mango, mung bean, pawpaw, sugarcane, winged bean, cacao, cashew, lemon, sweet potato, choko, roselia, banana, macadamia

*Amblypelta cocophaga* China

*Amblypelta costalis szentivanyi* Brown
Coconut, aibika, avocado, bean, cassava, custard apple, soursop, guava, mango, mung bean, pawpaw, sugarcane, winged bean, cacao, cashew, lemon, sweet potato, choko, roselia, banana, macadamia

*Amblypelta gallegonis* Lever
Coconut, aibika, avocado, bean, cassava, custard apple, soursop, guava, mango, mung bean, pawpaw, sugarcane, winged bean, cacao, cashew, lemon, sweet potato, choko, roselia, banana, macadamia
Amblypelta lutescens papuensis Br.
Coconut, aibika, avocado, bean, cassava, custard apple, soursop, guava, mango, mung bean, pawpaw, sugarcane, winged bean, cacao, cashew, lemon, sweet potato, choko, rosella, banana, macadamia

Amblypelta theobromae Brown
Coconut, aibika, avocado, bean, cassava, custard apple, soursop, guava, mango, mung bean, pawpaw, sugarcane, winged bean, cacao, cashew, lemon, sweet potato, choko, rosella, banana, macadamia

Amorbus rhombeus Westw.
Rice

Amrasca devastans Distant
Aibika

Anadastus albertisi Harold
Aibika

Ananipa sp.
Lettuce

Andaspis numerata Brimblecombe
Tea

Andaspis sinosa
Fig

Anomala anoguttata Burm.
Sugarcane, coastal pitpit

Anomis flava Fabricius
Aibika, beans, okra, velvet bean, hibiscus

Antestiopsis chambereti Le Guillon
Sweet potato

Antestiopsis semiviridis (Walk.)
Pepper, coffee

Anthococcus kerevatae Williams
Malay apple, soursop, jackfruit, citrus, cacao,

Anticarsia irrorata Fabricius
Bean, mung bean, snake bean

Antonina graminis (Maskell)
Sugarcane, sorghum, rice

Aonidiella aurantii Mask.
Breadfruit, citrus, lemon, cycads, grapefruit, sour orange, sweet orange, lime, mandarin, pomelo, marrow, paper mulberry, chilli, coconut,

Aonidiella citrina (Coq.)
Lemon

Aonidiella comperei McKenzie
Indian mulberry, banana, fig, velvet apple

Aonidiella eremocitri McKenzie
Pao trees, coconut, citrus

Aonidiella inornata McKenzie
Pao, banana, grapevine, pandanus, kava

Aonidiella orientalis (Newstead)
Pawpaw

Apachynus beccarii Dubrony
Potato

Aphis craccivora Koch
Cowpea, yard long bean, peanut, mung bean

Aphis gossypii Glover
Melon, aibika, bean, potato, pumpkin, sugarcane

Aphis sacchari Zehntner
Sugarcane, corn, bean

Aphidius lividus Zehntner
Cardamom

Apirocalus cornutus (Pascoe)
Bananas, cassava, taro, aibika, chilli, cabbage, choko, lettuce, beetroot, carrot, sweet potato, coffee, bamboo, apple, citrus, soursop, guava, cashew, peanut, mung bean, strawberry, cacao, coffee,

Apichynus beccarii Dubrony
Bananas, cassava, taro, aibika, chilli, cabbage, choko, lettuce, beetroot, carrot, sweet potato, coffee, bamboo, apple, citrus, soursop, guava, cashew, peanut, mung bean, strawberry, cacao, coffee,

Apirocalus ebrius Faust
Bananas, cassava, taro, aibika, chilli, cabbage, choko, lettuce, beetroot, carrot, sweet potato, coffee, bamboo, apple, citrus, soursop, guava, cashew, peanut, mung bean, strawberry, cacao, coffee,

Apirocalus terrestris Thompson
Bananas, cassava, taro, aibika, chilli, cabbage, choko, lettuce, beetroot, carrot, sweet potato, coffee, bamboo, apple, citrus, soursop, guava, cashew, peanut, mung bean, strawberry, cacao, coffee,

Aphthona bicolorata Jacoby
Pumpkin, sorghum, cucumber, sweet potato

Araeacerus sp. (See Oxyderes)
Sugarcane, cabbage

Araeacerus fasciculatis Degeer
Winged bean

Araeocorynus cumingi Jekel
Winged bean

Araeocorynus sp.
Sugarcane

Argina astrea Drury
Sweet potato

Armacia sp.
Ficus
Arrhenes dschilus Plotz
Arripoda tenimberensis Jacoby
Artococca toxanthana Hampson
Aspidilla hartii (Cockerell)
Aspidilla sacchari (Cockerell)
Aspidomorpha adhearrens Weber
Aspidomorpha australasiae Jacoby
Aspidomorpha miliaris (F.)
Aspidomorpha punctum (Fabricius)
Aspidomorpha quadriradiata Boh.
Aspidomorpha socia Montr.
Aspidomorpha testudinaria Montr.
Aspidiotus destructor Signoret

Aspidiotus excisus Green
Aspidiotus musae
Astacops dorycus Boisd.
Astacops flavicollis Walk.
Astacops villicollis (Stal.)
Astrolecianum sp.
Asura crocota Hampson
Ataenius spinator Harold
Atherigona orientalis Schiner
Atherigona oryzae Mall.
Atractomorpha crenateps Blanch
Atractomorpha similis
Atysa sp.
Aulacaspis tegalensis (Zehntner)
Aulacaspis vitis (Green)
Aulacorthum solani Kaltenbach
Aulacophora abdominalus (Fabricius)
Aulacophora coffeae Hornstedt
Aulacophora culcullata Blackburn
Aulacophora femoralis (Mots.)
Aulacophora melanopus Blanchard
Aulacophora pallidifasciata Jacoby
Aulacophora papuana Jac.
Aulacophora pygidialis Baly

Asusa crocota Hampson
Sugarcane
Arripoda tenimberensis Jacoby
Bean, corn, rice, soybean, sweet potato
Artococca toxanthana Hampson
Banana
Aspidilla hartii (Cockerell)
Sugarcane, sweet potato, yam, ginger, lesser yam
Aspidilla sacchari (Cockerell)
Sugarcane, giant taro
Aspidomorpha adhearrens Weber
Sweet potato, aibika
Aspidomorpha australasiae Jacoby
Sweet potato, aibika
Aspidomorpha miliaris (F.)
Sweet potato, aibika
Aspidomorpha punctum (Fabricius)
Sweet potato, aibika
Aspidomorpha quadriradiata Boh.
Sweet potato, aibika
Aspidomorpha socia Montr.
Sweet potato, aibika
Aspidomorpha testudinaria Montr.
Sweet potato, aibika
Aspidiotus destructor Signoret
Coconut, bananas, guava, mango, golden apple, cherimolia, soursop, sweet sop, pawpaws, sugarcane, pandanus, Barringtonia sp. (Pao nuts), breadfruit, betel nut palm
Aspidiotus excisus Green
Pawpaw, citrus
Aspidiotus musae
Banana
Astacops dorycus Boisd.
Coconut
Astacops flavicollis Walk.
Taro
Astacops villicollis (Stal.)
Taro
Astrolecianum sp.
Coffee, raspberry, pepper, malay apple
Asura crocota Hampson
Sweet potato
Ataenius spinator Harold
Coastal pitpit
Atherigona orientalis Schiner
Rockmelon, capsicum, tomato, corn, common bean, marrow, pumpkin, bitter cucumber, sorghum
Atherigona oryzae Mall.
Rice, corn
Atractomorpha crenateps Blanch
Okra, aibika, brussels sprouts, sugarcane, sweet potato
Atractomorpha similis
Sweet potato
Atysa sp.
Sugarcane, coastal pitpit
Aulacaspis tegalensis (Zehntner)
Durian
Aulacaspis vitis (Green)
Potato, bean, tomato
Aulacorthum solani Kaltenbach
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora abdominalus (Fabricius)
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora coffeae Hornstedt
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora culcullata Blackburn
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora femoralis (Mots.)
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora melanopus Blanchard
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora pallidifasciata Jacoby
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora papuana Jac.
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora pygidialis Baly
Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn
Aulacophora rigoensis Jacoby

Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn,

Aulacophora similis Oliv.

Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn,

Aulacophora wallacii Baly

Common bean, mung bean, soybeans, peanuts, broad beans, cassava, pumpkin, spinach, sweet potato, rockmelon, zucchini, corn,

Aulacophrys fascialis Marsh.

Strawberry

Austracris guttulosa (Walk.)

Sugarcane, citrus

Axiagastus cambelli Dist.

Coconuts, wild betel nut

Badamia exclamationis Fabricius

Okari

Bambusaspis bambusae (Boisduval)

Bamboo

Bathytricha truncata Walker

Sugarcane

Batrachamorphus sp.

Roselle, sunflower

Batrachedra arenosella Walker

Coconut

Bedellia somnulentella (Zeller)

Sweet potato

Bemisia tabaci (Genn.)

Taro, sweet potato, cassava, tomato,

Blastophaga sp.

Millet

Bissus sp.

Rice

Borbo cinnara Wallace

Bamboo

Borbo impar tetragraphus Mab.

Coconuts, wild betel nut

Bothrichara palliata Macleay

Coastal pitpit, kidney bean

Bothrogonia sp.

Bean, Passionflower, cacao

Brachyplatis papuus Guer.

Rice, sorghum

Brachyplatis translineatus Walker

Coconut, betel nut

Brevennia rehi (Lindinger)

Coconut, betel nut

Brontispa lateralis

Coconut, betel nut

Brontispa longissima Gestro

Coconut, betel nut

Brontispa palmivora Gres

Coconut, betel nut

Brontispa simmondsi Mlk.

Coconut

Brysica exigua Dist.

Cassava

Caedius demeijerei Geb.

Bean, taro, radish

Caenobissus pilosus (Barber)

Rice

Calliteara horsfieldi Saunders

Sugarcane

Cannococcus ikshu Williams

Sugarcane, coastal pitpit

Cannococcus palauensis (Beardsley)

Sugarcane, rice

Carpophilus sp. nr. tenuis Murray

Betel nut

Carpophilus maculatus Murray

Capsicum

Cassena intermedia Jac.

Aibika, bean, mung bean, soybean, snake bean, broad bean, aibika, peas, corn, apple

Cassena papuana (Jac.)

Aibika, bean, mung bean, soybean, snake bean, broad bean, aibika, peas, corn, apple

Cassida diomma Bois.

Lettuce, sweet potato, potato

Cassida papuana Spaeth

Sweet potato

Cassida sexguttata Boisduval

Sweet potato

Caunacea sera Meyrick

Aibika, bean, mung bean, soybean, snake bean, broad bean, aibika, peas, corn, apple

Cephesium pachymerum (Pascoe)

Coconut

Cephenes mosleyi (Butl.)

Sugarcane

Cephenes oceania Mabille

Tea, Malay apple

Ceratovacuna lanigera Zehntner

Tea, citrus, coffee, avocado, guava

Ceresium pachymerum (Pascoe)

Wild mango

Ceroplastes ceriferus (F.)

Citrus, coffee, tea, cyecds, breadfruit, guava, breadfruit, citrus, coconut, rose apple, Tahitian chestnut, mango, banana, guava, jackfruit,
avocado, cashew, feijoa, monsteria, rambutan, nutmeg, pigeon pea, cherry guava, apple.

**Chaeococcus bambusae** (Maskell) Bamboo

**Chaetanaphthrips orchidii** F. Banana, citrus, giant taro

**Chaetanaphthrips signipennis** Bagn. Banana

**Chaetocnema basalis** Baly Corn, rice, wheat, millet, mustard

**Chauliognathus waroensis** Wittmer Sweet potato, bean

**Chelisoches morio** Fabricius Taro, banana

**Chilo auricilius** (Dudg.) Rice, sugarcane, sorghum

**Chilo infuscatus** Snellen Rice

**Chilo suppressalis** (Walker) Rice

**Chilo terrenellus** Pag. Sugarcane

**Chlmietia transversa** Walker Mango

**Chlorococcus talipikanus** Williams Sugarcane,

**Chrysodeixis eriosoma** Doubleday Cabbage, bean, pumpkin, cacao, tomato, kohl rabi, snake bean, aibika, lesser yam, soybean

**Chrysomphalus aonidum** (Linnaeus) Citrus, breadfruit, coconut, Indian mulberry, banana, pandanus, cycads, candle nut, soursop, sweet sorghum, bullock’s heart, tamarind,

**Chrysomphalus dictyospermi** (Morgan) Jackfruit, asparagus, citrus, coconut, apple, mango, avocado, pao, tea, macadamia, guava, golden apple, laulau, pawpaw, java almond, vanilla, dye fig, Chinese taro, betel nut, cyclad, cassava, oil palm, eggplant

**Chrysomphalus pinnulifer** (Maskell) Citrus

**Cicadella sp.** Lettuce, taro, sugarcane, potato

**Cicadella spectra** Dist. Rice, sugarcane, sweet potato, corn

**Cicadella wallacei** Distant Sweet potato

**Cicindela decem-guttata urvilei** Dejean Rice

**Cicropes sp** Betel nut, 

**Clavigralloides acantharis** Fabricius Pigeon pea

**Cletus sp** Amaranth

**Clostera rubida** Druce Flacourtia

**Clysterius angustus** Arrow Sweet potato

**Cnaphalocrocis medinalis** (Gn.) Rice, corn, wheat, sorghum, sugarcane

**Cnaphalocrocis poeyalis** Boisduval Rice

**Coccus celatus** De Lotto Coffee, soursop

**Coccus hesperidium** Linnaeus Citrus, coconuts, bamboo, pawpaw, loquat, banana, tea, chilli, turmeric, yam, mango, avocado, cacao, breadfruit, aibika, horseradish tree, rosella, galip, breadfruit, jackfruit, guava, lemon, Tahitian chestnut, avocado, pawpaw, swamp taro, dye fig, soursop, bullock’s heart, sweet sorghum, taro, peanut, five corner, laulau, snake bean, candle nut, 

**Coccus longulus** (Douglas) Watery rose apple, Malay apple, coffee, citrus, tea, mango, pandanus, Tahitian chestnut, guava, Indian mulberry, pineapple, marrow

**Coccus viridus** (Green)

**Coelophora inaequalis** F. Lettuce, soybean,

**Coelophora ripponi** Crotch Corn

**Colaspis regulae** Jacoby Sweet potato

**Colgar tricolor** Dist. Aibika, chinese cabbage, sunflower, okra, avocado, cabbage, coffee, cacao, cashew,

**Colpocelis vignaphila** Bryant Common bean

**Compsolacon gracilis** Candeze Corn, sugarcane

**Conoderus mucronatus** Candeze Potato

**Conogonia sp.** Taro

**Conomorpha cramella** Snellen Cacao, rambutan

**Contarinia sorghicola** (Coq) Sorghum
Coproporus sp.
Coptoidea pygmaea Mont.
Coptoidea variegata Herrich-Schaffer
Coptotermes hyaloapex Holmg.
Coronacella kilakalai Muir
Cosmopolites sordidus (Germar)
Creatonotus gansis (L.)
Criniticoccus theobroma Williams
Criocerus sp.
Criocerus clarkii Baly
Criotioniades sp.
Criococcus theobroma Williams
Crocidolomia binotalis Zeller

Cryptophasa nitiotricha Meyr
Cryptophasa sp. nr arithmologia Meyrick
Cylas formicarius elegantulus (Summers)
Cyrtopeltis modestus
Bactrocera atrisetosus Perkins
Bactrocera bryoniae (Tryon.)
Bactrocera cucurbitae Coq
Bactrocera decipiens Drew
Bactrocera dorsalis Hendel
Bactrocera frauenfeldi Schiner
Bactrocera microstigma
Bactrocera musae (Try.)
Bactrocera neohumeralis Hardy
Bactrocera obliquus
Bactrocera papuanensis
Bactrocera peculiaris
Bactrocera striigifinis atritus May
Bactrocera trivialis Drew
Bactrocera tryoni Frogg
Bactrocera umbrosus (F)
Darada rubella Feld
Dasychira mendosa Hubn.
Deanolis albizonalis Hampson
Demonax collaris Pascoe
Dendrothripoides ipomoeae Bagn.
Dentilissus venosus Breddin
Depsages granulosa Guerin-Meneville
Deraecoris sp
Dermolepida nigrum (Non f.)
Dermolepida noxiwm Britton
Desmopterella sp.
Diacrissa niceta (Stal.)
Diacrisia papuana Roth.
Diaphania indica Saunders
Diapsis rutherfordi
Dichocrosis sp nr punctiferalis Guenee
Dieuches finitimus Van Duzee
Dimorphopterus cornutusis Slater
Dimyrmus pyrochrous Boisd.
Diocalandra taitense (Guer.)
Drepanococcus chiton (Green)
Duplaspidiotus claviger (Cockerell)

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Cabbage
Pigeon pea
Corn
Ton
Rice
Banana, yams
Corn
Cacao
Yam
Pumpkin
Potato, sweet potato
Cacao

Cabbage, Chinese cabbage, kohl rabi, broccoli, turnip, radish, Nasturtium schlechteri
Raintree
Malay apple
Sweet potato
Tomato
Zucchini, squash, marrow, cucumber, tomato
Banana, chili, capsicum, tomato, guava, pawpaw, nectarine
Pumpkin, zucchini, cucumer, rockmelon, citrus, corn, sunflower
Laulau, guava, mango
Banana, chilli, capsicum, tomato, guava, pawpaw
Pawpaw,
Corn
Pumpkin
Capsicum, grapefruit, peach, guava
Fig, tree tomato, passionflower, banana, laulau
Citrus, breadfruit,
Coconut
Hibiscus, potato, eggplant, cassava, soursop
Mango
Soybean
Sweet potato
Sugarcane
Pigeon pea
Taro
Banana
Taro
Sunflower
Portulaca
Banana
Pumpkin
Sugarcane
Wild ginger
Strawberry, (F. vesca),
Rice
Ginger
Coconut, nipa
Cacao, soursop, pawpaw
Citrus, fig
**Dysdercus cingulatus** (F.)
Okra, aibika, hisiscus, roselle, cowpea

**Dysdercus sidae** Mont.
Kapok, hibiscus

**Dysmicoccus boninensis** (Kuwana)
Sugarcane, coconut, pandanus

**Dysmicoccus brevipes** (Cockerell)
Pineapple, banana, peanut, mango, sugarcane, oil palm, coconut, coffee, Pandanus antaresensis, Pandanus, soursop, celery, apple, guava, lemon, pumpkin, Tahitian chestnut, amaranth, pigeon pea, sweet sot, chinese cabbage, sweet potato, soybean, java almond, breadfruit, kava, rice

**Dysmicoccus nesophilus** Williams
Grapefruit, sweet orange, cacao, breadfruit, Indian mulberry, candle nut, giant taro, lemon, mango, avocado, guava, pawpaw, dye fig

**Dysmicoccus papuanicus** Williams
Karuka, coconut

**Earias vittella** (F.)
Aibika, hibiscus, okra

**Ectatorhinus magicus** Gerstaecker
Galip

**Ectropis bhurmitra** Walker
Cacao, cassava, sweet potato, taro, peanuts, coffee

**Elassogaster lineata** de Meij
Sugarcane

**Elassogaster sepsoides** Walk.
Sugarcane

**Elaunon bipatitus** Kirby
Potato

**Enoplopteron ?heiroglyphicum** de Meij
Sugarcane, banana

**Epilachna cucurbitae** Richards
Cucumber

**Epilachna guttatopustulata** Fabricius
Taro

**Epilachna signatipennis** Boisd.
Sweet potato, rice bean, common bean, cowpea, lime bean, cucumber, aibika

**Epilachna vigintisexpunctata doryca** Boisd
Eggplant

**Erionota thrax** L.
Banana, coconut, oil palm, nipa palm

**Erythroneura sp.**
Winged bean

**Euborellia annulipes** Lucas
Peanut

**Eucalymnatus tessellatus** (Signoret)
Grapefruit, coconut, oil palm, mango, Indian mulberry, banana, pandanus, guava, tu-lip, cacao, Malay apple, candle nut, giant taro, Corn, coastal pitpit

**Euricania discigutta** (Walk.)
Eggplant

**Euconocephalus sp**
Coffee, cabbage, chinese cabbage, aibika, bean, corn

**Eudocima fullonia** Clerck
Citrus

**Eumetopina flavipes** Muir
Sugarcane

**Eumossula gracilis** Willemse
Coconut, banana

**Eupeneusta solena** Bradley
Sugarcane

**Eupholus cinnamoneus** Pasc.
Cassava, sweet potato yam, cashew, avocado,

**Eupholus nickeri** Hllr.
Cassava, sweet potato yam, cashew, avocado,

**Eupholus schonherri** Guer
Cassava, sweet potato yam, cashew, avocado,

**Euproctis sp**
Broccoli, okra, asparagus, apple, capsicum, winged bean

**Euricania tristicula** Stal
Citrus

**Euricania villica**
Sunflower, avocado, common bean, soursop,

**Euronotobrachys sp.**
Taro

**Euryphlepsia sp.**
Sugarcane

**Euscyrtus hemelytrus** (de Haan)
Lettuce

**Eysarcoris ventralis** West.
Rice

**Ferrisia consobrina** Williams
Tomato, cassava, potato

**Ferrisia virgata** (Cockerell)
Cassava, cacao, coffee, guava, citrus, avocado, hibiscus, leacaena, Erythrina, cashew, soursop, pumpkin, banana, bullock’s heart, breadfruit, tomato, lemon, swamp taro, ginger, sour orange, coconut, snake bean, cowpea, taro pawpaw

**Fiorinia coronata**
Nipa, coconut, pandanus

**Fiorinia fioriniae** (Targioni)
Avocado, coconut, citrus, tea, cycads
Ganae pulchella Pascoe
Geococcus coffeae Green
Gesonula mundata sanguinolenta Kraus
Glenea aluensis Gahan
Glyptoporopterus sharpi Faust.
Gonocephalum ochthebioides Ful.
Graphium agamemnon L.

Gryllotalpa africana Beav
Gymnopholus interpres Hllr.
Gymnopholus marquardti Hllr.
Gymnopholus weiskei Hllr.
Hapatesus tropicus Neboiss
Haptoncus sp nr concolor
Harpedona plana Poppius
Helicoverpa armigera Hubner
Helicoverpa assulta assulta Guenee
Helicoverpa punctigera Wallengren
Helopeltis clavifer (Walker)

Hemiberlesia lataniae (Signoret)
Hemiberlesia palmae (Cockerell)

Hemisphaerinus sp
Henosepilachna haemorrhoea (Biel)

Henosepilachna signatipennis Boisd

Heteropternis obscurella (Blanch)
Hexacentrus mundar Walker
Hippotion boerhaviae Fab.
Hippotion celerio (L.)
Homeoxipha fuscipennis
Homona coffearia Niet
Howardia biclavis (Comstock)

Hypolixus mastersi Pascoe
Hypolixus ritsemae Pasc.
Hyposidra talaca

Grauk, hibiscus
Taro
Taro, sugarcane, macadamia
Aibika, cacao
Taro
Radish
Custard apple, cherimoya, avocado, soursop, durian
Tomato, peanuts, sweet potato, rice
Raspberry
Raspberry
Yam
Sweet potato
Betel nut
Greater yam
Corn, tomato, capsicum, lettuce, rice, taro, pigeon pea, pea, bean, sweet potato, cabbage, subflower, okra, cacao, coffee

Helicoverpa assulta assulta Guenee
Helicoverpa punctigera Wallengren
Helopeltis clavifer (Walker)

Hemiberlesia lataniae (Signoret)
Hemiberlesia palmae (Cockerell)

Hemisphaerinus sp
Henosepilachna haemorrhoea (Biel)

Henosepilachna signatipennis Boisd

Heteropternis obscurella (Blanch)
Hexacentrus mundar Walker
Hippotion boerhaviae Fab.
Hippotion celerio (L.)
Homeoxipha fuscipennis
Homona coffearia Niet
Howardia biclavis (Comstock)

Hypolixus mastersi Pascoe
Hypolixus ritsemae Pasc.
Hyposidra talaca

Cacao, sweet potato, eggplant, snake bean, cashew, custard apple, mango, guava, passionfruit, Ficus sp., avocado, citrus, leucaena
Jackfruit, citrus, coconut, loquat, laulau, apple, cassava, swamp taro, avocado, madras thorn, guava, grapes, Indian mulberry, passionfruit, coffee, candle nut, five corner, cherry guava, cycads, yams
Soursop, sweet sop, bullock’s heart, breadfruit, jackfruit, pao nut, tea, citrus, coconut, turmeric, macadamia nut, mango, banana, avocado, cherry guava, guava, golden apple, cacao, chinese tara, pandanus, cardamom, vanilla, candle nut, cycads, yams, taro, laulau, Indian mulberry, passionfruit

Soursop
Pumpkin, cucumber, beetroot, spinach, common bean, winged bean, mung bean, soybean, eggplant, tomato, potato, ginger
Pumpkin, cucumber, beetroot, spinach, common bean, winged bean, mung bean, soybean, eggplant, tomato, potato, ginger,

Sugarcane, okra
Taro
Taro, sweet potato, grapevine
Potato, capsicum, sunflower, turnip, avocado, maize, okra, winged bean.
Soybean, pea, snake bean, velvet bean, peanut, mung bean, parsley, okra, eggplant, cucumber, sunflower, citrus, soursop
Tea, pawpaw, citrus, litchi, tomato, soursop, sweet sop, mulberry, pomegranate, rambutan, macadamia nut, Java almond, kava, sapodilla
Corn, yam
Sugarcane
Asparagus, common bean, yam, custard apple, soursop, avocado, coffee, tea, Malay apple
**Hypotactus ruralis** Fst.
**Icerya purchasi** Maskell
**Icerya seychellarum** (Westwood)

**Idiophantis chirodaeta** Meyr.
**Idiophantis eugeniae** Bradley
**Idopsis caerulea** Faust.
**Idopsis excellens** Faust.
**Idopsis grisea** Faust.
**Idioscopus clypealis** (Leth.)
**Idioscopus niveosparsus** (Leth.)
**Ischiopsopha bifasciata** Quoy & Gaim var. hyla Heller
**Ischiopsopha ignatipennis** Boisd
**Ischnaspis longirostris** (Signoret)
**Kilifia acuminata** (Signoret)

**Kolla sp.**
**Lacocoptera impressa** Blanchard
**Lagria sp.**
**Laingiococcus painei** (Laing)
**Lampides boeticus** L.

**Lamprosema charesalis** Walker
**Lasiodactylum notabilis** Oliff
**Lema papuana** Jac.
**Lema variator** Gres.
**Lema wauensis** Gres.
**Lepidota reuleauxi** Brenske
**Lepidosaphes beckii** (Newman)
**Lepidosaphes gloverii** (Packard)
**Lepidosaphes karkarica**
**Lepidosaphes rubrovittata** Cockerell
**Lepidosaphes tokionis** (Kuwana)
**Leptococcus metroxyli** Reyned
**Leptocorisa acuta** (Thunberg)
**Leptocorisa discoidalis**
**Leptocorisa oratorius** (Fab.)
**Leptocorisa palawanensis**
**Leptocorisa solomonensis** Ahmad
**Leptoglossus australis** (Fab.)

**Leptothea ciskii** Weise
**Leucoptera psophocarpella** Brad & Cart
**Licyllus albicollis** Fab.
**Liliocerus sp nr bakewelli** Baly
**Liliocerus papuana** (Jac.)

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**Cassava**
**Citrus, pigeon pea**
Bullock’s heart, sweet sop, soursop, breadfruit, jackfruit, citrus, Tahitian chestnut, apple, banana, guava, five corner, mango, steeng, avocado, pomegranate, grapes, wild ginger, giant taro, paper mulberry, chilli, yam, mango, Chinese taro, pigeon pea, lablab bean, common bean, coconut, Surinam cherry, Malay apple, feijoa, strawberry, red raspberry, sweet potato, lettuce, litchi, macadamia nut, monsteria, mulberry, pandanus, radish, golden apple, blackberried nightshade, tomato, pepper, Polynesian arrowroot, betel nut, sapodilla, oil palm, dye fig, cinnamon, eggplant, pawpaw.

**Laulau**
**Potato, chilli**
**Sweet potato**
**Passionfruit, citrus, sweet potato, avocado**
**Mango**
**Mango**
Pawpaw

**Coconut**
Persimmon, coffee, *Guillemia gasipaes*, mango,
Citrus, Malay apple, mango, breadfruit, cinnamon,
Passionfruit, sweet potato

**Apple, mulberry**
Citrus, soursop, coconut, fig, cacao, *Maesa sp.*
Snake beans, pigeon pea, mung bean, cowpea, peas, winged bean,
Banana

**Ginger**
**Sugar cane**
**Citrus**
Giant taro, citrus, kumquat, coconut

**Fig, Tahitian chestnut, Malay apple,**
**Citrus**
Sago, pineapple, coconut
**Rice, betel nut, amaranth, sugar cane, beans**
**Rice, betel nut, amaranth, sugar cane, beans**
**Rice, betel nut, amaranth, sugar cane, beans**
**Rice, betel nut, amaranth, sugar cane, beans**
**Rice, betel nut, amaranth, sugar cane, beans**
**Pumpkins, zucchini, cucumber, rock melon, bitter cucumber, granadilla, cassava, sweet potato, taro,**
**Yams, passion fruit, tomato, citrus**

**Pumpkin**
**Winged bean**
**Eggplant**
**Yam**
**Yam**
Locusta migratoria (Linn.)
Lopholeucaspis baluanensis
Lophops saccharicida Kirk.
Lophotectes penicilliger (Heller)
Lygaeus sp.
Lygaeus hospes Fabr.
Lymnantria rosina Pag.
Lyriomyza brassicae (Riley)
Machaerota humboldti
Maconellicoccus hirsutus (Green)
Macrosiphum euphorbiae (Thomson)
Maculicoccus malaitensis (Cockerell)
Maliarpha separatella Rag.
Mampava bipunctella Rag
Marasemia bilinealis Hampson
Marasemia hexagona
Marasmius venilalis Walker
Maruca vitrata Fabricius

Megalurothrips usitatus Bagnall
Megalamerus sp.
Megymenum papuense
Meijerella inaequalis Becker
Melacanthus argineguttatus
Melanesicoccus kleinioviae Williams
Melanaphyus clypealis Arrow
Melanitis constantia Cramer
Melanitis ledabankia F.
Meninda bisignata Walker
Menochilus sex-masculatus Fab.
Meredolus sp.
Meredolus cocotis Marshall
Meroleptus cinctor Marshall
Metrania papuana
Metronia sp
Mictis profana F.
Microtermes biroi Desneaux
Milviscutulus ciliatus Williams
Milviscutulus mangiferae (Green)

Milviscutulus pilosus Williams
Milviscutulus spiculatus Williams
Monolepta nigroapicata Bry.
Monolepta semivialacea Fab.
Monolepta sp nr bifasciata Hornstedt
Morganella longispina (Morgan)
Mulciber linnaei Thoms
Mutabilicoccus simmondsi (Laing)
Mutabilicoccus vanhurni (Reyne)
Mycalesis asophis Hew
Mythimna loreyi (Dup.)
Mythimna separata (Walk.)
Mythimna unipuncta Haworth
Myzus ornatus Laing

Banana, sugarcane, corn, rice, pineapple, bamboo
Citrus
Sugarcane
Coconut
Silver beet
Guava
Cabbage, Chinese cabbage, radish, broccoli, turnip
Okra, turnip, sugarcane, sunflower
Hibiscus, mulberry, grapes, pineapple, cacao, aibika, breadfruit
Potato, tomato, capsicum, eggplant, sweet potato, papaw, pumpkin, lettuce
Tahitian chestnut, coconut, cacao, citrus
Sugarcane, rice
Sorghum
Rice
Rice
Lima, snake, mung, adzuki, rice bean, snake bean, cowpea, winged bean, soybean, velvet bean, pigeon pea
Mung bean, peanut, soybean, lima bean
Bitter cucumber, marrow
Ginger, rice,
Mung bean
Kleinhovia hospita
Taro
Sugarcane, corn
Rice, sugarcane, corn, sorghum
Rice
Corn
Betel nut
Coconut
Strawberry
Sweet potato
Pigeon pea, citrus, pumpkin
Coconut
Guava
Breadfruit, sweet orange, jackfruit, coconut, Ton, Java almond, tu-lip, Malay apple, Dye fig, mango, monsteria, Indian mulberry, avocado.
Coconut
Indian mulberry, mango, avocado
Corn, mung bean, pumpkin, sweet potato
Cucumber, potato, pumpkin, sweet potato
Cassava
Citrus, pawpaw, laulau, avocado
Sugarcane
Coconut, betel nut, oil palm
Cacao, breadfruit
Sugarcane, rice, corn, sorghum
Rice, corn, sugarcane
Sugarcane
Potato
Myzus persicae Sulzer
Potato, cabbage, taro, chilli, sugarcane, bean, citrus, tomato

Nacoleia octasema (Meyrick)
Banana, nipa, pandanus

Nagia episcopalis Hampson
Okari

Neomaskella bergii (Signoret)
Sugarcane

Neoplatyolecanium sp.
Tahitian chestnut

Neosaissetia keravatae Williams
Pepper

Neotermes sp.
Onion, shallot, chives, leek

Nezara viridula (Linnaeus)
Winged bean, rice bean, soybean, broad bean, mung bean, snake bean, okra, tomatoes, rice

Nilaparvata lugens Haseg
Rice

Nipaecoccus vastator (Mask.)
Citrus, coffee

Nipaecoccus viridus (Newstead)
Asparagus, citrus, aibika, mango, pomegranate, Taro

Nisia sp.
Aibika

Nisotra basselae Bry
Aibika

Nisotra obliterata Jacoby
Okra, hibiscus

Nyctemera baulus Boisduval
Cabbage, taro, winged bean

Nysius epiensis (Motsch.)
Beans, peanuts

Nysius femoratus Van Duzee
Taro

Nysius villicus Van Duzee
Sunflower, lettuce, potato, sweet potato

Odonaspis ruthae Kotinsky
Hibiscus, nipa

Odonaspis saccharicaulis (Zehntner)
Sugarcane

Olethreutes (Argyroplace) sp.
Pao

Omiodes blackburnii Butler
Coconut, banana

Omiodes diemenalis Guenee
Bean, peanut, soybean, winged bean, cowpea, snake bean, mung bean, velvet bean, pigeon pea

Omiodes indicata Fabricius
Bean, peanut, soybean, winged bean, cowpea, snake bean, mung bean, velvet bean, pigeon pea

Omphisa anastomosalis Guenee
Sweet potato

Omphisa spp.
Sugarcane

Onchyroterca concursa Walker
Bean, sweet potato

Onthophagus latinasutus Arrow
Radish

Onthophagus sp nr pupensis Harold
Cabbage

Opogona fumiceps
Beans

Opogona saccharella
Hibiscus, banana, cassava, taro, citrus, sunflower, avocado, cashew, macadamia, passionfruit, corn, pumpkin, asparagus, rhubarb, strawberry, silver beet, amaranth, Rungia, soursop, snake bean, mung bean, lima bean

Oribius cruciatus Fst.
Hibiscus, banana, cassava, taro, citrus, sunflower, avocado, cashew, macadamia, passionfruit, corn, pumpkin, asparagus, rhubarb, strawberry, silver beet, amaranth, Rungia, soursop, snake bean, mung bean, lima bean

Oribius destructor Mshl.
Hibiscus, banana, cassava, taro, citrus, sunflower, avocado, cashew, macadamia, passionfruit, corn, pumpkin, asparagus, rhubarb, strawberry, silver beet, amaranth, Rungia, soursop, snake bean, mung bean, lima bean

Oribius improvidus Marshall
Hibiscus, banana, cassava, taro, citrus, sunflower,
avocado, cashew, macadamia, passionfruit, corn, pumpkin, asparagus, rhubarb, strawberry, silver beet, amaranth, *Rungia*, soursop, snake bean, mung bean, lima bean

*Oribius inimicus* Mshl.  
Hibiscus, banana, cassava, taro, citrus, sunflower, avocado, cashew, macadamia, passionfruit, corn, pumpkin, asparagus, rhubarb, strawberry, silver beet, amaranth, *Rungia*, soursop, snake bean, mung bean, lima bean

*Orinaeme sp.*  
Sugarcane

*Orosius argentatus* Evans  
Taro, peanuts, tomato

*Orthaca cincticornis* Walk.  
Corn

*Oryctes centaurus* Sternb  
Coconut

*Oryctes rhinoceros* (L.)  
Coconut, pandanus, sago, nipa, oil palm, sugarcane, taro, banana

*Ostrinia furnacalis* (Guen)  
Corn, rice

*Oxya gavisa* (Walk.)  
Strawberry, peanut

*Oxya japonica* (Thnb.)  
Sugarcane, rice, corn, coconut, cacao, coffee

*Oxya vittigera* (Blanch)  
Sugarcane, rice, corn

*Oxyderes cyrtus* Jordan  
Pawpaw

*Pachyrhizus erosus* Horv.  
Beans, rice, sugarcane

*Palmicula browni* (Williams)  
Coconut, oil palm

*Pamara amalia* Semper  
Coconut, taro, Chinese taro, Giant taro, bananas, sweet potato, pitpit, coconut, sago, sugarcane, potato, peanuts

*Papuanella sp.*  
Mandarin

*ParaBactrocera perplexus*  
Pumpkin

*Paraputo leveri* (Green)  
Taro coffee, coconut

*Parasaissetia nigra* (Nietner)  
Cassava, aibika

*Parastasia guttulata* Fairm.  
Coastal pitpit, jackfruit

*Paratella miniata* Mel.  
Avocado, cacao

*Parlatoria crotonis* Douglas  
Pandanus, coconut, Tahitian chestnut

*Parlatoria proteus* (Curtis)  
Macadamia nut, cacao, citrus, coffee

*Paromius gracilis* Rambur  
Sorghum

*Patanga sp.*  
Sugarcane

*Pelopidas agna dingo* Evans  
Rice
Penicillaria jocosatrix Guenee  Mango
Pentalonia nigronervosa Coq  Banana, taro, ginger
Perissopneum Ashm.  Corn, sugarcane, sorghum
Perkinsiella bicaloris  Avocado, guava, Java almond
Perkinsiella boreon Fennah  Sugarcane
Perkinsiella bulli Fennah  Sugarcane
Perkinsiella diagoras Fennah  Sugarcane
Perkinsiella falcipennis Fennah  Sugarcane
Perkinsiella lalokensis Muir  Sugarcane
Perkinsiella macrinus Fennah  Sugarcane
Perkinsiella mycon Fennah  Sugarcane
Perkinsiella papuensis Muir  Sugarcane
Perkinsiella rattlei Muir  Sugarcane
Perkinsiella saccharicida Kirkaldy  Sugarcane
Perkinsiella sinensis Kirkaldy  Sugarcane
Perkinsiella thompsoni Muir  Sugarcane
Perkinsiella vastatrix (Breddin)  Sugarcane
Phaciocephalus sp.  Sugarcane
Phaneroptera brevis Serv.  Sugarcane
Pharotes torvus Mshl.  Taro
Philia femorata Walk.  Peanut
Phodoryctis caerulea Meyrick  Cowpea
Plomesa sp.  Cabbage
Phthorimaea apercuella (Zell.)  Potato, tomato, cape gooseberry, blackberried nightshade
Phyllocnistis citrella Staint  Citrus
Phyllocnistis sp.  Winged bean
Phyllophora boshmai de Jong  Karuka
Piezodorus rubrofasciatus Fab.  Mung bean
Pinnaspis aspidistrae (Signoret)  Coconut, oil palm, Tahitian chestnut, banana, pandanus, tomato, taro, eggplant, Java almond
Pinnaspis buxi (Bouche)  Tanget, tomato, ceriman (monstera), betel nut, coconut, taro, bitter cucumber, jackfruit, citrus, banana, pao nut, Tahitian chestnut, Indian mulberry, galip nut, pandanus.
Pinnaspis strachani (Cooley)  Candle nut, avocado, soursop, bullock’s heart, breadfruit, capsicum, citrus, coconut, taro, tanget, pumpkin, yams, persimmon, oil palm, aibika, Tahitian chestnut, tomato, cassava, Indian mulberry, banana, pandanus, eggplant, Java almond, grapes, ginger, litchi, Fei banana
Planococcus citri (Risso)  Grapefruit, sweet orange, lemon, pomelo, pumpkin, swamp taro, sweet potato, basil, avocado, guava, yam, cacao, coffee, leucaena, passionfruit, fig, yam,
Planococcus dioscoreae Williams  Yam, chinese taro
Planococcus lilacinus (Cockerell)  Sweet sop, soursop, five corner, lemon, mango, cacao, citrus
Planococcus pacificus Cox  Candle nut, giant taro, amaranth, cashew, pineapple, soursop, sweet sop, bullock’s heart, celery, peanut, breadfruit, jackfruit, asparagus, betel nut, chinese cabbage, cabbage, paper mulberry, pigeon pea, galip, capsicum, watermelon, citrus, taro, coconut, coffee, taro,
pumpkin, yam, laulau, soybean, Tahitian chestnut, aibika, sweet potato, tomato, passionfruit, macadamia, mango, Indian mulberry, mulberry, banana, basil, Pandanus, beans, ton, guava, winged bean, radish, sugarcane, eggplant, potato, golden apple, Java almond, cacao, cowpea, Chinese taro, corn, ginger.

**Platylecanium cocotis** Laing
- Coconut, betel nut

**Platypeltocoris similis** Popp
- Yam

**Platystomus wallacei** Pascoe
- Pigeon pea

**Platyscynops griseus** Breuning
- Capsicum, snake bean, sunflower, sugarcane

**Plautia brunneipennis** (L.)
- Cabbage, turnip, broccoli, Kohlrabi, Brussels sprouts, Chinese cabbage, *Nasturtium schlechteri*, Pigeon pea

**Polyomatus boeticus** (L.)
- Pigeon pea

**Prodromopsis oculatus**
- Banana

**Pluteus crassipes** Csiki
- Coconut, nipa, sago, betel nut, oil palm

**Plutella xylostella**
- Corn

**Polyomatus boeticus**
- Pigeon pea

**Polyomatus boeticus**
- Pigeon pea

**Psammomus sp.**
- Cassava

**Psammoponacis cockerelli** (Cooley)
- Coconut, pawpaw, mango

**Psammoponacis pentagona** (Targioni)
- Cassava, aibika, capsicum, breadfruit, pawpaw, okra, soybean, tomato, common bean, Indian mulberry, passionfruit, granadilla, coconut

**Psammoponacis saccharicola** Takahashi
- Cabbage, tomato, banana, lime, cassava

**Psammoponacis solomonensis** Williams
- Lemon, orange, pomelo; sour sop, breadfruit, banana, cacao, cashew, pineapple, coffee, taro, giant taro, potato, grapes, mango, elephant foot yam, Chinese taro

**Psammoponacis solomonensis**
- Rice, sugarcane

**Psammoponacis solomonensis**
- Coffee, galip, banana, cacao

**Psammoponacis solomonensis**
- Avocado

**Psammoponacis solomonensis**
- Betel nut, coconut

**Psammoponacis solomonensis**
- Spinach, eggplant

**Psammoponacis solomonensis**
- Tomato

**Psammoponacis solomonensis**
- Snake bean, sweet potato, pumpkin

**Psammoponacis solomonensis**
- Granadilla

**Pseudepomastus parvulus**
- Pigeon pea

**Pseudepomastus parvulus**
- Cacao

**Pseudepomastus parvulus**
- Sugarcane

**Pseudepomastus parvulus**
- Chilli, citrus, coffee, Indian mulberry, pandanus, guava, cherry guava, tea, kava, pomegranate, taro, Malay apple, monstera, ton, *Ipomoea tuba*, Chilli, giant taro, monstera, cape gooseberry, tomato, litchi, parsley, pineapple, capsicum, eggplant, blackberried nightshade

**Pseudepomastus parvulus**
- Grapes

**Pseudepomastus parvulus**
- Guava

**Pseudepomastus parvulus**
- Cardamom

**Pseudepomastus parvulus**
- Coconut, mangrove

**Pseudepomastus parvulus**
- Citrus, guava, coffee

**Pseudepomastus parvulus**
- Pawpaw, coconut, banana, sago palm, oil palm

**Pseudepomastus parvulus**
- Highlands kapiak

**Pseudepomastus parvulus**
- Soybean

**Pseudepomastus parvulus**
- Pawpaw

**Pseudepomastus parvulus**
- Lemon
Rhopalosiphum maidis (Fitch)
Citrus, corn, rice, sugarcane, millet,
Rhynchophorus bilineatus (Montr.)
Coconuts, sago, oil palm, fishtail palm
Rhynchophorus ferrugineous (Oliv.)
Coconuts, sago, oil palm, fishtail palm,
Rhynchortaia wallacci Crotch
Citrus
Rhyaparida cacaona Gressitt
Rhynchophorus bilineatus
Coconuts, sago, oil palm, fishtail palm, mango
Rhynchophorus ferrugineous
Coconuts, sago, oil palm, fishtail palm
Rhynchortalia wallacii Crotch
Citrus
Rhynapida cacaona Gressitt
Rhynapida coriacea Jac.
Rhynapida ?fasciata Baly
Rhynapida morosa Jac
Rhynapidae casuarinae
Rhynapidae sobrina Bryant
Rhynapidae wauensis
Citrus
Ricanula puncticosta
Riptortus annulicornis Boisd.
Winged beans, snake beans, mung beans, soybeans,
lime beans, peas, common bean
Riptortus imperialis Kirk
Winged beans, snake beans, mung beans, soybeans,
lime beans, peas, common bean
Riptortus obscuricornis Dallas
Winged beans, snake beans, mung beans, soybeans,
lime beans, peas, common bean
Riptortus rubronotatus Blote
Winged beans, snake beans, mung beans, soybeans,
lime beans, peas, common bean
Ropica honesta Pascoe
Rosenbergia weiskei Heller
Saccharicoccus sacchari (Cockerell)
Sugarcane, sorghum, rice
Saccolaemus longiceps Pascoe
Saissetia coffeae (Walker)
Saccolaemus longiceps Pascoe
Saissetia coffeae (Walker)
Saissetia miranda (Cockerell & Parro)
Saissetia neglecta De Lotto
Sangicoccus truncatispinus (Reyne)
Scapanes australis australis Boisd.
Coconut, oil palm, pineapple, banana
Scapanes australis grossepunctatus Stern
Coconut, oil palm, pineapple, banana
Schizenteraspis silvicola
Pandanus
Sciphyrus diminutus Horvath
Sweet potato
Scirpophaga excerptalis (Walker)
Sugarcane
Scirpophaga innotata (Walker)
Rice
Scirpophaga innotata (Walker)
Sugarcane
Sclifikophthalmus sp
Mango, cashew, banana
Scopelodes dinawa B.Bak
Mango, cashew, banana
Scopelodes nitens B.Bak.
Coconuts
Segestes decoratus Redt.
Coconuts
Segestina defoliatrix defoliatrix Ulvavov
Coconuts, karuka, banana, oil palm
Segestina gracilis (Willems)
Coconuts, karuka, banana, oil palm
Segestina hanoverana Willems
Coconuts, karuka, banana, oil palm
Segestina uniformis (Willems)
Coconuts
Segestina insulana Willems
Coconuts, karuka, banana, oil palm
Segestina leefmansi (Willems)
Coconuts, karuka, banana, oil palm
Segestina montana Willems
Coconuts, karuka, banana, oil palm
Segestina novaehuineae Brancsik
Coconuts, pandanus
Segetes cornelii Willems
Coconut
Segetes gracilis
Selenothrips rubrocinctus (Giard)
Cacao, cashew, mango, avocado, apple
Senoclidia purpurata (F.Sm.) — Yam

Sesamia arfaki Bethune-Baker

Sesamia grisescens Warren

Sesamia inferens (Walker)

Silba sp.

Simodactylus sp

Simplicia caenealis Walker

Sogatella furcifera Horvath

Solephyma papuana

Sparganobasis suberuciatus Marsh.

Spilosoma owgarra Bethune-Baker

Spirocaria bissellata Mulsant

Spodoptera exempta (Walker)

Spodoptera litura (Fabricius)

Spodoptera mauritia (Boisduval)

Spoladea recurvalis Fabricius

Steatococcus samaraius Morrison

Stenocatantops augustifrons (Walker)

Stephanitis typica (Distant)

Strumeta barringtoniae (Tryon.)

Strumeta bryoniae (Tryon.)

Strumeta recurvens Her.

Syllepte derogata Fabricius

Symphilites sp.

Syncrotus (Syncrotellus) similis Ghauri

Syntherata janetta White

Tabidia insuratis Snell

Taenaris butleri Oberth

Taenaris dimona Hew

Taenaris myops kirschii Stgr.

Tagiades obscurus tindali Rbb

Tagiades trebellius canonicus

Tagiades tregellius Hopf.

Tarophagus colocasiae

Tarophagus persephone

Tarophagus proserrpina (Kirk)

Tauchiridea adusta Bolivar

Teleclita strigata cinnamomea Rothsch.

Teleogryllus commodus Wlk.

Telostylinus sp.

Terentius nubifasciatus Walker

Tetrameura nigeriabdominalis (Sas.)

Tetramychus marianae McGregor

Tettigilla pasiphae Kirk

Tettigilla sp.

Theretra nessus Dry

Theretra oldenlandiae Fab.

Theretra pinastrina intersecta

Thosea sinensis (Walk.)

Thressa punctifera de Meijere

Thrips tabaci Lind.

Senoclidia purpurata (F.Sm.) — Yam

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Sesamia grisescens Warren

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Theretra oldenlandiae Fab.

Theretra pinastrina intersecta

Thosea sinensis (Walk.)

Thressa punctifera de Meijere

Thrips tabaci Lind.

Senoclidia purpurata (F.Sm.) — Yam

Sesamia arfaki Bethune-Baker

Sesamia grisescens Warren

Sesamia inferens (Walker)

Silba sp.

Simodactylus sp

Simplicia caenealis Walker

Sogatella furcifera Horvath

Solephyma papuana

Sparganobasis suberuciatus Marsh.

Spilosoma owgarra Bethune-Baker

Spirocaria bissellata Mulsant

Spodoptera exempta (Walker)

Spodoptera litura (Fabricius)

Spodoptera mauritia (Boisduval)

Spoladea recurvalis Fabricius

Steatococcus samaraius Morrison

Stenocatantops augustifrons (Walker)

Stephanitis typica (Distant)

Strumeta barringtoniae (Tryon.)

Strumeta bryoniae (Tryon.)

Strumeta recurvens Her.

Syllepte derogata Fabricius

Symphilites sp.

Syncrotus (Syncrotellus) similis Ghauri

Syntherata janetta White

Tabidia insuratis Snell

Taenaris butleri Oberth

Taenaris dimona Hew

Taenaris myops kirschii Stgr.

Tagiades obscurus tindali Rbb

Tagiades trebellius canonicus

Tagiades tregellius Hopf.

Tarophagus colocasiae

Tarophagus persephone

Tarophagus proserrpina (Kirk)

Tauchiridea adusta Bolivar

Teleclita strigata cinnamomea Rothsch.

Teleogryllus commodus Wlk.

Telostylinus sp.

Terentius nubifasciatus Walker

Tetrameura nigeriabdominalis (Sas.)

Tetramychus marianae McGregor

Tettigilla pasiphae Kirk

Tettigilla sp.

Theretra nessus Dry

Theretra oldenlandiae Fab.

Theretra pinastrina intersecta

Thosea sinensis (Walk.)

Thressa punctifera de Meijere

Thrips tabaci Lind.
Thysanoplusia orichalcea Fabricius

Tiracola plagiata (Walker)

Tiracola rufimargo
Tirathaba rufivena Walk.
Toxoptera aurantii B.de Fonse.
Toxoptera citricidus (Kirk)
Trachycentra chlorogramma Meyrick
Trachylepidia fructicassiella Ragonot
Trichogomphus excavatus Mohinke
Trichogomphus semmelinki Rits
Trochorhopalus strangulatus Gyllenhall
Trypopsilopa chinensis Weidmann
Unaspis citri (Comst.)
Valanga irregularis (Walker)
Valanga nigricornis (Burm.)
Valanga sp.
Vinsonia stellifera (Westwood)
Xanthodes transversa Guenee
Xyleborus exigus Walk.
Xyleborus perforans (Wollastan)
Xyleborus potens Schedl.
Xyleutes ceramicus Walker
Xylotrupes spp.
Zeuzera coffeae Nietner
Zophiuma lobulata Ghauri
Zigina sp
Zigina medioborealis Ghauri
Zizina otis (F.)

Cabbage
Eggplant, tea, banana, lima beans, common beans, winged bean, cassava, castor oil, cacao, maize, pumpkin, watermelon, cabbage, cauliflower, tomato, cape gooseberry, passionfruit, beetroot, pawpaw, pigweed, amaranths, spinach, leucaena, bitter cucumber, fig, taro, sweet potato, mulberry.

Apple
Coconut, nipa, oil palm, betel nut, bananas, bean
Citrus, fig, persimmon, loquat
Citrus, fig, persimmon, loquat
Karuka, marita
Sugarcane
Coconut
Sugarcane, banana
Rice
Citrus, aibika
Citrus
Rice
Sugarcane, rice, pepper, chinese cabbage, aibika
Pomelo, mango, coconut, Malay apple
Okra, hibiscus, aibika, roselle
Coconut
Sugarcane, coconut, citrus, breadfruit
Avocado
Chilli, coffee, tea
Coconut, granadilla
Winged bean
Sweet potato
Pigeon pea, snake bean, soybean, winged bean
References about insect pests

In this book for each insect pest described references are given to enable further study. The first author’s surname is listed along with the page number in the reference on which the pest is discussed. The following is a complete list of the references used.

Burns, Australian Butterflies in Colour (Reed). p 60


Child, Butterflies of Australia.

CIE Distribution map No


CSIRO Insects of Australia

DAL Entomology Bulletin No.

Encyclopaedia of PNG


Grist, & Lever. 1969, Pests of Rice Longmans.

Harvest Quarterly

Hassan, E., Major Insect and Mite Pests of Australian Crops.


Hill, D.S., 1975, Agricultural Insect Pests of the Tropics & their control. CUP.


Holloway, J.D. et al, 1984, Lepidoptera CIE Guides to Insects of Importance to Man. CABI

Insect Pests of New Zealand

Insects of Hawaii Vol 8

Insects of Micronesia Vol 17 No 1


Kranz, 1977, Diseases, Pests and Weeds of Tropical crops


Mayflower. Illustrated Encyclopaedia of Moths and Butterflies

O'Connor, B.A., Exotic Plant Pests and Diseases. SPC Section on crops.


PANS manual No.2. Pest Control in Groundnuts.


Perry, in Enyi (ed), Ag in the Tropics. UPNG


SPC Technical Paper No 145. The Banana Scab Moth.


Swain, G., 1971, Ag Zool in Fiji. HMSO

Thistleton, B.M. and Masamdu, R.T., 1985, Surveys of Insects associated with food crops in Three study areas in the Southern Highlands Province. DPI Research Bulletin 36


Williams, D.J. and Watson, G.W., The Scale Insects of the Tropical South Pacific Region. Part 1. The Armoured Scales. CAB IIE

Williams, D.J. & Watson, G.W., The scale insects of the South Pacific. Part 2 Mealybugs. CAB

Williams, D.J. & Watson, G.W., 1990, The Scale Insects of the Tropical South Pacific Region. Part 3 The Soft Scales. CAB.

Wood, Cocoa. Tropical Agriculture Series. Longmans.
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