Clivias are a very hardy group of plants. They are rarely troubled by pests and diseases and enjoy growing where few other flowering plants enjoy it—in a dry shady spot in the garden or in pots.

Clivias produce orange or yellow flowers in a huge variety of forms as shown here at the Toowoomba Clivia Show in Toowoomba TAFE 2010

There are however a few pests that may occasionally cause problems including one recently discovered by Toowoomba horticulturist Ron May. The main pests of Clivias are

- Lily borers (Brithys crini and Spodotera picata)
- Banana Fruit Caterpillar
- Mealy bug

Lily borers cause problems in Clivia by boring into the growing points of the plant and causing soft rots in the crown of the plant. As they are the larval stage of a moth control with chemicals registered for use on caterpillars will be effective. Professional growers will also usually treat infected plants with Sulphur to help prevent fungal attack that results from attack.
Banana Fruit Caterpillar was recently discovered to be a pest in Clivias by Toowoomba horticulturist and keen photographer Ron May. Ron prepared the article below which he kindly allowed for reproduction in this fact sheet.

**A recent noctuid to Toowoomba, Qld - the Banana Fruit Caterpillar (**Tiracola plagiata**)(Lepidoptera: Noctuidae) - Ron May**

The temperate climate of Toowoomba is ideal for growing the plant genus Clivia. This perennial is cultivated extensively throughout the Toowoomba area.

Unfortunately there were two species of Lepidoptera, *Brithys crini* and *Spodoptera picta* that can be destructive pests of plants within the Amaryllidaceae family. Now there are three.

![Tiracola plagiata larva on Clivia](image1)

In late winter of 2010, while inspecting damage to my Clivia plants, I captured several caterpillars and reared these to adult moths. Different foods were used as an experiment. Clivia, rose, banana skins and capsicum were devoured.

Ted Edwards graciously identified this noctuid as *Tiracola plagiata*, which in Asia is known to have been recorded feeding on 26 different families of host plants. In Australia, it is found from Wollongong NSW north into Queensland.

Photos Ron May


Editor’s note: See *Metamorphosis Australia* No. 55, “The First Record of *Tiracola plagiata* feeding on *Pararistilochia praevenosa*” by Hilton Selvey.

![Tiracola plagiata adult](image2)

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Treatment options as for lily borer on page 1.
**Mealy bug**

Mealybugs belong to the same group of insects as scale and aphids. They are a very common pest of indoor plants and plants growing in warm, humid, sheltered sites away from adverse environmental conditions and natural enemies. Mealybugs are so named because many of the known species are covered in a whitish ‘mealy’ wax, which helps retard the loss of water from their soft bodies. Mealybugs can build up in huge numbers in a very short time and cause considerable damage. They feed by inserting their straw-like mouthparts, known as ‘stylets’, into plant tissue. Feeding damage can be either by direct removal of plant fluids and nutrients, and/or by the excretion of toxic salivary compounds into plant tissue. Black sooty mould which grows on the waste product (honeydew) of Mealybugs is often the first sign that Mealybugs have taken up residence. Ants may also act as farmers of Mealybugs as they are actively fed honeydew by some species of mealybug.

The real problem with controlling mealy bugs is that they are so well hidden down in leaf axils and also often on the root systems of plants. This means that they tend to be difficult to knock down with any type of sprays (organic or more toxic sprays).

**Control**

Because mealybugs have high reproductive capacities and multiple generations in a year, they have the potential to become resistant to pesticides very quickly. The use of stronger and stronger pesticides breeds more and more resistant Mealybugs, until the stage is reached where efficient and practical chemical control of the pest is no longer possible. Fortunately mealybugs can be controlled using ‘soft’ methods including biological agents and low-toxicity pesticides, most of which are readily available to the horticultural industry and the home gardener. Confidor, oils sprays and pyrethrum based sprays are registered for use. For information on biological control agents such as predatory ladybirds and parasitic wasps contact Australasian Biological Control Association on the free call number 1800 000 160.


**Summary**

Clivias rarely need treatment for pests and diseases but watch out for stem borers, banana fruit caterpillars and mealy bugs.