Swarming Bugs (family Lygaeidae)

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During the dry season there are various swarms of native 'sucking bugs' that appear in Darwin, Palmerston and Katherine as well rural areas of the Top End. Three common swarming bugs noticed in the dry season are *Graptostethus servus*, *Oxycarenus luctuosus* and *Remaudiereana nigriceps*.

Graptostethus servus

Graptostethus, also known by local growers as 'Crusader' bugs generally start swarming onto rural properties in early May. *Graptostethus* are sap-sucking bugs that are about 9 mm long, orange/red in colour and have black and orange markings on the back in a 'cross' pattern.

These bugs are sap-suckers but do not feed on fruit trees or vegetables. They usually feed on seed pods of native legumes, grasses or weeds. When these bugs swarm, they generally do not feed but may cause physical damage by breaking off stems or cause scratch marks on leaves, flowers or fruit by moving on the plants in such large numbers.

In the dry season, these bugs tend to swarm into orchards or on rural blocks and may stay for 2-8 weeks, or longer. They occur in large swarms and rest on fruit trees, ornamentals, vegetables and native trees. The bugs are attracted to moisture from irrigation, dew or rain. Although these bugs do not feed on fruit or vegetable crops, they occasionally cause indirect damage (seen as pin-prick spots) by feeding on moisture found on fruit, shoots or flowers. Besides their need for water, they also like to form large groups to aggregate and mate. At night these bugs are attracted to lights from houses or verandahs.



Graptostethus photo: H Brown



Graptostethus swarm photo: M. Neal

Oxycarenus luctuosus (Cottonseed bug) and Remaudiereana nigriceps (Seed bug)

Oxycarenus and Remaudiereana are small black bugs with membranous wings. Oxycarenus is usually 3-4 mm in length and Remaudiereana are slightly larger, about 4-5 mm in length. The swarms are seen during the early dry season (April, May and June) but can also be seen at other times of the year.

Oxycarenus feeds on seeds and fruit of hibiscus, cotton and other native malvaceous plants and weeds. Occasionally, Oxycarenus may be found aggregating on cultivated plants and may cause physical damage from their sheer numbers. In New South Wales they have been noticed to cause



damage to fruit trees especially stone fruit where they suck the sap from young fruit causing them to shrivel or exude gum. Feeding on ripening fruit causes dried discoloured patches.

Remaudiereana feeds on a range of native plant seeds lying on the ground as well as grasses and weeds. This species does not feed on live plants, however, there has been incidences of stems breaking off from the weight of sheer numbers of *Remaudiereana* aggregating on nursery plants.

Both species are attracted to lights at night and can be seen in huge numbers in and around houses as well as on rural properties and in orchards. The swarms may aggregate for several weeks depending on the suitability of the site. *Remaudiereana* has been noticed to swarm in huge numbers in the Darwin rural areas in the early dry season for about two weeks. Very large populations of these bugs seem to appear every five to 10 years. Preferred areas are around the bases of houses and buildings, near compost heaps, on fences, in grass and on damp soil. When they are aggregating *Graptostethus, Oxycarenus* and *Remaudiereana* are attracted to shade, humidity, and moisture (from irrigation) and this is often found near houses and buildings as well as in gardens and orchards. *Remaudiereana* has also been noticed to swarm in the daytime and is attracted to anything white such as floors, walls and clothing hanging out to dry.





Remaudiereana nigriceps Photo: D. Chin

Pest management

The control of the *Graptostethus* and *Oxycarenus* is difficult. Sprays have a very limited effect on the swarms. Often if a pesticide is applied to the swarm, the bugs that are sprayed directly will die but further swarms may move in. Since the bugs are native, they breed in bushland and it is not feasible to spray 'host plants'. However, it may be necessary to apply sprays to reduce the numbers but this will not prevent any further swarms from moving onto properties.

In situations where *Graptostethus* swarms remain for an extended period, and are causing physical damage to flowers or fruit, the trees affected may need to be sprayed with a registered pesticide suitable for that crop. For mangoes, a spray of carbaryl or dimethoate may assist with control. Both products will kill or repel pollinators and sprays should be avoided when the crop is flowering (unless there is noticeable damage on the flower panicle).

To reduce infestations around houses and buildings, surface sprays such as permethrin (or similar) can be applied to the external perimeter and near the openings such as around door and window frames.

When purchasing pesticides, it is important to seek advice from suppliers on the suitability of the product, ensuring that it is only used for purposes listed on the label. Please read all pesticide label instructions before applying any sprays.

REFERENCES

Fletcher, M. (2007). Plant bugs. Primefacts, New South Wales Department of Primary Industries.

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