

Bean pod sucking bug (018)

Common Name

Pod sucking bug

Scientific Name

Riptortus species; there are two species, *Riptortus serripes* and *Riptortus linearis*.

Distribution

Asia, Oceania. Possibly, Australia, *Riptortus linearis* is recorded from Solomon Islands.

Hosts

Legumes, such as long bean, French bean, soybean, and mung bean. Some species attack *Macadamia* and sorghum.

Symptoms & Life Cycle

Eggs of *Riptortus* are laid on bean leaves and those of other plants; usually the eggs are laid singly. They hatch and the nymphs go through five stages. The nymphs are ant mimics (Photos 1&2), meaning they look like large black ants, presumably to protect them from predation. Adults are dark brown and about 20 mm long (Photos 3&4).

Impact

This is a major pest of beans. Both adult and nymphs "sting" the beans in the pods, feeding on the juices in them, so that the beans fail to mature. The pods turn brown, shrivel and die (Photo 5). Severe damage is caused to bean crops, long beans especially, in Pacific island countries.

Detection & inspection

Look for the large adult bugs on the leaves and under the leaves, 16-18 mm long; look for ant-like nymphs. Look closely for small holes and damaged, shriveled pods.

Management

NATURAL ENEMIES

There are no reports of predators or parasitoids attacking *Riptortus* in Pacific island countries. However, the reduviids (assassin bugs), mantids (preying mantids), spiders and wasps that are known to attack *Leptoglossus* (see **Fact Sheet no. 165**) probably attack *Riptortus* eggs, and prey on nymphs.

CULTURAL CONTROL

Before planting:

- Do not plant crops of beans next to those that are already infested with the bug.
- Plant beans next to *Bixa* (Photo 6), a method recommended by a farmer on Malaita, Solomon Islands. *Bixa* is known as the lipstick tree. It has deep red, soft, seeds that children use to paint their faces, lips included. *Bixa* acts as a trap crop. As the seeds open large numbers of *Riptortus* are attracted to the seeds, preferring them to the seeds of beans, which suffer less damage as a consequence.

During growth:

- Handpick the insects. Do this in the early morning, as at other times of the day the insects are more likely to take flight.

After harvest

- Collect and burn as much of the crop as possible after harvest.

CHEMICAL CONTROL

If infestations reach levels where chemical control is necessary, use sprays of derris, pyrethrum or chilli. If a commercial product is needed, use synthetic pyrethroids or malathion. But note, these pesticides will also kill the natural enemies.



Photo 1. *Riptortus* nymphs. Note that the nymphs are ant mimics - they have evolved to appear as ants - presumably this makes potential predators cautious about attacking them.



Photo 2. *Riptortus* adults and nymphs.



Photo 3. Adult *Riptortus* pod-sucking bug.



Photo 4. *Riptortus* adult feeding on the seeds of long bean.

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval. Recommendations will vary with the crop and system of cultivation. Expert advice on the most appropriate pesticides to use should always be sought from local agricultural authorities.



Photo 5. Bean pods shrivel and die when attacked by *Riptortus*, and losses can be high.



Photo 6. Fruit of *Bixa*, the lipstick tree. Observations on Malaita, Solomon Islands, suggest that *Riptortus* is attracted to the seeds of this shrub. If proven, it could be used as a companion plant.

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Information from Pod-sucking bug - *Riptortus serripes* (2010) Insects and Spiders in Brisbane. (http://www.brisbaneinsects.com/brisbane_coreidbugs/PodSucking.htm); and CABI (2021) *Riptortus linearis*. Crop Protection Compendium. (<https://www.cabi.org/cpc/datasheet/47644>); and from Brown bean bug (2020) Business Queensland. Queensland Government. (<https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/crop-growing/pests-field-crops/brown-bean-bug>). Photos 1&2 Graham Teakle, Canberra, Australia.

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