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# Banana rust thrips and banana silvering thrips

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Banana rust thrips, *Chaetanaphothrips signipennis*, and banana silvering thrips, *Hercinothrips bicinctus*, occasionally damage banana fruit in the north coast region of New South Wales and in Queensland. These thrips live in colonies in sheltered places on the banana plant, especially behind the bases of leaf stalks. When they infest flower or fruit bunches their feeding blemishes the fruit, sometimes very severely.

Banana rust thrips has been the more important pest of the two. Banana silvering thrips damage has rearely occured in recent times.

## BANANA RUST THRIPS

**Description and life history.** The adult thrips is yellow, about 1.3 mm long, and has narrow fringed wings. Each forewing has two dark areas. The females lay eggs in the plant tissue, under leaf sheaths and where fruits touch. These larvae hatch after about a week and are white to cream and, when fully developed after about another week, are about the same size and shape as the adults, but have no wings. The mature larvae enter the soil and form white pupae that look like mature larvae. Adult thrips emerge from the pupae 7 to 10 days later.

The thrips congregate in colonies on the pseudostems behind the bases of leaf sheaths, and their feeding there leaves the plant tissue blood red in colour. They congregate on fruit, mainly where the fruits touch each other. Both the adults and the larvae feed by puncturing plant surface cells and sucking up the sap. There are many generations per year but the greatest numbers of thrips occur from November to March. Although adult thrips can fly, major spread is far more likely by movement of infested planting material to new areas. Banana rust thrips only develops on a few plant species and banana plants are the only sources of infestation in the plantation. In affected plantations thrips damage develops mainly at the warmer sites.

**Damage.** Banana rust thrips may infest bunches at any time during their growth, but infestations that develop when the bunches emerge cause the most severe damage. Injured areas on young fruit first appear water soaked, then look discoloured and grey and later become rust coloured. With further growth of the fruit cracks may develop in the scarred areas. Injury to fruit is usually on the sides of fruits that are touching or are close together, but in severe infestations the whole fruit may be blemished. Sometimes the fruits split.

## BANANA SILVERING THRIPS

**Description and life history.** The adult is about 1.5 mm long, and yellow to brown with a darker abdomen and pale yellow hindwings, each with two broad, brownish bands. On the fruit, adults look dark with a pale yellow line along the body, formed by the folded yellow hindwings. The larvae are yellow white, often with a globule of black excrement at the tip of the abdomen. The life history is similar to banana rust thrips. Banana silvering thrips has also been recorded infesting passionfruit, choko and some weeds.

**Damage.** Fruit is attacked at all stages. The damaged areas develop a silvery blemish, spotted with the thrips' dark excreta. In severe infestations the blemish may be reddish brown, and deep longitudinal cracks may develop in the blemished skin.

**Control**. For new plantings, take planting material from plantations free of banana rust thrips, or far better, use tillue-cultured bananas.

Discourage weed growth in plantations where banana silvering thrips attack is known to occur, as they breed on some weeds. In particular, ensure choko vines are removed.

Insecticides applied in spring to the bases of the plants and surrounding soil for banana weevil borer control, assist in preventing damage by banana rust thrips, but appropriate bunch treatments at the time of bunch pruning or covering are much more reliable.

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