

White butterfly (*Pieris rapae*)

Introduction

White butterfly (WB) is found throughout NZ. The caterpillar causes damage by feeding on the leaves of brassica crops.

Identification

The adult WB has four broad cream to white coloured wings with black spots and a grey to black body. The female has two pairs of black spots on the forewings, while the male has one pair of spots. Their bodies are about 20 mm long with a wingspan around 50 mm.



Typical WB damage on kale leaf.

Female lay 300-400 eggs on the underside of leaves of the host plant. They are laid singularly on more than one plant, initially creamy white but changing to orange just before they hatch.

The caterpillars are dull green with small hairs giving a velvety appearance. There are five larval stages, during which they grow from 2 mm to 30 mm in length. In later stages, an orange-yellow stripe can be seen along the back. Caterpillars can be differentiated from diamondback moth (see page 135) in their behaviour, being quite aggressive when disturbed. This is in comparison with diamondback moth larvae which “run away”, often dropping off the leaf onto the ground after being disturbed.

Caterpillars feed on the outer, older leaves of the brassica crop initially, but as they grow move into the centre of the plant. Feeding commences from the leaf margin towards the central leaf vein, with feeding damage mainly occurring from October to May.



Adult WB.

WB pupa are around 15 mm long, with a hardened outer shell and gain protection by hiding where their colour blends in with the background (i.e. in leaf litter or on fence posts or sheds).

Prevention and management

There are a number of natural predators that can keep WB populations in check. These include hoverflies, harvestman and parasitic wasps.

Good seed-bed preparation is a good prevention, because the removal of old brassica crop debris prevents over-wintering and localised build up in paddocks.

If damage is apparent in the crop, insecticides can be effective in the control of WB.

Agriseeds wishes to acknowledge the work in the book “New Zealand Pest and Beneficial Insects” edited by R.R. Scott as a reference in producing this section.