



Raspberry Beetle



The raspberry beetle *Byturus tormentosus* is a serious pest of raspberries, blackberries and hybrid berries (tayberries, loganberries etc.) The adult is approximately 4mm long, covered with yellowish-brown hairs which later fade to greyish brown. The larva are 6-8mm long, creamy white, with brown markings on their upper surface. They can often be seen crawling around the punnet after the fruits have been picked.

DAMAGE

The adult beetle can cause extensive damage if there are large numbers and attack raspberries or hybrid berries before blossom time. It normally causes most damage to summer and the early fruits of autumn fruiting raspberries, but those fruits ripening after late August seem less affected. Buds can be destroyed completely, open blossoms are also injured, the stamens and nectaries being bitten and destroyed. Ultimately, there will be many small malformed fruits and heavy crop losses.

The damage caused by the larvae is even more important. The adult lays its eggs on the flowers during early and mid summer. One female may lay one hundred or more eggs, usually one per flower. Eggs hatch out after about ten days, usually from the green fruit to early pink fruit stages. The larvae initially feed at the base of the berries but later feed in the inner core or plug. Attacked drupelets turn brown and hard, particularly at the stalk end of the berry. The presence of the grub inside the fruit renders (for most people) the fruit inedible.

CONTROL

Non Chemical Control

Hoe the ground around your raspberries, blackberries and hybrid berries regularly in late spring and early summer to bring the pupae up to the surface of the soil to be eaten by birds.

The use of a '**Raspberry Beetle Trap**' (available from Ken Muir) can greatly reduce this problem, by attracting and trapping the adult beetles as they emerge from the soil in the spring, before they get the chance to cause any damage to your valuable crop. The large off-white vanes of the trap combined with a floral attractant lure act as a 'super raspberry flower' that is irresistible to the beetles and draws them into the funnel trap bucket below, permanently removing them from your crop. Each trap protects 50sqm and contains one floral lure. The traps should be placed outside in the spring 4-6 weeks before the first flowers appear (April-May). With later flowering hybrid berries eg loganberries, or autumn fruiting raspberries, a second replacement lure is recommended.

If you have suffered from serious infestations in the past and discover more than 5-10 beetles in the trap per week before the onset of first flowering, then it is advisable to also use the trap in conjunction with an insecticide.

Chemical Control

The aim is to kill the young larvae while they are feeding on the outside of the fruit so the timing of the control measures is very important. On raspberries, spray when the first pink fruits are seen and again two weeks later; on hybrid berries spray at 80% petal fall and again two weeks later. On blackberries spray immediately before the first flowers open.

Natural (Organic) sprays

Sprays based on natural pyrethrum/pyrethrins which is derived from the flowers of a member of the

Chrysanthemum genus *Tanacetum cinerariifolium*, work on contact. An interval of at least 24 hours is required between spraying and picking the fruit

Pyrol Bug & Larvae Killer - concentrate or ready to use
Defenders Bug Killer

Synthetic pesticides

Synthetic pesticides generally give a higher level of control however care must be taken when using on edible plants to follow the manufacturers' instructions precisely and observe the harvest intervals given by them.

Bayer 'Sprayday Greenfly Killer' (*Deltamethrin*)

Bayer Garden '**Provado® Ultimate Fruit & Vegetable Bug Killer**' – concentrate or ready to use.

Westland Resolva Bug Killer (*Lambda cyhalothrin*) – concentrate or ready to use.

USE CHEMICALS SAFELY: ALWAYS READ THE LABEL

When using chemicals it is most important to follow the manufacturer's instructions precisely. Only use on the fruits that are listed on the manufacturer's label. An accurate weighing machine and measuring cylinder should be obtained. Chemicals can be wasted by making concentrations unnecessarily strong or by making them too weak and ineffective. Furthermore, if chemicals are too strong they may cause damage to the foliage.