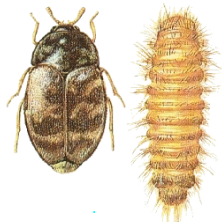


MONITORING GUIDE

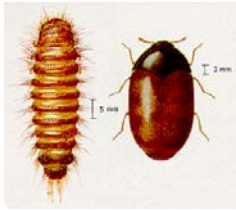
KHAPRA BEETLE & WAREHOUSE BEETLE

Trogoderma granarium & *Trogoderma variable*

Khapra Beetle



Warehouse Beetle



Suggested Traps

Detector Trap



Product No. 2050223

Window Trap



Product No. 2050221

PC Floor Trap



Product No. 2050226

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GENERAL INFORMATION

These two insects are serious stored product pests that belong to the small, but quite diverse Family of dermestid beetles. They are unlike most other members of this family, in that the larvae live mainly on stored food products such as cereals, flour-based products, raisins, spices, and oilseeds, whereas the adults seldom eat at all. In the wild, most of the dermestid beetle family lives on dead animal matter rather than plant material.

Trogoderma granarium is a listed quarantine insect throughout the world, and as such is usually subject to immediate eradication on being reported. Fortunately, it prefers hot, dry conditions so it is mainly confined to warehouses in tropical climates. There have been a few reported instances in the United States, all of which were subsequently fumigated.

Trogoderma variable on the other hand is not considered a quarantine pest but is found extensively in food warehouses throughout North America and the rest of the world, and can cause serious damage to food products. In addition, the presence of larval moult skins deposited in food products can cause intestinal irritation, especially in young children, which raises medical concerns.

LIFE CYCLE

The adult Warehouse Beetle usually lives no more than 2 weeks, during which time it mates and lays a small number of eggs, which quickly hatch into larvae. The larvae however are able to survive up to 9 months without food, and for as long as 6 years when the food supply is plentiful. During this period, the insects can continuously damage foodstuffs by eating and secreting the frass on to them.

Although populations are often small, the damage caused over a period of time can be costly. High protein foods such as seeds and nuts are preferred and the larvae are found most often in darker areas. Occasionally they will eat the bodies of other insect corpses.

TRAP PLACEMENT

Monitoring traps are commonly used to identify the presence of these insects and will often be placed 5 - 10 metres apart in areas containing susceptible foodstuffs. Small **Detector traps** are commonly used, but in very dusty areas **Window traps** may be preferred (see *monitoring guide #1902-20 'An Overview of Traps and Attractants for Storage and Grain Beetles'*). Lures should be replaced every 6 weeks.

Regular inspection and recording is vital in order to catch any outbreak. Concentrating the number of traps in areas of highest catch will help to pinpoint the source of an infestation.