





Technical Bulletin for: **Khapra Beetle**

Trogoderma granarium (Everts) • Coleoptera, Dermestidae • TROGRA



DISTRIBUTION	Worldwide, currently eradicated in the U.S.
HOSTS	Wheat, barley, rice, oats, corn, dried blood, dried milk, fishmeal, ground nuts, flour, bran, malt, flax seed, alfalfa, tomato seed, pinto bean, black-eyed pea, and many others
DESCRIPTION	
Adult Moth	Oblong-oval beetles, approximately 1.6 to 3.0 mm long and 0.9 to 1.7 mm wide. Males are brown to black with indistinct reddish-brown markings on their elytra. Females are slightly larger than males and lighter in color.
Larvae	At hatching, larvae are approximately 1.6 to 1.8 mm long, more than half of this length consisting of a tail made up of hairs on the last abdominal segment. Larvae are uniformly yellowish white, except head and body hairs are brown. As the larvae increase in size, their body color changes to a golden or reddish brown, more body hairs develop, and the tail becomes proportionally shorter. Mature larvae are approximately 6 mm long and 1.5 mm wide.
Eggs	Milky white, turning pale yellowish with age, cylindrical, 0.7 by 0.25 mm, with one end rounded, the other pointed and bearing spine-like projections.
LIFE HISTORY	Adults have wings, but apparently do not fly and feed very little. Mated females live from four to seven days, unmated females from 20 to 30 days, and males from seven to 12 days. Mating occurs about five days after emergence, and egg laying begins almost immediately at 40°C. Egg laying may begin at one to three days at cooler temperatures, but no eggs are produced at 20°C. Eggs hatch in three to 14 days after the female lays an average of 50 to 90 eggs that are loosely scattered in the host material. Complete development from egg to adult can take 26 to 220 days, depending upon temperature.

MONITORING INFORMATION

LURE ACTIVE INGREDIENTS, SUBSTRATE & FIELD LIFE	14-Methyl-Z-8-16Ald on a Red Rubber Septum. Lure longevity: 30 days.	
TRAP TO USE	Delta Trap Sticky Insert	
MONITORING STRATEGY	Hang traps in or near host plants, or in warehouses where beetles are present. Check with Cooperative Extension or Master Gardener for local information and recommendations.	
CULTURAL & PHYSICAL CONTROL	Check thoroughly for eggs and larvae in cracks, crevices, as well as behind paneling on walls and under timbers, tanks, shelves etc.	

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