





Technical Bulletin for: Mediterranean Flour Moth

Ephestia kuehniella (Zeller) • Lepidoptera, Pyralidae • EPHKUE



DISTRIBUTION	North Pacific, United States, United Kingdom, Netherlands, Sweden
HOSTS	Cereal grains, notably flour. Also eats rice, marijuana, oak, barley, horseradish.
DESCRIPTION	
Adult Moth	Up to 12 mm with a wingspan of 16-20 mm. Pale gray bodies, forewings gray with black zigzag markings and the hindwings are an off-white.
Larvae	White or pink, with black spots and dark heads, about 12 mm long when mature
Eggs	Oval, sometimes with a slight projection on one end, strong star-shaped sculpting on surface, and greyish-white in color.
LIFE HISTORY	The female deposits her eggs in any suitable food material and usually fastens them to the food particles. The young larva spins silken tubes constantly and spends its time in these tubes feeding. The silk causes balls to form, which can clog machinery in flour mills, necessitating downtime to clean the machines. The larvae may pupate in a cocoon within the flour or on the surface of the flour. They may also pupate in some crack or crevice either within or without a cocoon, often migrating from the food source in search of a pupation site. These larvae are therefore commonly seen significant distances from the breeding source. The life cycle from egg to adult can be completed in four to six weeks in heated buildings and six or more generations per year can occur. The adult moths are active fliers and fly in a very rapid zigzag fashion.

MONITORING INFORMATION

LURE ACTIVE INGREDIENTS, SUBSTRATE & FIELD LIFE	ZE-9,12-14Ac and ZE-9,12-14OH on a Red Rubber Septum. Lure longevity: 30 days.	
TRAP TO USE	Red Paper or Plastic Delta Trap	
MONITORING STRATEGY	Hang traps in warehouse, flour mill or shop, whenever adults tend to appear. Check with Cooperative Extension or Master Gardener for local information and recommendations.	
CULTURAL & PHYSICAL CONTROL	Look for larvae and pupae in cracks in ceiling, wall corners, discharge outlets, or under tracks of machinery that facilitates dark areas and silk buildup.	

Alpha Scents, Inc.
insect monitoring systems

Alpha Scents, Inc., 360 S. Sequoia Pkwy. Canby, OR 97013
TEL: 503-342-8611 • FAX: 314-271-7297 • sales@alphascents.com • www.alphascents.com