

Now What's Eating the Sunflowers?

Sunflower maggot has been reported in several fields in the north central region recently. It can be found by prying open the sunflower bud; dark brown spots on immature disk flowers may be observed. The larvae are less than ¼” at maturity. The small, brown pupae are found in the face of the sunflower bud, usually surrounded by a small number of damaged disk flowers.

Adults of sunflower seed maggot have brown lace-like wings, and emerge during the first week of July and lay eggs on the corolla of incompletely opened sunflower inflorescences. The total larval period is 14 days. The first generation pupates in the head; the second generation overwinters in the soil as pupae. Economic damage from the maggot is rare. The magnitude of damage to sunflower seeds by sunflower seed maggot larvae largely depends on the larval stage and seed development. Seed sterility occurs when newly hatched larvae tunnel into the corolla of young blooms; a single larva feeding on young flowers will tunnel through 12 ovaries. Mature larvae feeding on older sunflower heads destroy only one to three seeds. Since economic damage is rare, there is no research on control of the adult, and control of the larva is impossible as it feeds inside the bud and would be untouched by an insecticide application.



Red Sunflower Seed Weevil

The red sunflower weevil emergence peaks in late July. There have already been reports of high numbers in eastern Ward County. Female weevils deposit eggs inside developing pericarp (sunflower shell) then larva feed on the developing seed. Start scouting as ray flowers are beginning to show, and continue until 70% pollen shed when sunflowers are no longer susceptible to damage.



The red sunflower weevil is a rusty red color, about ¼” long, with a long snout, or proboscis. Economic thresholds are roughly 3-5 weevils per head, although as market prices increase that threshold may be lower. NDSU recommends treatment when 30% of plants are just starting to shed pollen. Control levels decrease after most of the plants are past 40% pollen shed. For more information refer to the 2007 Field Crop Insect Management Guide.