Alfalfa Weevil

The alfalfa weevil spends the winter as an adult in the crowns of the alfalfa plant or under leaves or other debris. Adult weevils are small, 1/4-inch, brownish-grey snout beetles, with a darker brown band down the back.

Alfalfa weevil adults emerge in the spring after average temperatures reach 60 degrees F. They start chewing holes in young alfalfa leaves as soon as crop growth begins but do not lay eggs until early April. In most areas, alfalfa weevil will only produce one generation per year, but if conditions are good they may also lay eggs in the fall, potentially producing two separate cycles of egg laying and larvae.

Egg hatch occurs in one to two weeks. The newly-hatched, yellowish-green larvae (immature weevil or “worm”) feed within the stem for a few days before moving to the opening leaf buds at the tips of the stems. Later, they feed on the leaves, producing a characteristic ragged or skeletonized appearance. At maturity, the larvae are dark green, 3/8-inch long, with a black head and a white stripe down the back.

Inside This Issue

• Alfalfa Weevil
• FMC Solutions
• Alfalfa Yield Loss
• Cutworms
Trials have shown that forage yields in the first crop of alfalfa are decreased about 170 lbs./acre for each addition of one larva/stem in a weevil population on alfalfa up to 12 inches to 15 inches tall. Because of reduced plant growth and lower stem densities, yield/losses of second harvest alfalfa may approximate 140 lbs./acre for each addition of one larva/stem. (Oklahoma State University)

In recent studies on alfalfa yields under separate and combined effects of weevils, cutworms, and weed encroachment, researchers have shown that controlling alfalfa weevils allows plants to more effectively compete with weed species. Combined effects of alfalfa weevils and weed control have the greatest positive effect on forage yields and stand retention.

**Mustang® Maxx Insecticide**
- Rate: 4.0 oz./acre
- REI: 12 hrs
- Retreat Interval: 7 days
- PHI: 3 days (forage)
- Season Max Use: 24 oz./acre
- Application: Ground, air or chemigation

**Stallion® Brand Insecticide**
- Rate: 11.75 oz./acre
- REI: 24 hrs
- Retreat Interval: 10 days
- PHI: 7 days (forage)
- Season Max Use: 35.25 oz./acre
- Application: Ground, air or chemigation

![Graph showing alfalfa loss due to one alfalfa weevil per stem](image)

**Egyptian Alfalfa Weevils per Sweep**
*University of California Davis - Godfrey 2013*

![Bar chart comparing treatments](image)
Cutworms have a minimum developmental threshold of 50ºF and degree-day accumulation can be used to predict larval damage. Feeding activity tends to occur after about 300 Fahrenheit degree days, and pupation occurs after about 640 degree days.

However, with cooler weather, growth of cutworms will slow and activity may be extended.

When convenient, irrigate the field before treating army cutworms. Applications in late evening, when larvae usually feed above ground, are most effective.

When making an insecticide application for army cutworms, growers should be sure that temperatures will be above 50 degrees for three to four days after the application is made.

Use the following link to determine your local degree day levels.
www.weatherdatadepot.com