

Alfalfa Weevil

By Andy Luke, field specialist in agronomy

There have been reports of alfalfa weevils in the area. Scouting now to look for damage can help catch early infestations of alfalfa weevils, preventing significant yield loss.

Adult alfalfa weevils are $\frac{1}{4}$ to $\frac{3}{16}$ of an inch long brown beetles with a dark, narrow stripe down their back. The adults lay yellow, oval eggs into alfalfa stems in early spring. The larvae begin hatching in April and continue to emerge through June. Both the adult and larvae feed on alfalfa foliage, greatly reducing overall quality and yield. Alfalfa weevil larvae are green with a white stripe down their back, and they will feed for roughly 3-4 weeks.

Damage from alfalfa weevils is first observed primarily in the upper canopy. Larval damage shows up as pinholes in leaf terminals. As the larvae increase in size, they feed on foliage between the leaf veins, skeletonizing the leaf. They also feed on the buds and growing tips. Adult damage is usually minor, but they feed on leaf margins in the lower canopy. They also cause bark damage by feeding on the stems after the first cutting, impacting alfalfa regrowth. Leaves damaged from alfalfa weevils will dry out quickly, giving the field a gray cast.

Scouting for alfalfa weevils is important before making a management decision. To scout, randomly select 30-50 alfalfa stems throughout the field and shake them into a bucket, dislodging the larvae feeding on the plant. Carefully cut the stems so that the larvae remain in place until they can reach the bucket. After the larvae are removed, determine the average size and number of larvae per stem. Also pay special attention to the number of damaged stems and the stage of plant development. When 25-50% of leaf tips have been skeletonized and there are three or more larvae per stem, treatment is warranted. Treatment options include insecticide applications, although early hay harvest of the field is equally effective. In fields I have scouted, harvest is close enough where it is likely the best option.

After the first cutting, monitor the regrowth for continued weevil damage. Harvesting removes the food and shelter for the weevil larvae, exposing them to predators and harmful sunlight. The adults go dormant through the hot summer months, so damage is only a concern early in the season.

If you would more information about this or any other topic, contact Andy Luke at the Harrison County Extension Office, (660) 425-6434 or email him lukea@missouri.edu.

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