

Checking For Pests Of The First Cutting



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The alfalfa weevil season got off to a late start due to the cool spring but now activity is apparent. The weevil, a key pest of the first cutting taken from established fields, feeds over a 3 to 5 week period. In sufficient numbers, weevil larvae can reduce forage yield and quality in addition to reducing general stand health.

Alfalfa weevil larvae should be expected in all established fields in the state. Often, numbers are below damaging levels but it is important to check for them each spring. They will not be a problem in fields seeded this spring and there is a very low risk of damage in alfalfa seeded last fall.

A 15-inch diameter sweep net is the ideal sampling tool for assessing weevil populations but you can get important information by carefully examining plant tips for feeding damage and the legless, grub-like weevil larvae. Expect to see a mix of sizes because eggs hatch over a relatively long period. Newly hatched larvae are light yellow-green with dark heads and tend to feed in new, folded leaves. Larger larvae are greener with a distinct white stripe down the center of the back; they tend to feed on expanded leaves. The last larval developmental stage is about 3/8" long, it accounts for about 80 percent of the total feeding damage by the insect.

A precise way to assess weevil infestations is to collect 30 stems from randomly selected areas of a field and use to the numbers of larvae found, average stem length, and current degree-day accumulation to make a decision. A more general guideline is to treat if 25 percent or more of the tips examined over a field show feeding damage, there is an average of 2 or more larvae per tip, and harvest is 10 days or more away.

If practical, harvest is a weevil management option. Small larvae die if exposed intense sunlight and high temperatures after the crop is cut. Also, this tactic conserves natural enemies that can be lost due to an insecticide application. Primarily, this comes from some tiny wasps that were released in the US through a national biological control program to regulate weevil populations.

A potential drawback to the early harvest strategy is damage to regrowth by surviving weevils. Close monitoring of regrowth following harvest will allow control methods to be applied if needed.

The pea aphid, a cool season insect, is common on alfalfa and other legumes in the spring. The 12-day life cycle of this insect coupled with

a string of dry days with temperatures in the 50's and 60's allows large numbers of these sap feeders to develop. The rains that have accompanied our cool spell may temper aphid populations some but don't be surprised if they are abundant in alfalfa.

While large populations can develop on alfalfa, the pea aphid usually does not seem to have a significant impact on plant health and yield. It does serve as prey for a range of natural enemies, including lady beetles and hover flies. Δ

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Figure 1. Tip feeding damage by alfalfa weevil larvae.

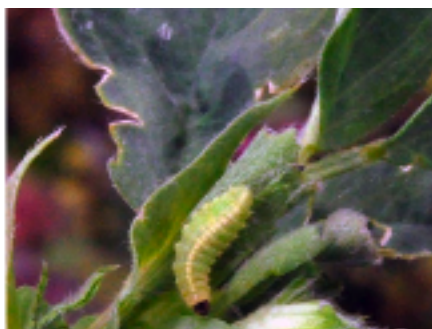


Figure 2. Alfalfa weevil larva.



Figure 3. Pea aphid on alfalfa leaf.