



EXTENSION

Pest e-alerts



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Alfalfa Insect Update – 11 September 2020

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Insects and Disease in Seedling Alfalfa

As we transition into September, this week's moisture has allowed conditions to improve considerably if producers are thinking about planting new alfalfa fields. In Oklahoma, most new fields are planted from August 20 to September 20, to allow for root establishment before entering winter months. In general, 6- 8 weeks is needed to allow for germination and growth in preparation for the first freeze.

New alfalfa seedlings are subject to a variety of environmental stresses. Seedling stands are particularly vulnerable to increased pest pressure. Insects can begin attacking alfalfa plants at or before emergence. Frequent scouting of new stands is essential for optimal insect control. Weed competition and disease can also be a limiting factor to new stand development. An integrated pest management (IPM) program that addresses the most common insect pests, disease, and weeds is crucial for establishment and productivity.

Insects: In fall planted stands, grasshoppers, fall armyworms, cutworms, and other general feeders can devastate stands in a few days. Monitoring for insect presence after planting is a must. Timely application of insecticides is the most reliable method of control. It may be advisable to spray fence lines and field borders if grasshopper infestations are heavy. Fall armyworm can be a potential problem until the first "killing frost". Army cutworm activity increases in the fall (October) as they return from over-summering sites. While generally not a problem in established stands this time of year, they can cause severe damage to newly seeded alfalfa. Look closely!!! As the picture on the next page shows, they can be difficult to find as they blend in with their environment. Threshold levels for fall armyworm and army cutworm in newly seeded stands is (1-2/sq.ft.).

Grasshopper

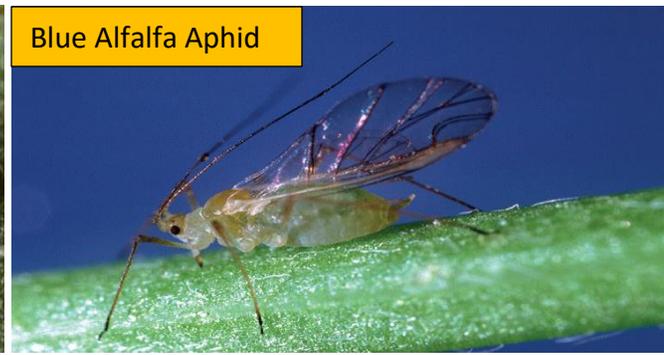


Fall Armyworm



Army Cutworm in seedling alfalfa

During the fall, populations of spotted alfalfa aphids, and occasionally pea aphids, can build up on seedling alfalfa. In addition, Blue alfalfa aphids may come into alfalfa fields in the fall and are present nearly every winter and spring. Because of their toxic effect on alfalfa plants, threshold levels are significantly lower (1/stem) for SAA and BAA in seedling stands.



Using adapted resistant varieties and good cultural practices that encourage rapid growth provide the best controls for aphid infestations. Early detection is an important factor because it allows timely insecticide application before problems have gone too far. More information on insect control can be found at *CR-7150 Alfalfa Forage Insect Control*.

Weeds: In newly seeded alfalfa weeds can be a major concern. Competition for nutrients and water can cause reduction in yield and quality, and in some cases stand failure. However, transitioning from the previous crop, consideration must be given to herbicides previously used and what restrictions may be in effect for potential residues. For more information on weed control in seedling alfalfa go to *PSS 2089, Alfalfa Stand Establishment*.

Diseases: Diseases such as damping off and root rots, are sometimes problems with alfalfa stand establishment. Fungicidal treatments, applied to seed or sprayed on seedlings, are effective for a short time and may make the difference between successful stand establishment and failure.

Genetic resistance in conjunction with crop rotation, good land preparation practices, and good seedbed preparation are more long-lasting control measures. Root rots are most commonly found in soils that are wet for a prolonged period; therefore, providing drainage before seeding is an excellent disease prevention measure.

Some final thoughts on seedling alfalfa:

- Develop an IPM Plan.
- Monitor plants after emergence.
- Frequent scouting of new stands is essential.
- Fall insect infestation can cause significant damage.
- Early detection is vital to preserving new stands.

Disease and Insect Diagnostic Laboratory

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