



Pest Control Notes

Yolo, Solano, Sacramento Counties

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Late Aphid Infestations Cause Havoc for Alfalfa Growers

Watch for outbreaks of blue alfalfa and pea aphids in alfalfa fields this year as these pests are causing significant amounts of damage to many fields in the Sacramento and Northern San Joaquin Valleys. Aphids, in general, are being favored by cool, wet conditions, which have occurred this spring. The blue alfalfa and pea aphids can be particularly damaging because they inject a toxin into the plants when feeding that stunts growth and causes the leaves to curl and turn yellow. Aphids may further reduce forage quality by excreting honeydew when feeding that is colonized by a black fungus (sooty mold) that reduces the palatability of the hay.

Normally, resistant varieties effectively control these pests, however, prolonged periods of below-normal temperatures may lower resistance to blue alfalfa aphid injury and result in crop damage. We're also seeing more blue alfalfa aphid than pea aphids in alfalfa this year, which may explain the significant stunting in some fields. The blue alfalfa aphid tends to be more damaging than the pea aphid because it feeds more on the terminal buds and has a more potent toxin.

Economic treatment thresholds for both aphids are listed in the table below (from the UC IPM guidelines, <http://ipm.ucdavis.edu>). If both aphid species are present, use the blue alfalfa aphid treatment levels. Many fields have high numbers of beneficial insects that are helping to reduce the aphid pressure (lady beetles, parasitic wasps, and syrphid flies). We're also seeing a fungal pathogen that's attacking aphids in alfalfa fields as well. If aphid infected fields are close to harvest, cut the hay, but watch the re-growth carefully to make sure that the aphids aren't damaging the new growth. If plants are over 7 to 10 days from harvest, there are few beneficial insects, and aphid numbers are increasing, treat with an appropriate insecticide with a short pre-harvest interval.

Plant height	Pea aphids	Blue alfalfa aphids
Under 10 inches	40 to 50 per stem	10 to 12 per stem
10 to 20 inches	70 to 80 per stem	40 to 50 per stem
Over 20 inches	100 + per stem	40 to 50 per stem

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