Strawberry Pest Management Issues in Santa Maria

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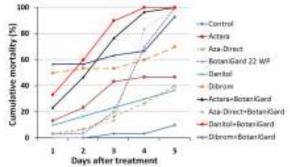
Annual University of California Santa Maria Strawberry Field Day 14 April, 2011

Maggots in young strawberry fields: Seedcorn maggots and larvae of dark-winged fungus gnat were seen in some strawberry fields. They were effectively managed with chemicals and plants outgrew the pest problem.





Microbial control potential for strawberry pests: Entomopathogenic fungus, Beauveria bassiana



successfully colonized strawberry plants and persisted in various plant parts for up to 9 weeks. Further studies are under way to see the effect of colonized fungus on herbivores. Preliminary field study with an organic formulation of this fungus showed some effect on adult lygus bug and thrips. A combination of reduced rates of chemicals and *B. bassiana* in bioassays showed a potential for field use.

Whitefly control: In a field trial, there was a 79% and 74% decline in immature stages from Oberon and Movento, respectively, 2 wk after treatment. There was a 480% increase in plots treated with Esteem.

Lewis mite, a potential strawberry pest: Lewis spider mite, *Eotetranychus lewisi*, infestations seem to be increasing in Ventura Co. They are occasionally seen in Santa Maria also. These are slightly smaller than twospotted spider mites and have multiple patches on their body. It is





important to consider them in pest monitoring. They can be controlled with most of the commonly used miticides. Studies to learn more about this pest on strawberries and its management are being initiated.

Degree-day calculation for lygus bug management: California Strawberry Commission set up data loggers to calculate degree-days to help time chemical treatments for controlling nymphal stages.

Spotted winged drosophila monitoring: Started monitoring in some strawberry fields in Santa Maria. They have not been detected so far.

Rare aphid pathogen: Natural infection of a rare fungus, *Entomophthora* sp. was found in an aphid in an organic strawberry field in Santa Maria.



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