



Cooperative Extension, University of California

August 13, 2009

Pest Control Notes

Yolo, Solano, Sacramento Counties

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MEETING ANNOUNCEMENTS

UC DAVIS DRY BEAN PRODUCTION FIELD DAY THURSDAY AUGUST 20, 2009

See details on page 2

and

WESTERN ALFALFA AND FORAGE SYMPOSIUM DECEMBER 2-4, 2009

The **2009 Western Alfalfa and Forage Symposium, December 2-4 in Reno** will be at the Grand Sierra Resort Casino. Now in its 39th year, this is a comprehensive meeting that is relevant to all forage growers and others involved in the forage industry in the Western US. For more information and updates, see the UC Davis alfalfa production website at <http://alfalfa.ucdavis.edu>.

Hello all,

Due to county budget cuts and a reduction in county staff time, our UCCE office in Yolo County is now closed on Mondays until further notice. New office hours are Tuesday to Friday from 8 am to 5 pm (though closed 12 to 1 pm for lunch). UC Advisors will continue to be available Mondays and can be reached by phone or email. My direct office phone is 530-666-8734 and email is rflong@ucdavis.edu. I have a new cell phone number, which is 530-681-7661. Our website address with a staff directory is <http://ceyolo.ucdavis.edu>.

The University of California is also experiencing budget reductions and will be implementing a furlough and/or salary reduction program for one year, beginning September 1, 2009, which will be somewhere around 18 days a year.

*We are sorry for this inconvenience and hope this budget crisis is temporary while we continue to strive to provide high quality programs to our community. I look forward to seeing you at our upcoming dry bean field day at UC Davis.
Happy Summer!*

Sincerely,

Rachael Long, Farm Advisor

UC Davis Dry Bean Field Production Meeting

Thursday, August 20, 2009, 9 am – noon

Field meeting followed by a barbecue lunch at noon!

2 hours of CE credits applied for

The University of California Cooperative Extension and Department of Plant Sciences at UC Davis, is pleased to announce the Dry Bean Production Field Day to be held at the UC Davis farm.

Directions: Take Hutchison Dr. about 1.5 miles west from Hwy 113 in Davis. Turn south on Hopkins Lane, then east on a dirt road with a row of olive trees and park along the fence. **The field is located across from the Bee Biology Center.** There's also an airport at UC Davis that's a 5-minute walk from the field site. For more information see: <http://taps.ucdavis.edu/airport/>.

Agenda

- 9:00 Sign-in
- 9:15 Introductions and updates
- 9:30 Blackeye trials
- 9:45 *Lygus* management
- 10:00 Lima bean trials
- 10:15 Mite management
- 10:30 Cover crop trials
- 10:45 Common bean trials
- 11:30 Market update, group questions, and discussion
- 12:00 BBQ lunch

Thanks to our sponsors including UCD Plant Sciences, Tarke Warehouse, Colusa Produce, Sutter Basin Bean Cooperative, Rancho Gordo, California Dry Bean Advisory Board, INTX Microbials LLC, and Mohr-Fry Ranches.

For more information or questions contact Rachael Long at 530-666-8734.

Dry Bean Publications

2008 UC Cooperative Extension sample costs to produce dry common beans, single- and double cropped in the Sacramento Valley, available at: <http://coststudies.ucdavis.edu>

The second edition of the Common dry bean production in California manual is available at <http://ceyolo.ucdavis.edu> in the Pest Management section.

Alfalfa Production: Molybdenum deficiency

There have been several alfalfa fields in the Sacramento area that have been deficient in molybdenum (Mo or moly), which is unusual, but not unheard of for the Sacramento Valley. Symptoms of molybdenum deficiency are like those of nitrogen and sulfur deficiency: light green or yellow, stunted plants, caused by a lack of moly that is essential for nitrogen fixation. There may be a region just south of Sacramento that may have alfalfa with somewhat low concentrations of Mo but as you go further south, Mo toxicity begins. Some low copper—high molybdenum has been documented in the Modesto and south areas.

Plant tissue testing is the only way to confirm a molybdenum deficiency. Collect plant samples from the top 6-inches or one-third of a plant sample, or from whole plant samples collected from baled hay. Plant samples with less than 0.3 ppm are considered deficient, 0.4 to 1.0 marginal, 1 to 5 ppm adequate, and 5 to 10 ppm high. Concentrations over 10 ppm may be toxic to livestock. High moly concentrations in alfalfa should be offset with copper concentrations that are twice as high as molybdenum concentrations to prevent livestock toxicity.

The most common moly fertilizer is sodium molybdate (40% molybdenum), but ammonium molybdate can be used as well. Follow the label carefully and apply during winter or before re-growth has resumed after cutting. Broadcast on the soil surface only and avoid application to any plant foliage. A single application of 0.4 pounds per acre of molybdenum should last from 5 to 15 years. Thorough records of molybdenum application times and amounts along with repeated tissue testing are essential to determine when to apply or reapply this nutrient.

Do not apply excessive molybdenum (that is double or triple coverage with the sprayer at the end of the field) because the concentration of the element in alfalfa may become so high that the forage becomes toxic to livestock. For the same reason, do not apply molybdenum directly on foliage. Analyzing the top one-third of the plant for both copper and molybdenum can detect deficiencies and suboptimum ratios of these elements in forages.

Deficiency often occurs on slightly acid to very acid soils. Increasing the soil pH increases solubility and availability of soil molybdenum.

Alfalfa Publications

Irrigated Alfalfa Management, for Mediterranean and Desert Zones, UC ANR Publication number 3512 available for order at <http://alfalfa.ucdavis.edu/> (\$65.00 each) or through our UCCE office in Woodland. This is a great resource with 24 chapters focused on all aspects of alfalfa hay production. You can also access the individual chapters on the UC Davis alfalfa website to read them online.

Avoiding Weed Shifts and Weed Resistance in Roundup Ready Alfalfa Systems, UC ANR Publication number 8362, Free to download at <http://anrcatalog.ucdavis.edu/>.

2008 Sample costs to establish and produce alfalfa hay in the Sacramento Valley at <http://coststudies.ucdavis.edu/>.

Sunflower and Safflower

Cost of production studies are also available for these crops in the Sacramento Valley at <http://coststudies.ucdavis.edu/>, and are scheduled to be updated this year (occurs every 5 years).

Hedgerows

A multi-year project in collaboration with UC Berkeley researchers continues to focus on the contribution of hedgerows of flowering plants on attracting pollinators (honey bees and native bees) and beneficial insects for pollination and pest control services in adjacent field crops, here in Yolo County. Results so far document that managed hedgerows of native plants attract pollinators and beneficial insects, much needed on farms to help with pollination and pest control. Unmanaged weedy vegetation has higher numbers of pest than beneficial insects, documenting the need to replace this vegetation with managed vegetation adjacent to field crops.

For more information on hedgerows see the free publication titled, “Establishing Hedgerows on Farms in the Sacramento Valley”, available at <http://ceyolo.ucdavis.edu> in the Pest Management section. Jessa Guisse, California pollinator outreach coordinator with the Xerces Society is also a great contact for information native bee habitat; she can be reached at jessa@xerces.org and 916-457-7904, ext 14.

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