



Pest Control Notes

Yolo-Solano-Sacramento Counties • 70 Cottonwood Street, Woodland, CA 95695 • Phone: (530) 666-8143 Fax: (530) 666-8736

Field Meeting Announcements

- **UC Davis Dry Bean Field Production Meeting, Thurs. Aug. 16, 2007 (see pg. 2)**
- **UC Davis Surface Water Quality Workshop, Friday Sept. 7, 2007 (see pg. 3)**

Alfalfa Production

Some of you may have seen the USDA-APHIS order pertaining to the Roundup-Ready (RR) alfalfa. As you know, it is illegal to plant RR alfalfa now, but existing RR fields may continued to be harvested and fed. However, certain restrictions apply. Existing RR alfalfa hay fields will require:

- 1) Cleaning of equipment when moving from RR to conventional hay fields.
- 2) Trucks must be cleaned when transporting RR alfalfa, and covered by a tarp if viable seed is present.
- 3) Hay must be segregated when stacked.
- 4) Buyers must be notified that they are purchasing RR hay
- 5) All bales leaving the farm must be identified with a tag attached marked 'Roundup-Ready Alfalfa'.

Clearly these requirements are unreasonable so efforts are underway by the alfalfa industry to try to mitigate these restrictions. Contact Aaron Keiss, akiess@cmc.net, California Alfalfa and Forage Association, for more information on how to try to change these regulations.

Study Leave Notes

*In May I had the opportunity to take a study leave to work on several hedgerow projects, including writing and analyzing data and learning about sources of the foodborne pathogen *E. coli* O157:H7. During this time I learned more about the importance of hedgerows, including their benefits to air and water quality and pest management. For example, native perennial grasses can serve as replacement vegetation for weedy areas (mustard, radish, Malva) that are sources of pests such as *Lygus*, cucumber beetles, and stinkbugs. For *E. coli* O157:H7, although much research remains to be done on the epidemiology of this pathogen, hedgerows planted around farms may actually help reduce the risks of *E. coli* O157:H7 by helping to trap and filter harmful pathogens in dust as well as irrigation or storm water runoff. The following is a summary of potential sources of *E. coli* O157:H7.*

Outbreaks of *Escherichia coli* O157:H7 in leafy green vegetables have prompted concerns with establishing habitat and attracting wildlife to farms. Although *E. coli* O157:H7 may occur in diverse animals as well as humans, research indicates that domestic cattle are the primary reservoir of microbial pathogens such as *E. coli* O157:H7 associated with food-borne illnesses. Goats, sheep, feral pigs, and deer are also considered animals of significant risk for *E. coli* O157:H7.

Other wild animals and as well as birds can become infected, serve as a transient reservoir, or mechanically vector *E. coli* O157:H7 bacteria across a landscape. Although relatively limited in scope, studies assessing the seasonal association of *E. coli* O157:H7 in wildlife have generally concluded that the prevalence is very low or generally not detected in most regions studied. However, when there is a local potential source of *E. coli* O157:H7, such as a nearby dairy operation, the prevalence can be much higher and transmission between plant and animal agriculture may be demonstrated by genetic matches in isolates from the dairy and in associated rodents and birds visiting both areas.

The two most common ways that *E. coli* 0157:H7 can be spread from cattle into the environment and agricultural landscapes are through the land application of raw, non-composted manure, and through runoff of manure or lagoon water into streams and irrigation ditches. Implementation of Good Agricultural Practices (GAPs) as defined by the Commodity Specific food safety guidelines for the production and harvest of lettuce and leafy greens will help minimize risks of contamination of crops with *E. coli* 0157:H7.

For hedgerows, the GAPs for leafy greens will likely require periodic monitoring of fields adjacent to wildlife habitat for evidence of intrusion by animals of significant risk for carrying *E. coli* 0157:H7 (cattle, goats, sheep, pigs, and deer). If there is evidence of intrusion by animals of significant risk, the production block must undergo a detailed food safety assessment by appropriately trained food safety personnel.

UC Davis Dry Bean Field Production Meeting

Thursday, August 16, 2007, 8:50-2:30

Field meeting followed by a barbecue lunch at noon!

3 hours of CE credits (approved for morning session from 9 am-Noon)

Directions: UC Davis Farm, on Olive Lane, about 1.5 miles west of Hwy 113 on the south side of the road. Turn south on Olive Lane and park along the fence. ***The field location is across from the Bee Biology Center.***

- 8:50 Sign-in
- 9:00 Introductions: *R. Long, Farm Advisor, Yolo Co.*
- 9:05 Agricultural management practices for water quality protection: *R. Long*
- 9:15 Heat trials of 3 yellow bean lines: *S. Temple, UCD Specialist*
- 9:20 Lima bean *Lygus* breeding trials and advanced line strip tests: *S. Temple*
- 9:35 *Lygus* IPM for grain legumes: *L. Godfrey UCD Entomology Specialist*
- 9:45 Baby lima spider mite trial: *M. Canevari, Farm Advisor, San Joaquin Co.*
- 9:55 Lima inoculant studies: *S. Temple and Robert Todd, Crop BioScience, Idaho*
- 10:00 Heirloom bean studies: *Ann Prentiss, UCD Graduate Student*
- 10:10 Common bean breeding trials: *S. Temple, UCD Specialist*
- 10:35 Cowpea architecture and *Lygus* management: *S. Temple and J. Ehlers, UCR Researcher*
- 10:45 Black eye breeding and yield trial: *J Ehlers*
- 11:00 Garbanzos, 06-07 yield trials, ascochyta, sclerotinia, herbicides: *S. Temple and M. Canevari*
- 11:20 Invited guest presentations
- 11:45 Group questions and discussion
- 12:00 BBQ Lunch, Sponsors: UCD Plant Science, Tarke, Colusa Produce, Dry Bean Advisory Board
- 1:30 Organic heirloom dry bean and summer cowpea covercrop variety trail, *S. Temple*
- 2:30 Adjourn

Best Management Practices for Managing Irrigation Runoff for Water Quality Protection Field Day Meeting

Friday September 7, 2007
8:30 to 11:00 a.m.
UC Davis Agricultural Research Farm

2.5 Hours of CE Credits applied for

Directions:

UC Davis Farm, Hutchison Drive about ¼-mile west of Hwy 113 on the south side of the road. After Hutchison makes an 'S' turn, immediately turn south on a dirt road that borders an orchard to the east. The trial will be behind the orchard on the Land, Air, and Water Research Farm.

8:30 Sign-in.

8:40 Welcome and Introductions
Rachael Long, UCCE Farm Advisor, Yolo Co.

8:50 Sacramento Valley Water Quality Coalition monitoring program results
John Swanson, Central Valley Regional Water Quality Control Board

9:15 Agricultural management practices to protect water quality
R. Long and Dr. Blaine Hanson, Irrigation Specialist, UCCE, LAWR, Davis.

9:35 Efficacy of Landguard products, a series of enzyme based products to catalyze the rapid breakdown of a range of common pesticides that may occur in irrigation runoff.
Dr. Don Weston, University of California Berkeley.

10:00 Field demonstration and discussion using polyacrylamide (PAM) irrigation water additive, and sediment traps to manage tailwater runoff and water quality.
Dr. Don Weston and Dr. Blaine Hanson

11:00 Adjourn

ALFALFA PRODUCTION

Variety Trial Information: Statewide Alfalfa Variety Trial information can be found on the UC Davis Alfalfa Production Website at: <http://alfalfa.ucdavis.edu>. On the UCD alfalfa home page select '2005 Alfalfa Variety Data'. The number in front of the trial location is the year the trial was planted; the last number is the year the trial was harvested. Fall dormancy and pest ratings can be found under 'Quick Links' on the left margin of the home page in 'Alfalfa Variety Selection'. If you have any questions, please call or stop by our office.

Overseeding forages in alfalfa: UC publication, "21594, Overseeding and Companion Cropping in Alfalfa", is available through our office. Overseeding is recommended for older or weakened stands to help boost production, especially when forage prices are high. Mixed stands will result, changing the forage quality, so be sure you know your market for your hay.

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Pest Control Notes



August 1, 2007

Hemp Production

Currently it is illegal to grow industrial hemp in the United States for fiber or seed, but efforts are underway to try to change these regulations. For those interested, I have a cost of production study for industrial hemp that is available through our office. For our area of the Sacramento Valley, the bottom line is that currently it is not cost effective to grow industrial hemp because the value of the commodity is too low relative to the costs to produce this crop. Hemp is a good fit in the Midwest where water and land are much cheaper.

Rachael Long

Rachael Long

Pest Management – Farm Advisor

To simplify information, when trade names of products have been used, no endorsement of named products is intended, nor criticism implied of similar products, which are not mentioned.

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