Cooperative Extension, University of California February 10, 2010

Pest Control Notes

Yolo, Solano, Sacramento Counties

70 Cottonwood St., Woodland, CA 95695
Phone: 530-666-8143 Fax: 530-666-8736 Website: http://ceyolo.ucdavis.edu

Hello all,

As we move into 2010, on behalf of our UCCE office, I'd like to wish you all a good year ahead and thank those of you who contributed to our office to help support our research and education programs. Given the current and likely future budget cuts to our office, your support is greatly needed and appreciated.

Many thanks also to those of you who contributed to information for our land rental rate survey for various commodities in our area. Results should be available within the next couple of weeks on our website at http://ceyolo.ucdavis.edu.

There are several local upcoming production meetings noted below, that I hope you will be able to attend. May the rains continue to help end our drought!

Sincerely, Rachael Long, UCCE Farm Advisor, rflong@ucdavis.edu

Please mark your calendars for the following upcoming meetings (details on page 3):

Irrigation water management
Thursday, March 4, 2010, 8 am to 4 pm
Heidrick Ag History Center, Woodland

Rodent control in buried drip irrigated systems and other field crops
Friday, March 5, 2010, 9:30 am to Noon
Norton Hall, Woodland UCCE office

Alfalfa and small grains field day
Wednesday, May 19, 2010
Agronomy field headquarters, UC Davis

Dry Bean Production

Publication

The second edition of the manual, "Common Dry Bean Production in California," will be available in a few weeks as a free downloadable publication at http://ucanr.org/freepubs (#8402). This manual features information on common dry bean varieties, fertilization, pest, weed, and disease management (including organic production), and harvesting and marketing practices. For Yolo County, our boron levels are generally too high to grow most dry beans. Boron levels in the soil in the range of 0.5-0.75 ppm will cause significant yield and quality losses to common beans and in the range of 0.75 to 1.0 ppm for limas.

In a recent survey that we (UCCE and UCD Plant Sciences) conducted with 271 consumers from Farmers Markets in Davis, San Francisco, and through CSA subscriptions, we found that nutritional value was the most important factor for consumers when they selected produce, giving growers a valuable marketing tool for selling dry beans (particularly the heirloom varieties), since they are well known for their health value.

Alfalfa update

Fertilization

In driving around our counties, I've seen a number of alfalfa fields that look water stressed from our recent rains (15.5 inches since July 1). To try to improve stand health and plant growth there may be interest in applying nitrogen. However, in trials we conducted in 2006 (a very wet spring) we didn't see any clear benefits in yield gains with different application rates of nitrogen to alfalfa relative to the costs of using and applying this nutrient. When alfalfa is stressed from too much water, the plants are looking for air, not nitrogen.

When the rains stop and the soils begin to dry, the alfalfa will start growing again and the rhizobium bacteria that fix the nitrogen will be able to supply the needed nitrogen for rapid alfalfa growth. Plant tissue sampling can then be used to determine if phosphorus (P), potassium (K), and sulfur (S) are adequate. Soil sampling can also be used for detecting if P and K are needed but not S. Keep in mind alfalfa growth responses usually do not appear until 60-90 days after P and K applications are made. For more information on alfalfa production, see the "Irrigated Alfalfa Management" publication at http://alfalfa.ucdavis.edu/IrrigatedAlfalfa/.

Molybdenom deficiency

If your fields show nitrogen or sulfur deficiency with a general yellowing and stunting of growth, be sure to have plants checked for Molybdenom deficiency and test the soil pH, to ensure optimum nitrogen fixation. For more information on this nutrient, see my August 2009 newsletter at http://ceyolo.ucdavis.edu.

Stem nematodes

Last fall we found stem nematode in both alfalfa stems and soil documenting that this pest can be found in alfalfa most times of the year. To minimize stem nematode damage to alfalfa, as a long-term solution the industry should move towards planting more stem nematode resistant varieties in their fields as older less resistant fields transition out of production.

Onion Seed Production

Last spring I started a project on onion seed production with our new UC Davis bee biologist Prof. Neal Williams (he also may be contacting some of you for pollination work in watermelons). In preliminary observations in onion fields, we noticed that honey bees were repelled by the use of insecticides and fungicides during bloom. We also found that honey bees were pulled away from onions by alfalfa fields in bloom (onion nectar is not favored by honey bees), so be sure to cut alfalfa fields in a timely manner if there are onions blooming nearby.

Native bees are much more efficient pollinators of onion seed than honey bees (pollen viability is higher on native bees), so creating or preserving native bee habitat around farms is important for pollination of this crop. If you're interested in pollinator habitat, contact Jessa Guisse, California Pollinator Outreach Coordinator, The Xerces Society for Invertebrate Conservation, (916) 457-7904 x14 or (530) 510-0976, jessa@xerces.org.

Safflower Production

Last summer I conducted a safflower trial at the UC Davis Agronomy field headquarters with oleic and linoleic varieties. Oleic safflower (the primary market) is a very healthy choice for oils because it is low in saturated fats. For information on the results of these trials, see my website at http://ceyolo.ucdavis.edu.

Rodent control in buried drip irrigated systems and other field crops

Roger Baldwin, IPM Wildlife IPM Pest Management Advisor

Friday, March 5, 2010, 9:30-Noon
Norton Hall, Woodland UCCE office
2.5 hrs CE credit applied for

Topics to include:

- Gopher and vole (field mice) control
- Gopher and mice control baiting regulations

This program is designed for row crop scenarios, with special concern for buried drip irrigation systems. Rodent control will be applicable across a range of crops, but is aimed at commercial agricultural production. There will be about 1.5 hour of classroom and 1 hour of field time (weather permitting).

****

Irrigation Water Management

Solutions for on-farm water and energy efficiency

Thursday, March 4, 2010, 8:00 am – 4:00 pm
Heidrick Ag History Center, 1962 Hays Lane, Woodland, California

Register with Sheila Pratt at pratt@yolorcd.org or (530) 662-2037 ext. 117

Topics to include:

- Understanding and managing soil moisture for optimal irrigation scheduling and yields
- Opportunities for energy efficiency, carbon reductions and cost savings
- Learn about funding opportunities for water and energy efficiency improvements
- Zero Net Energy Consumption? Tour Dixon Ridge Farms to learn how

Workshop Program

7:30 - 8:00 am	Register/ continental breakfast: Sponsored by SusCon and PG&E
8:00 - 8:30 am	Blaine Hanson, UC Cooperative Extension: "What is happening in the Soil?"
8:30 - 9:30 am	NRCS, Yolo RCD, PG&E program presentations
9:30 - 10:00 am	Allan Fulton, UC Cooperative Extension: "Irrigating Orchards Efficiently for Water and Energy Savings"
10:00 - 10:15 am	Break
10:15 - 11:00 am	Vendor presentations on water and energy efficiency
11:00 am- 12:00	Network and Trade show
12:00 - 1:00 pm	Lunch: Sponsored by SusCon and PG&E
1:00 - 2:00 pm	PG&E Irrigation Pump Demonstration
2:00 - 4 pm	Tour water and energy efficiency projects at Russ Lester's Farm (offsite)
4:00 pm	Adjourn

Sponsored by UCCE, Yolo RCD, NRCS, PG&E, and Sustainable Conservation

Know Your Risks, Plan for the Future, A Regional Forum for the Southern Sacramento Valley Farm Community

Tuesday, March 23, 2010, 9am - 4pm
Winters Community Center

Featuring:

- State Water Policy: Implications for Sacramento Valley Growers
- Regional Issues: Delta, Groundwater, Regulation
- Beyond Irrigation Technology: Soil and Crop Management for Maximum Water Efficiency
- Funding and Support Resources for Water Management

For more information see: http://www.agwaterstewards.org or 831-763-2111

Sponsored by the California Agricultural Water Stewardship Initiative

University of California
Yolo County Cooperative Extension
70 Cottonwood Street
Woodland, CA 95695

Non Profit Organization
Postage Paid
Permit #41
Woodland, CA 95695

ADDRESS SERVICE REQUESTED

February 10, 2010