Time to Lay the Groundwork for the 2013 Cotton Season

The 2012 cotton season started slow, but finished with a flourish. Growers across the northern San Joaquin Valley reported good yields with no major pest or disease issues. With 2012 in the books, it’s time to start thinking about the new year. Here are some tips from leading cotton experts.

What the Weather and Regional Crop Mapping Can Tell You About Lygus- Dr. Pete Goodell, UCCE Advisor with UC Statewide IPM Program:

It is valuable to watch the rainfall patterns between November and May. The 2012-13 rainy season is being labeled “La Nada” because of a weak El Ninó situation and the resulting unpredictability in the existing weather pattern. Rainfall amount and duration during late autumn, winter and early spring is the largest determinant of potential lygus severity the following summer.

As you think about what crops will be planted, consider the pest interactions between neighboring crops. When developing your crops maps in anticipation of the pesticide permitting process, think about what your cropping system is going to be on your farm. It might be worthwhile to gather with your neighbors and see what you could do together and determine how you can reduce the risk of lygus in cotton based on crop placement.

I have seen this kind of cooperative action result in success where very large farms banded together to manage lygus over a large region. We can improve on that effort and expand this practice to more farmers and growing regions. Local growers can really benefit by sharing their farm maps and together building a regional map. Through cooperative actions, pest populations, especially lygus and whitefly, can be managed at a community level, reducing the risk to all members of the community.

Feel free to contact me at 559-646-6515 if you have questions or wish to discuss these ideas in more detail.

Assessing Water and Nitrogen in Cotton Production- Dan Munk, UCCE Fresno Farm Advisor and cotton specialist:

Crop and water management planning is often complicated by the fact that irrigation districts don’t know until later in the water year what the growers water allocation will be. But during the winter months, growers will be evaluating their water situation – including how much residual moisture they have in the field versus how much water they need to apply for pre-irrigation. That will depend on the winter rains and how much moisture remained following the previous crop. Stored soil moisture often accounts for 20 to 30 percent of the total water requirement of cotton. Assessing your water management situation going into the 2013 season is going to be important for establishing what acreage you are able to plant next year, keeping in mind all your crop water needs for your whole farm.

Another consideration during the winter months is beginning to develop your nitrogen management plan. We know that residual soil nitrogen plays an important part in cotton production systems. University research has shown time and time again, that it takes 50 to 60 pounds of nitrogen to produce one bale of cotton per acre. A significant part of that nitrogen will come from residual soil nitrogen levels.

Growers can start their field plan by taking composite soil samples from the top two or three feet to estimate existing soil nitrogen levels. Determining soil nitrate levels in the surface gives the grower a good sense of the readily available nitrogen at planting and early season. The difference between soil residual levels of nitrogen and total nitrogen requirement can come very close to the recommended side-dress amount.

Taking into account organic mineralization caused by the breakdown of soil organic matter and any recently applied manures will also reduce the need for nitrogen fertilizers. Because of cotton’s low nitrogen use rate early in the season, it is recommended that amendments be applied at “lay by” when nitrogen losses to leaching and volatilization can be minimized.

While phosphorus responses in cotton systems are quite rare, some fields respond to potassium amendments. Typically responsive soils include sandy soil types associated with Sierra Nevada alluvium as well as some of the clay soil types in the river bottom where root activity may be more confined to surface layers. (continued on next page)
Wintertime To-Do List for Almonds  

With winter and the new year upon us, it’s time for almond growers to start their winter chores for the upcoming season. Here are some tips and a wintertime to-do list from Walt Bentley, the long-time entomologist and retired UC IPM advisor:

Orchard sanitation remains important to control navel orangeworm and defend against aflatoxin contamination. Head into the orchard and check for mummy nut loads, where NOW can get their foothold. Remove and destroy those mummy nuts. Trees should be cleaned to less than two mummies per tree by February 1 in the Sacramento Valley, and fewer in the San Joaquin Valley where winter storms or bird and squirrel activity are not adequate for natural removal of the mummies. Blow or sweep fallen mummy nuts to the row center and destroy them by discing or flail mowing by March 15 where ground cover is not present. Moist orchard floor conditions provided by winter-resident vegetation and rain will enhance mortality of navel orangeworms in mummy nuts that have fallen from trees, according to the UC IPM website.

Check for San Jose scale, especially if you have been off a dormant oil program. While fewer orchards from Fresno north have been experiencing this problem, scale will surface from time to time. The UC IPM website, local extension farm advisor or your pest control advisor can help you examine for San Jose scale. Growers who participate in the San Joaquin Sustainable Farming Project receive helpful information about dealing with scale as well.

Look for wintering leaffooted plant bugs. Walk through the orchard and look for that pest, which can be up to an inch long with spiked leaf-like protrusions on their hind legs. The bugs will aggregate under sheltered areas and large trees and they don’t move around during the winter. If you find an aggregation, follow them throughout the winter to estimate the mortality and spring population density, according the UC almond experts. Around mid-March when the pest start looking for food, growers need to start monitoring for dropped nutlets. UC IPM points out that there are no treatment thresholds for this pest in almonds.  

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Gina Rushing comes from a family with a long heritage in Central Valley farming. Her great-grandparents and grandparents harvested table and wine grapes for much of the 20th century. Other relatives tilled the soil as well. But as a youngster growing up in the big city – Fresno – she always longed to join her cousins working in the tomato fields during the summer.

“I would wish I could go out there with them. I wanted to be out in the field driving tractors,” she recalled.

Rushing moved to farm country 1989 when she and her husband, Eric, owner of a Fresno communications business, took up residence in a country home at her grandparents’ vineyard. Still, the homemaker could only watch the farm operation from afar, never thinking she would someday be among the 1 million female farm operators in the United States.

Finally, 14 years later, her dream came true. As a partner with her grandmother, Lorraine Cetti, in the family ranch, Rushing took over day-to-day management after the custom farmer who operated the vineyard retired. She was ecstatic. At the same time, she admitted, “I didn’t know what I was getting into.”

The customer grower – Joe Lucchesi – “basically taught me what to do. He was a great teacher.” She learned about driving the tractor and operating the equipment safely.” Over the next three years, Rushing oversaw the 60-acre vineyard, which dates back to 1912. “My vines were short lived. We put in almond trees in 2006.”

Seeing a future in nuts, the family pulled out the vines and planted fledgling Butte and Padre almond trees at the ranch along Shaw Avenue near Fresno. They decided on almonds because they could bloom quickly – something that her 94-year-old grandmother could enjoy.

With the change in crops came a steep learning curve. “I had a really slow start. I had a lot of re-planting. You are learning as you grow.”

Her farm is called LPGL Ranch – which stands for her grandfather Leo, aunt Phyllis, herself, Gina, and grandmother, Lorraine. Rushing and her grandmother are an exceptional commodity in U.S. agriculture. Women are the principal owners of only 14 percent of the nation’s 2.2 million farms. Rushing is full of enthusiasm when talking about her livelihood.

“I love being outside, watching the crop grow and the bees.” Besides, she adds, “not too many girls get to buy a tractor.”

For the past three years, her young orchard has been in full production. While she’ll hire outside help for big tasks such as pruning and harvest, Rushing pretty much handles the day-to-day activities with her husband helping with the equipment.

“I live where I work. If I have to be there at midnight to spray, I will be there. I do all the discing, spraying and most of the field work.”

To gain expertise and knowledge, she started attending field days and joined the San Joaquin Sustainable Farming Project two years ago.

“It’s exciting to find people who know the course of action,” she said. Learning from noted University of California farm advisors, entomologists and IPM specialists such as David Doll, Walt Bentley and Dr. Pete Goodell has helped her learn more about sustainable farming practices that can improve the financial bottom line while protecting the environment.

“The UC experts are at the cutting edge of what is going on. They have educated me on all kinds of things. The information is phenomenal,” she said. “You don’t have to be a new grower to be in this program. Even the older guys are learning. When I got into farming people use to say no year will ever be the same. Things are constantly changing.”

Gina wouldn’t have it any other way.
Letter from the Director, Marcia Gibbs, Sustainable Cotton Project

It’s heartwarming and rewarding to work with a unique group of innovative growers dedicated to sustaining Central Valley agriculture for future generations.

As the San Joaquin Sustainable Farming Project moves into its fourth season, we look forward to expanding our reach and working with more alfalfa, almond and cotton growers in Madera, Merced and Fresno counties.

Sponsored by the Sustainable Cotton Project, the program connects growers with some of the state’s leading extension advisors and researchers and helps the farming community become better environmental stewardships while maintaining profitability.

Each grower completes a whole farm self-assessment and working with staff and UC crop experts develops a strategy for implementing University of California Integrated Pest Management Year Round plans and best management practices (BMP) on their enrolled acreage.

Our field scouts will work with your existing PCA to augment field scouting, we offer targeted field days with agricultural experts to help growers deal with current issues, assist with BMP implementation planning and provide annual hedgerow seeds and beneficial insects, when needed.

For more information or to inquire about enrolling in the program for the 2013 season, please contact: Director Marcia Gibbs at (530) 370-5325 or marcia@sustainablecotton.org

You can find us online at the following:
WEBSITE: www.sustainablecotton.org 
FACEBOOK: https://www.facebook.com/sustainable.farmingproject
BLOG: http://centralvalleyfarmscout.blogspot.com/
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