COOPERATIVE EXTENSION SUTTER/YUBA COUNTIES ~ UNIVERSITY OF CALIFORNIA
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Agronomy Notes

February 2004

COLUSA FARM ADVISOR JERRY SCHMIERER IS NOW COVERING *AGRONOMIC CROPS IN SUTTER AND YUBA COUNTIES

(**Alfalfa, wheat, corn, safflower, dry beans---but not rice*)

Due to budget cutbacks and retirements, I have been given the opportunity to expand my "area of influence" to Sutter and Yuba counties in addition to my agronomy assignment in Colusa County. Actually, this is a very good assignment for me as I will be working with the same crops; mainly alfalfa, wheat, safflower and dry beans on both sides of the river. Since I live in Yuba City, this is a logical expansion to my assignment.

I look forward to working with you. If you have problems that you would like me to take a look at or have program or research suggestions, please feel free to call me. The easiest way to contract me is on my cell phone (530-519-9229) or by email (jlschmierer@ucdavis.edu).

UPDATE ON WHEAT STRIPE RUST

Even though many growers have switched to a variety (i.e. Summit or Stander) that was resistant to last year's strain of Stripe Rust, a new strain may develop this year and cause the same type of losses on the new varieties. Resistant varieties are the first line of defense against this disease, but we must keep watch so that we don't let a new strain catch us off guard.

What to look for now?

At this stage, stripe rust is harder to see than leaf rust. It develops slower than leaf rust and will not show up in the upper leaves until later. It will often appear on the bottom leaf, possibly a leaf laying on the soil surface, and will appear as necrotic blotches surrounded by a few small pustules.[2]

Rust spores are spread by wind to initiate infections. Disease development is most rapid at temperatures of 50° to 60°F (10° to 16°C) with intermittent rain and dew; secondary cycles occur at 7- to 10-day intervals.[1]

Treatment Levels

Positively identify the rust before spraying. *Consider spraying if stripe rust is found on 10% of any leaf on 10% of the plants in a stand.* Dry or windy conditions should slow the progress of the disease. However, wind is the main method of spore transport between fields. General yellowing of lower leaves with out evidence of pustules cannot be attributed to the rust pathogen.[3]

Application timing will depend on when initial infections occur; the objective is to protect the flag leaf from infection.[1]

[1] UC IPM
[2] Lee Jackson, UC Small Grain Specialist
[3] Kim Kidwell, Wheat Breeder, Washington State University

JERRY SCHMIERER, UC FARM ADVISOR

NOTES ON SAFFLOWER WEED CONTROL

There is nothing new in safflower weed control, but judging from some of the weedy fields that I have seen the last couple of years, a review of the basics is in order. For starters, safflower in the rosette stage is a poor competitor with weeds and the most critical weed control time is during the first few weeks. Late season, tall weeds can cause harvest problems.

Weed Control Issues:
The pre-plant, soil applied and incorporated herbicides that are registered on safflower do not prevent weed seed germination. They are absorbed by weed seedling root or shoot and kill the seedling before it emerges from the soil. If weeds have emerged by seeding time, either cultivation or a burn down herbicide like Gramoxone or Roundup can be used.

Most Common Pre-plant incorporated herbicides:

- Treflan, etc. (TRIFLURALIN)
  - ♦ Incorporated within 24 (72) hours
    - −Thoroughly mixed in top 2 to 3 inches. Uneven application can result in erratic weed control or crop injury.
    - −Do not apply to wet soil (very poor incorporation)
  - ♦ Long crop rotation restrictions
    - −12, 18 or 20 months (Carry over into the next crop can be a problem!)
- Eptam (EPTC)
  - ♦ Volatile: must be incorporated immediately
    - −Thoroughly mixed in top 2 to 3 inches

Incorporation Issues:

Most common errors in incorporation:

- ♦ Operating equipment too slow
- ♦ Implements set too shallow or too deep
- ♦ Soil is too wet

Small tandem disc: 20” blades, spaced at 7.5”

- ♦ For the herbicide to be mixed in upper 2-3”
- ♦ Operating depth of most implement at twice the target depth (4-6”)
- ♦ 2 passes necessary, second at parallel, perpendicular or at an angle
- ♦ Large discs with >22 inch blades spaced 9” or more do a very uneven herbicide incorporation

Field Cultivators & Spring-Tooth Harrows

- ♦ Speed (5-7 mph) is key to good incorporation
- ♦ 2 perpendicular passes are more effective than 2 parallel passes
- ♦ Light drag harrow mounted behind the cultivator levels the soil and increases mixing action and uniformity

Powered Harrows & Rotary Tillers

- ♦ Slower speed gives better uniformity
- ♦ Set to desired 2-3 inch depth
- ♦ Direct spray into moving tines on powered harrow

Remember: The weed control attained is only as good as the application and incorporation!

2004 Triennial California Corn Growers Meeting

February 13, 2004
Jean Harvey Auditorium,
14273 River Road, Walnut Grove, CA 95690

8:00 - 8:30 **Regional Field Corn Variety Trials**
Kent Brittan, UCCE Farm Advisor, Yolo, Solano & Sacramento Counties

8:30- 8:50 **Corn Herbicide Update**
Mick Canevari, UCCE Farm Advisor & County Director, San Joaquin County

8:50-9:10 **Manure Management**
Marsha, Campbell-Mathews, UCCE Farm Advisor, Stanislaus County

9:10-9:30 **No-till corn Planting, DK & AS**
Wayne Edwards, Monsanto Technical Development Manager

9:30-9:40 **Cropland corn varieties**
Mike Reed, Stanislaus Farm Supply

9:40-9:50 **SeedTec corn varieties**
Craig Sharp, Eureka Seeds, Inc.

9:50-10:10 **Break**

10:10-10:20 **Variety Selection**
Jason Root, Pioneer Hybrids

10:20-10:30 **Northrup King Corn varieties**
Ed Wentzel, Western Ag Services

10:30-10:50 **Corn Insect Pests & Corn Stunt**
Charley Summers, PhD, UC Entomologist, Kearney Ag Center

10:50-11:10 **Corn Stunt**
Dan Opgenorth, PhD, Plant Pathologist, CDFA Plant Pest Diagnostics

11:10-11:20 **Golden harvest corn seed varieties**
Tim Haught, Simplot

11:20-11:30 **Seiben corn seed varieties**
Bill Kellogg, Kellogg Seeds

11:30-11:40 **NC+ Hybrid corn seed varieties**
Manny Mendes, Lockwood Seed and Grain

11:40-12:00 **Safflower Variety Trials**
Kent, Brittan, UCCE Farm Advisor, Yolo, Solano & Sacramento Counties