



UNIVERSITY *of* CALIFORNIA

Agriculture & Natural Resources

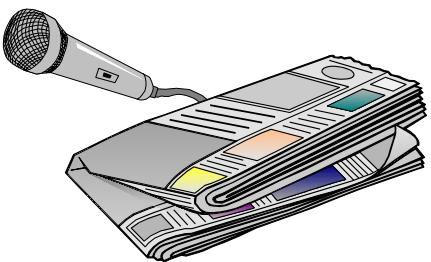
P. O. Box 697, Orland, CA 95963-0697 Telephone (530)865-1107 Fax (530)865-1109

Agriculture Home Economics 4-H

GLENN COUNTY

COOPERATIVE EXTENSION

NEWS FLASH



January 29, 2004

Extension Notes - Doug Munier, Farm Advisor

Wheat Stripe Rust in 2004 ?

Until last year, says Doug Munier, Glenn County Field Crops Farm Advisor, the northern Sacramento Valley has seen much less wheat stripe rust disease than other areas of California. However, last year wheat stripe rust disease greatly reduced yields in most fields in the Sacramento Valley. These serious yield reductions of 25 to 50 percent were seen in many, if not most, fields throughout the Sacramento and San Joaquin Valleys.

Now is the time to start checking for wheat stripe rust. Last year, Lee Jackson, UC Davis Cereals Specialist, found wheat stripe rust very early. By March last year, wheat stripe rust in California was severe and widespread. Several new races were present last year, so some varieties previously resistant were greatly effected by this important wheat disease.

At this early stage of wheat development, stripe rust is difficult to see. It develops slowly and will not show up in the upper leaves until later. It will often appear on the bottom leaves, possibly a leaf laying on the soil surface, and will appear as necrotic blotches surrounded by a few small pustules. These pustules may have the spores washed off of them by any recent rain.

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A new wheat variety Summit was still very resistant to last year's strains of the wheat stripe rust fungus disease. Much of the acreage in the Sacramento Valley this year is planted to Summit. This should result in normal yields unless new strains develop which overcome this resistance. The wheat stripe rust fungus has been rapidly developing new strains over the past few years.

If milling quality wheat is the goal, then Summit may need nitrogen applied during the boot to flowering stage. Thirty to forty pounds of actual nitrogen (units) usually raises grain protein by 1-2 percent.

Many wheat growers have responded to the increase in wheat stripe rust by planting barley. There are two newer University of California varieties, UC 937 and UC 933 which have yielded very well with good tolerance to barley leaf diseases.

If wheat stripe rust is found this early in the growing season some growers may consider using a fungicide, which may be economical considering the current weather pattern and amount of time left for grain-fill. Jerry Schmierer, Colusa County Farm Advisor, and Doug Munier, Glenn County Farm Advisor, did several fungicide trials last year and will do several more this year to get more information on the economical effectiveness of fungicides for wheat stripe rust.

The two better fungicide options are Tilt and Quadris. Tilt may be applied no later than full flag leaf emergence. It cannot be applied to forage wheat. Quadris can be applied up to late head emergence. The Quadris label does not address wheat for silage, but says it can be used on wheat for hay (defined as dried to 20% moisture before being fed).

If a grower sees wheat stripe rust developing in a field and is considering spraying a fungicide please call Doug Munier, Field Crops Farm Advisor, at 865-1153. He can help in disease identification and help determine how effective the fungicide application was for the stripe rust infection.