

Weekly Wheat Bulletin

The Weekly Wheat Bulletin is designed to share quick, informal and reliable information about the state's wheat crop and disease conditions. Comments forwarded by Thursday morning of each week will be posted in the Bulletin for distribution Thursday evening. Archived copies of the 2008 Wheat Bulletin may be accessed on the California Wheat Commission website:

For those of you that are new to our mailing list, the length of this bulletin will change from week to week. The amount of material is dependent on the contributions of our readers.

Comments:

- **3.18.08** "Irrigation is starting on wheat fields in Solano and Yolo County's. Dryland wheat is holding up well, but will need another rain to make a decent crop. Right now everything looks good, but we have a long way to go." *Alan Freese, Solano County grower*
- **3.18.08** "There is concern about some frost damage on early planted wheat. The temperature dropped below 30 degrees Sunday night. Dryland wheat needs some rain." *Mike Holdsworth, Western Milling*
- **3.18.08** "Last week we found stripe rust in a field of CalRojo south of Grimes in the

Sacramento Valley. Kent Brittan was able to confirm from the seed distributor that the variety planted was indeed CalRojo. Since then, two more fields of CalRojo have been reported as having stripe rust. The growers involved are making timely applications of fungicides to diminish crop loss. With this discovery, it is even more important to inspect fields regularly. It takes 8-14 days from initial infection of wheat plants until pustules are visible. Just because you don't see it this week, does not mean that the wheat hasn't already been infected. As per label restrictions, fungicides must be applied before the wheat plants start to flower. The next several weeks are a critical time for stripe rust control. "Jerry Schmierer, Agronomy Farm Advisor, Colusa, Sutter, Yuba and Glenn Counties

- 3.19.08 "I've seen the first hint of wheat stripe rust in the northern Sacramento Valley. On Tuesday in one 40 acre Summit field, with about 20 minutes of looking, I found 3 leaves with spores on 1/8 by 1 inch areas." Doug Munier, Farm Advisor, Glenn County
- 3.19.08 "Stripe rust now has been confirmed in a few fields in the Sacramento Valley (Yolo and Colusa counties) on both known susceptible cultivars (Blanca Grande, Summit) and on the (until now) resistant cultivar Cal Rojo (in Colusa county). Disease control measures during the growing season are limited to the use of fungicides. Evaluations by UC Farm

Advisors in the Sacramento Valley over the past several years have shown that several available fungicides effectively control stripe rust (see the CWC website www.californiawheat.org/ under Wheat Stripe Rust Reports/Articles) for those evaluations.

Regarding the disease detected on Cal Rojo, a cultivar that was considered resistant to stripe rust until now: There is no way to predict how long any particular source of resistance will remain effective. The pathogen population, mainly through natural mutation, can acquire a gene(s) for virulence that can overcome a gene(s) for resistance at any time. Some genes remain effective for decades (i.e., those in Anza and Yecora Rojo remained effective from the mid 1970's until 1998 or so), while others may be overcome before a new cultivar reaches commercial production (i.e., the cultivar Colusa, about 10 years ago). Cultivars containing more than one effective gene for resistance should last longer than cultivars that contain only one effective gene for resistance. Also, growers can minimize risk if they plant more than one resistant cultivar (if the cultivars have different genes for resistance)." Lee Jackson, UC Cooperative Extension Specialist, Small Grains

3.19.08 – "Most of the irrigated wheat in this area is looking good. Most growers appear to be providing adequate nitrogen and water during this critical period. Some lodging is happening on some of the Sept.-Oct. planted fields. The last few weeks we were still seeing the stunting affects of Shark or Osprey applications. This week, fields have grown out of the injury. The dryland areas are drying down quick and are moving toward heading at a rapid pace. Most of the irrigated areas look good but many are showing moisture stress in areas waiting for canal water or where water is being stretched. Most are in the Feeks 8 stage. Some fields were treated with a fungicide as a preventative even though there was not stripe rust starting, hoping for a yield bump. So far I have only seen stripe rust on some

Blanca Grande volunteers along a road. There was a lot of late wheat planted that is still in the tillering stage that is not looking very good due to moisture stress." Steve Wright, Farm Advisor, Glenn County

3.19.08 – "I have been fairly busy looking at Blanca Grande fields with stripe rust patches. A couple of those growers in the Dixon area are treating for stripe rust; fields are in the boot stage. I looked at the Cal Rojo fields that Jerry Schmierer found and they have large well developed patches of stripe rust. Leaf symptoms are similar to Summit, light yellow spots developing to large dashes of necrotic tissue, spores in line with the leaf veins. I understand that the 2 fields on the west side of the river were treated.

I feel that for the southern end of the Sacramento Valley we have not had enough rain this season to carry the wheat crop through the season. It is time to irrigate most of the fields. Please don't wait like last year, it is important to maintain adequate soil moisture from jointing through grain fill." Kent Brittan, Yolo, Solano, & Sacramento counties

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