Wheat Freeze Assessment Report—Selected Areas, Texas South Plains
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Calvin Trostle, Extension agronomist, Texas A&M AgriLife Extension Service, Lubbock
(806) 746-6101, ctrostle@ag.tamu.edu

I have only a small number of wheat freeze inquiries this week. In general, I think the average wheat field in the region on the same calendar date is about 2 weeks later than last year, so this is helping with minimizing wheat freeze injury in many fields. Wheat for grain that was planted ‘on schedule’ (for example, early October in the NW South Plains to late October in the Lamesa area) is more likely to have freeze injury potential due to the more advanced growth stages which are susceptible at a higher temperature threshold.

Remember that resources needed for freeze injury assessment are on the web at http://wheatfreezeinjury.tamu.edu

Here are three assessment reports:

**Dawson Co., Monday, April 21 (Trostle)**

In contrast to the previous week there was a lot more wheat for grain that was at the heading stage than I first realized, but I have not seen evidence yet of freeze injury on wheat for grain. Two growers, looking at their dryland yield potential and the uncertainty of what injury level they might see, cut for hay late last week. I noticed on rye that was grown for cover that many heads—even the majority—by Monday (and was headed out on Tuesday, April 15, when the major freeze occurred) were now bleached out and tan in color. They are sterile. Some wheat showed perhaps 1 head that was white or bleached per about 500 heads.

**Cochran Co., Monday, April 21 (Kerry Siders & Jeff Molloy)**

The wheat situation is not good, especially for earlier wheat. Between droughty conditions and a freeze April 15 wheat is looking rough. We looked at a few patches of wheat Monday south, west and northwest of Morton. The rule of thumb was that wheat which had progressed fairly normally, in terms of head development, received 40-60% freeze damaged heads.

As shown in picture below, this was a fairly typical sight with very obvious non-viable white heads of wheat. For much of this the recommendation was to cut it for hay soon.

The fields which were not as far along did not appear to have as significant damage. However, as these fields begin to flower and develop grain it may turn out that the flowering parts sustained some injury and were rendered non-viable. So a tough call in some situations. However, if you calculate cost of watering to find out if you will make a crop or not may help in the decision making processes.

Bailey & Parmer Counties, TX/Curry Co., NM, April 22 (Trostle)

I viewed six fields (four wheat, two triticale) mostly near U.S. 84 and north of Clovis. Only one field of wheat had any heading (perhaps 10%), but there was no sign of discoloration in emerged heads. Texas wheat fields (3) did not demonstrate any ready evidence (heads, most recently emerging leaf), or stems and nodes that suggested freeze injury. I only split a few stems, and I found no problems. The lack of heading suggests these were later planted wheat fields where we would be less likely to find injury.

The Curry Co. wheat field (NMSU-Clovis Ag. Science Center) demonstrated significant leaf burn on some varieties. Varieties with significant leaf burn ranged from about 5% dead emerging leaf to as high as 40%. There was no boot stage anywhere among the varieties. A few additional dead growing points might be present in these plants that has not manifested the potential injury yet in a dying most recently emerged leaf. Wheats that are injured will require longer time to recover vs. those that were not, in order to recapture some of the yield potential.

Triticale samples from Parmer Co., which will be harvested for forage, were quite different. One field was about 50% or more headed, and about 2/3 of the emerged heads were mostly white in color. The head is dead. Heads that appeared to emerge since the freeze appeared normal to this point. There were only a few most recently emerged leaves that appeared to be dying or dead. The other triticale field was still pre-boot and showed no signs of freeze injury. Since the fields are going to silage there is no recommendation to change their management at this point.

Calvin Trostle, Ph.D.
Professor & Extension Agronomist
Dept. of Soil & Crop Sciences
Texas A&M AgriLife Extension Service
Texas A&M AgriLife Research & Extension Center
1102 East FM 1294 / Lubbock, TX 79403-6603
http://lubbock.tamu.edu
http://soilcrop.tamu.edu