

## Dr. Brent Bean

Agronomist, Texas Cooperative Extension,  
6500 Amarillo Blvd. West, Amarillo, TX 79106

Email: [b-bean@tamu.edu](mailto:b-bean@tamu.edu) Ph: 806-677-5600

Website: <http://amarillo.tamu.edu/programs/agronomy>

### Wheat Damage from Freeze

Temperatures dropped below 25 °F for much of the region on the weekend of April 7<sup>th</sup>. Coldest temperatures were recorded in the western Panhandle. In some areas, particularly south and west of Amarillo, temperatures remained below 26 °F for over 30 hours. Observations made on Thursday suggest that very little damage occurred to the wheat as a result of the cold temperatures. Apparently soil temperatures were warm enough to keep the temperature within the wheat canopy high enough to avoid damage. I have seen a few split and soft internodes suggesting that we could see more lodging than normal later on as a result of the freeze. Wheat should be reexamined the week of the 16<sup>th</sup>, but as of now I am very optimistic that we still have excellent yield potential in the area wheat.

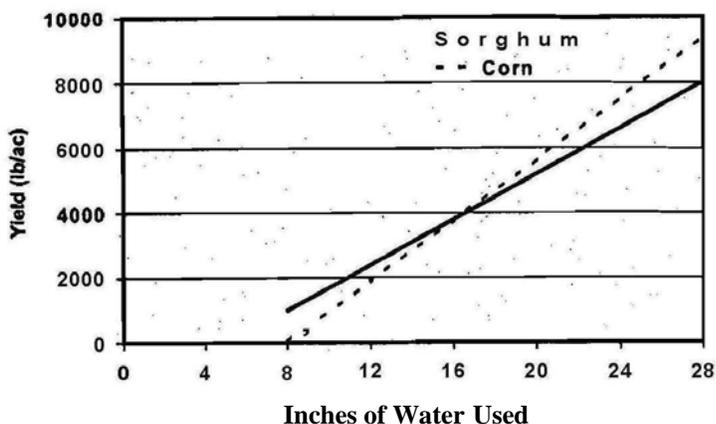
### Dryland Corn Production

Excellent corn prices coupled with very good soil moisture have some producers considering dryland corn. In recent years dryland corn has been planted with mixed results. Table 1 is a summary of planted and harvested dryland corn acres, along with the average yield, over the last three years in the Texas high plains. In 2004 and 2005 most of the planted acres were harvested with respectable yields ranging from 60 to 77 bu/acre. In 2006, 42,200 acres of dryland corn were planted, but only 12,400 acres were harvested. Of the harvested acres the average yield was excellent at 93 bu/acre. My guess is that those acres that were harvested, were probably planted late, and were thus able to take advantage of late summer rains received in 2006. Figure 1 shows the relationship between corn and grain sorghum yields and seasonal water use. Not surprisingly, the relationship shows that corn will do better in wet years, while grain sorghum gives the better yields in dry years. The point where corn and sorghum yield the same is about 17 inches of seasonal water

**Table 1. Corn planted and harvested acres along with yield in 2004, 2005, and 2006 in the Northern and Southern Texas High Plains TASS districts.**

Region	Year	Planted Acres	Harvested Acres	Yield, bu/ac
N. High Plains	2004	7,300	6,900	72
S. High Plains		4,900	4,000	75
N. High Plains	2005	22,700	20,200	60
S. High Plains		2,100	1,800	77
N. High Plains	2006	42,200	12,400	93
S. High Plains		None	NA	NA

**Figure 1. Relationship between corn and grain sorghum yields and seasonal water use.**



use. The risk associated with dryland corn compared to sorghum will be higher for the simple reason that corn will not tolerate long periods of drought as well as grain sorghum. One way to hedge your bets with dryland corn is only plant in fields with excellent soil moisture. Three feet of soil moisture will go along way in producing a dryland corn or sorghum crop.

After visiting with growers and agronomists who have attempted to produce dryland corn, some general guidelines for growing a successful dryland corn crop have been developed. These are as follows:

1. Plant only when 2.5 to 3 ft or more of soil moisture is present. A successful dryland crop can be produced without significant soil moisture at planting, but the crop will be much more dependent on timely in-season rainfall.
2. The likelihood of success will be greater when minimum or no-till practices are used in order to store as much soil moisture as possible prior to and during the growing season.
3. Choose a corn hybrid with the best drought and heat tolerance as is available. In general, shorter maturing hybrids will be a better choice, however, some longer maturing hybrids do have good drought and heat tolerance. The use of a Bt hybrid is also an important consideration, particularly if planting date is delayed.
4. Keep seeding rate low, preferably no more than 15,000 seed/acre.
5. Narrow rows may also provide an advantage by providing early season shading that reduces soil water evaporation.
6. The conventional wisdom has been to plant dryland corn as early as possible. However, a southwest Kansas study has shown, as well as producer observations, that this may no longer be the case. Consider delaying planting until significant soil moisture has been stored. This is similar to what is currently recommended for grain sorghum.

For more information on dryland corn production see the following publication on the Amarillo TAMU website at: <http://amarillo.tamu.edu/programs/agronomy/publications/Corn/DrylandCorn.pdf>.

### ***Resurrection of Propazine (MiloPro)***

Primarily through the efforts of the National Grain Sorghum Producers Association propazine will be available for use in grain sorghum for the first time in several years. In March, propazine received a conditional federal label for 3 years. The herbicide will be sold under the trade name ***MiloPro*** by Albaugh, Inc. The label is somewhat restrictive in that MiloPro cannot be used in sandy soils and the crop rotation restriction to cotton is 12 months. That being said, past experience would tell us the MiloPro will be safer to cotton than atrazine when planted the following year. MiloPro is also safer than atrazine on grain sorghum when both are used preemergence. Control of annual grass might be slightly better than atrazine, but will most certainly not be as good as metolachlor (Dual or Cinch). The other drawback to MiloPro is the expense. The product will retail for \$34.00/gallon with a use rate of 1 qt/acre. This makes it considerably more expensive than atrazine.

INFORMATION GIVEN HEREIN IS FOR EDUCATIONAL PURPOSES ONLY. REFERENCE TO COMMERCIAL PRODUCTS OR TRADE NAMES IS MADE WITH THE UNDERSTANDING THAT NO DISCRIMINATION IS INTENDED AND NO ENDORSEMENT BY TEXAS COOPERATIVE EXTENSION IS IMPLIED.