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WHEAT CROP

Recent rains have definitely helped the wheat crop. Unfortunately the rains came too late to help save many of the dryland fields. Many of the dryland fields that were fortunate enough to get established are thin due to a lack of tillering. Only an exceptionally wet, cool month of April will allow for any significant tillering to occur. Many fields were hit hard by greenbug. We have seen complete fields destroyed by this pest. Varieties that are greenbug tolerant are really coming to the forefront in 2000. I recently saw a field near Hereford where Tam 107 was planted on the same day right next to the greenbug tolerant Tam 110. The entire field of Tam 107 was completely dead, with not a single green plant remaining in the field. The Tam 110 wheat looked great! Also have confirmed soil borne mosaic in the Dalhart area. Those of you in this area should consider planting a soil borne mosaic tolerant variety. There are many varieties that are tolerant to soil borne mosaic, including, 2137, Hickok, Jagger, Karl 92, and Tonkowa. Most of the Tam varieties are susceptible.

CORN ROW SPACING STUDIES

Studies were conducted in 1997, 1998, and 1999 in the Texas High Plains to determine the effect of row spacing and plant population on corn yield. Row spacings examined were 20, 30, and 40 inches. Plant populations ranged from 22,000 to 45,000 plants per acre. Studies were conducted near Hereford and Sunray, Texas.

In 1997, yields were highest in the 20 inch rows. Average yield increase for 20 inch vs. 30 inch rows was 11.1% under limited irrigation, and 13.9% with full irrigation. Yield was not significantly increased under limited or full irrigation by increasing plant population over approximately 27,000 plants/acre. In 1998 at Sunray, neither row spacing nor plant population had any effect on corn yield. It is possible that the lack of differences between treatments was due to the site's low yield potential in 1998. At Hereford, yields were extremely low due to the drought and lack of adequate irrigation capacity. Under these conditions the best plant population was at 22,000 plants/acre and the best row spacing was 40 inches. This was the opposite of what was observed in 1997. In 1999, yields were approximately 7% higher in the 30 inch rows compared to the 20 inch rows at both locations. At Sunray, yields were highest when plant population was at least 38,000 per acre. At Hereford, plant population did not significantly effect yield.

Of the six studies conducted in 1997, 1998, and 1999, only two of the studies, those conducted in 1997,

PUBLICATION

We have recently updated our Corn Herbicide Guide for the Texas Panhandle and South Plains. For a copy go to <http://soil-testing.tamu.edu/> or email or phone me for a copy.

showed a significant yield advantage of 20 inch rows over 30 inch rows. These results suggest that farmers in the Texas High Plains should not expect an automatic 5 to 10 percent increase in yield as has been reported from the midwest by converting from traditional 30 inch rows to 20 inch rows. Possible advantages of 20 inch rows is better weed control due to quicker shading of the soil, less lodging late in the season, and quicker canopy formation following a hail. However, some disadvantages are that the 20 inch rows make it more difficult to get back into the field with tillage equipment if needed, more difficult to scout for insects, and some leaf diseases may be worse. A complete copy of the results of this study can be obtained at <http://soil-testing.tamu.edu/> or you can contact me directly for a copy. At this web site you will need to do a publication search by my name and use corn as the keyword(s).

BALANCE USE IN CORN

As most of you know several changes have been made to the Balance label for use in corn. Aventis is not recommending it's use on coarse textured soil. On medium textured soil the rate has been reduced to 1.25 to 1.75 oz/Ac for soils with less than 1.5% organic matter. When used on soils with a pH of greater than 7.5 rates are to be reduced by 0.25 oz/Ac. I am hearing some reports of people who are considering using less than the labeled rate. With the conditions we had last year a low rate such as 0.75 oz/Ac worked well. However, do not count on a rate less than what is required on the label to work consistently. In my opinion I would not use less than 1.0 oz/Ac on medium textured soil even when including other herbicides as tank mixes. Keep in mind that a company only will back a product if it is used according to the requirements on the label.

SORGHUM THOUGHTS

If you are considering growing forage sorghum for hay, you may be interested in a study conducted in 1999. The purpose of the study was to demonstrate the diversity of sorghums in their ability to produce forage and grain. The study included male sterile, photoperiod sensitive, and brown mid-rib varieties. Over 75 entries were included in the study. Forage yield ranged from 6,344 to 21,543 lbs/acre dry weight at heading. Lodging and grain yield data was also collected. A complete copy of the results of this study can be obtained at <http://soil-testing.tamu.edu/publications/833016-831192-99.pdf> or you can contact me directly for a copy.

Paramount was labeled last year for use in sorghum. Paramount should be used primarily for control of **bindweed**. Rate to use is 5.3 oz/Ac. The herbicide does an excellent job on bindweed, but is slow. Control may be less than 50% two weeks after application. However, be patient, after 6 weeks control should be 80% or greater. For quicker control, add a pint of 2,4-D or 4 oz of Clarity to the mix.. This will also help in the control of other broadleaf weeds, such as pigweed, that are not controlled with Paramount. Although barnyardgrass and crabgrass are listed on the Paramount label, my experience has been that Paramount does a poor job in controlling grass. At this point, I am not recommending its use for grass control.

FOOD FOR THOUGHT

One pigweed plant per two feet of row can reduce irrigated sorghum yield 36%.

Ally + 2,4-D has received a Section 18c label for use on atrazine resistant pigweed in sorghum.. Rate to use is 1/20 oz/Ac Ally + 8 oz/Ac 2,4-D amine. The 2,4-D somehow protects the sorghum from injury from Ally. Nobody knows why. Apply the treatment when sorghum is between 6 and 12 inches in height. Some sorghum varieties may be slightly delayed in maturity from this treatment, however, yield should not be effected.