Do foliar applied corn fungicides provide increased drought tolerance?

The following graph contains four experiments conducted at the Graves Chapple Research Center. Four corn hybrids were treated with and without Headline fungicide. Headline was applied at a rate of 9 ounces per acre on July 9 with 24 gallons of water.

The orange bars represent the untreated check and the green bars represent the Headline fungicide application. Corn foliage diseases were limited due to the hot dry conditions of the 2012 growing season. The test data indicates there was no significant difference between the untreated and the fungicide treatment. The data in these four different experiments would lead us to believe that the application of fungicide did not improve drought tolerance at the Graves Chapple Research Center.

Right, the Tiling Field Day held in Holt County was attended by area growers. The tiling project was established on November 19 along Highway 159 in the Missouri River Bottom. Dr. Kelly Nelson, UM researcher, provided information regarding the agronomic value of draining and using tile lines to sub-surface irrigate.
Left, in-line water control structure to adjust the water table of the field. Adjustment is made by changing the height of the sections inside channel as shown below. Two structures were installed at each spacing site in the field.

Two study areas were initiated along Highway 159 east of Big Lake. Tile lines were installed at 20 foot spacing at one part of the field and 60 spacing on the other. Notice the change in color which is a change in soil texture. The permeability of the soil to water affects tile spacing. Also, a topography map is important to plan the correct slope of a systemic tile drainage or sub-irrigation system.

If you would like to be added to our electronic mailing list, please contact Charmaine Flint, Holt County Secretary at 660-446-3724.

Information contained in this newsletter is intended for use in Northwest Missouri and may need to be adapted to other locations. We ask that you credit University of Missouri Extension if you use this information.

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