Field Corn Variety Trial Results  
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Table 1 shows the results of the 2013 Delta field corn variety trial, located on Tyler Island. Two replicates of sixteen varieties were planted on April 16, 2013 by air planter. Each replicate consisted of four 30-inch beds on an average row length of 1324 feet. Seed was planted two inches deep and six inches apart down the row, for an approximate planting density of 35,000 seeds per acre. The soil is a Rindge mucky silt loam with approximately 20 percent organic matter in the top 15 inches of soil. The Rindge series is a mucky peat soil down to 60 inches, and approximately 55,600 acres in the Delta are described by the Rindge classification. The previous crop in the field was corn, and subsurface irrigation by “spud ditch” was employed three times. Nitrogen was applied preplant (125 units as NH₃), and then 25 gallons per acre of 8-24-6 with ½% of zinc was sidedressed. Weed control was by cultivation and one glyphosate application. The field was harvested on October 4, 2013.

The table presents mean values for the two replicates. When interpreting the results, keep the following in mind. The mean is equal to the sum of values divided by the number of values, in this case, two replicates. The statistical method used to compare the means, called Tukey’s range test, compares all means against each other. Varieties were considered statistically different if their P value was less than 0.05, or 5 percent. What this means is that when differences between varieties exist, we are 95% certain that the two varieties are actually different; the results are not due to random chance. Differences between varieties are indicated by different letters following the mean. For example, a variety that has only the letter “a” after the mean yield value is different from a variety that is followed by only the letter “b”, but it is not different from a variety whose mean value is followed by both letters (“ab”). All varieties but one had statistically similar yield, but differences in bloom date, disease presence, ear height, and grain moisture were more pronounced. The CV, or coefficient of variation, is the standard deviation divided by the mean, or a measure of variability in relation to the mean. For some measures, particularly the disease percentage, the variability between the two replicates was very high.

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Data were transformed for analysis. Arithmetic means are presented.

Table 1: 2013 Delta field corn variety trial