TJ Technologies Corn Seed Treatment Evaluation, 2005

Bob Henson

A field experiment was conducted at the North Dakota State University Carrington Research Extension Center to test the effectiveness of biological seed treatments in controlling rot organisms in corn. Corn seed, treated and supplied by TJ Technologies, was sown in 30" rows on 16 May at the rate of 60,000 seeds / acre. Irrigated plots were 4 rows wide by 33' long and arranged in a randomized complete block design with 4 replicates. A soil test the previous fall showed: 32 lbs NO₃-N (0-24"), 10 ppm P₂O₅ (Olson), 173 ppm K₂O, pH 7.8, and 3.2% organic matter. After emergence, plots were thinned to 20,000 plants / acre. Excellent weed control was achieved with herbicides and cultivation. No other pest problems were observed.

No statistically significant (P < 0.10) differences among treatments were observed in days to 50% silking, ear height, lodging, yield, or test weight (Table 1).

| Table 1. Corn response to TJ Technologies seed treatments, NDSU Carrington, 2005. | | | | | |
|---|-----------------------|---------------|--------------------|-----------|----------------|
| Treatment | 50% Silking | Ear Height | Lodging | Yield | Test Weight |
| | (days after planting) | (cm) | (1-9) ¹ | (bu/acre) | (lb/bu) |
| Control | 71.5 | 97.8 | 2.0 | 146.2 | 52.3 |
| Micronutrients ST | 71.8 | 102.1 | 2.5 | 138.0 | 51.8 |
| QuickRoots | 70.8 | 96.7 | 1.5 | 133.8 | 55.0 |
| ST + QuickRoots | 70.8 | 100.4 | 2.3 | 145.5 | 55.4 |
| Mean | 71.2 | 99.2 | 2.1 | 140.9 | 53.6 |
| C.V. (%) | 0.9 | 4.2 | 58.4 | 9.1 | 8.1 |
| P-value | 0.140 | 0.312 | 0.690 | 0.488 | 0.574 |

¹1 = erect, 9 = prostrate