T-22 Biological Fungicide for Corn

Steve D. Ruhl, Agriculture and Natural Resources Extension Agent

Objective

To evaluate the effect of the biological fungicide T-22 on corn yield.

Background

T-22 Planter Box is a recently available agricultural product containing the fungus *Trichoderma harzianum* which is stated to actively colonize and enhance plant roots. It is stated to help corn plants deal with drought stress.

Cooperator: Tom Weiler Fertilizer: 206-70-99 lb/A actual N-P₂O₅-K₂O County: Morrow Herbicide: PRE: Dual II Magnum (1 qt/A), Atrazine (1.5 lb/A),

Nearest Town: Chesterville Atrazine (1.5 lb/A),
Soil Type: Chili Balance (1.0 oz/A)

Drainage: Naturally well-drained POST: Clarity (1 pt/A)

Tillage: Conventional Variety: Golden Harvest 2547

Soil Test: pH 6.5, P 104 ppm, Planting Date: May 1, 2000

K 208 ppm Planting Rate: 30,100 seeds/A Row Width: 30 inches

Harvest Date: October 23, 2000

Methods

A split planter box treatment of 1 oz. per acre of T-22 vs. no treatment was used in this study. The planter used was a six-row machine. The experimental design was a split-planter side-by-side strip trial with three replications. Three rows had T-22 applied and three rows had no treatment. Individual treatment strips were six rows (15 ft.) wide, and lengths ranged from 277 feet to 455 feet. All six rows of each treatment were harvested and weighed with a weigh wagon.

Results

Table 1. Soybean Yield.

Treatment	Yield (bu/A)
T-22	149.9
No treatment	145.5
LSD (P =0.05)	NS
F<1, CV (<4%)	

Summary

The use of T-22 did not have a statistically significant effect on corn yield in this trial. Seed treatments often produce small changes in yield, thus more replications should have been added. The literature on T-22 advocates its real benefit as occurring during a drought year. The 2000 crop year was somewhat dry during periods of the season, but it certainly was not a drought year.

Acknowledgment

The collaborators on this trial express their thanks to Golden Harvest Seed Company for furnishing the seed corn and weighing the plots. Also, thanks are owed to Todd Swetland, Pioneer Seed dealer, for providing the T-22 product.

For additional information, contact

Steve Ruhl

The Ohio State University Extension

ruhl.1@osu.edu