

Test of Zironar® in Irrigated Soybean

Study ID: 1531011202401

County: Boone

Soil Type: Nora silt loam

Planting Date: 4/22/24

Harvest Date: 9/28/24

Population: 130,000

Row Spacing (in): 20"

Variety: Pioneer® P25A16E

Reps: 5

Previous Crop: Corn

Tillage: No-till

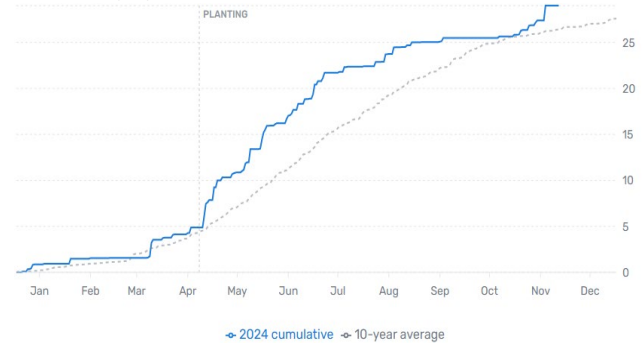
Herbicides: **Pre:** 10 oz/ac Barrage® + 6 oz/ac Fierce EZ® + 8 oz/ac glyphosate + 3.2 lb/ac AMS **Post:** 32 oz/ac Enlist One® + 43 oz/ac Liberty® + 8 oz/ac Outlook® + 4 oz/ac X-Cyte™ + 3.2 lb/ac AMS; 11.98 oz/ac clethodim

Foliar Insecticides: 3.98 oz/ac bifenthrin

Foliar Fungicides: 12 oz/ac Miravis Neo® + 9.5 oz/ac Preference® NIS

Irrigation: Pivot

Rainfall (in):



Introduction: Soybean cyst nematode is the number one yield-limiting pathogen of soybeans in the United States. This study evaluated the impact of Zironar® biofungicide/bionematicide on yield loss to soybean cyst nematode. Zironar® contains two *Bacillus* bacteria strains. Zironar® was applied in-furrow at 6 oz/ac at planting on April 22.

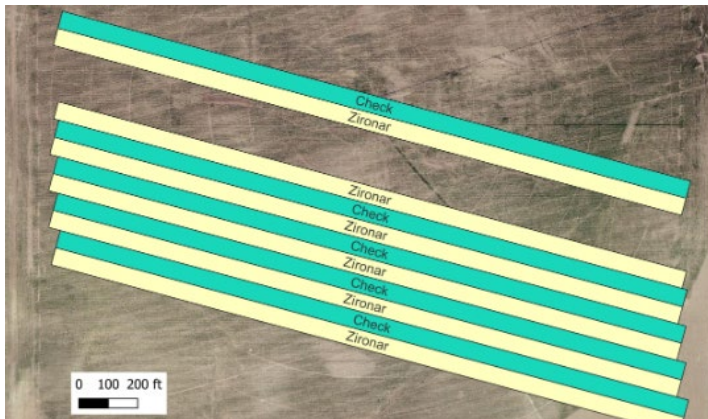


Figure 1: Project layout and design

Results:

	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ (\$/ac)
Check	12.5 A*	88 A	967 A
Zironar® (6oz/ac)	12.8 A	90 A	987 A
P-Value	0.4	0.4	0.32

*Values with the same letter are not significantly different at a 90% confidence level.

†Bushels per acre corrected to 13% moisture.

‡Marginal net return based on \$11/bu soybeans, \$6.50/ac for Zironar®.

Summary:

- There were no significant differences in moisture, yield, or marginal net return among the treatments evaluated.
- Zironar® may be more effective in protecting yield in fields with high SCN pressure.