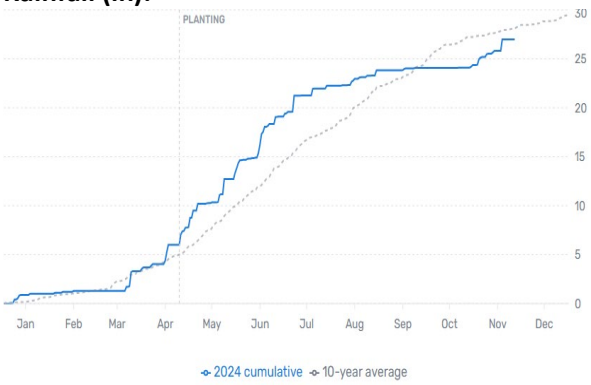
Trivapro® Fungicide Application via Chemigation to Corn

Study ID: 1256139202401
County: Pierce
Soil Type: Thurman-Valentine complex; Thurman loamy fine sand
Planting Date: 4/22/24
Harvest Date: 10/7/24
Row Spacing (in): 30”
Hybrid: Pioneer® 1185AM
Reps: 4
Previous Crop: Soybean with rye cover crop
Foliar Fungicides: Variable

Irrigation: Pivot
Rainfall (in):



Introduction: In this study, Trivapro® fungicide was applied at 13.7 fl oz/acre to a corn field at R1 on July 18, 2024, via chemigation with the goal to protect yield and manage foliar fungal diseases like Tar Spot and Southern Rust. Trivapro® is a fungicide with three modes of action, and a very good efficacy rating for Tar Spot in the EC130 Insect, Weed, and Disease Management Guide. This research used visual disease assessments and combine yield monitoring to collect data on fungicide efficacy. During the season, this field had apparent weed pressure on the west half, and experienced a hail event during the first week of July (before tassel). The study design was a randomized complete block with 4 replications.

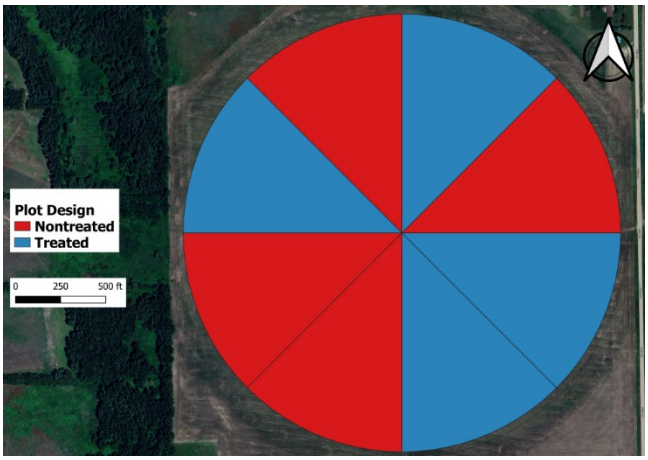


Figure 1: Project design of plots treated with Trivapro® (blue) and nontreated checks (red).

Results:

Treatment	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
Trivapro®	14.4 A*	230 A	989 A
Untreated Check	13 A	227 A	989 A
P-Value:	0.21	0.77	0.90

*Values with the same letter are not significantly different at a 90% confidence level.
†Bushels per acre corrected to 14% moisture.
‡Marginal net return based on $4.35/bu corn, $25.96/ac cost for Trivapo®.

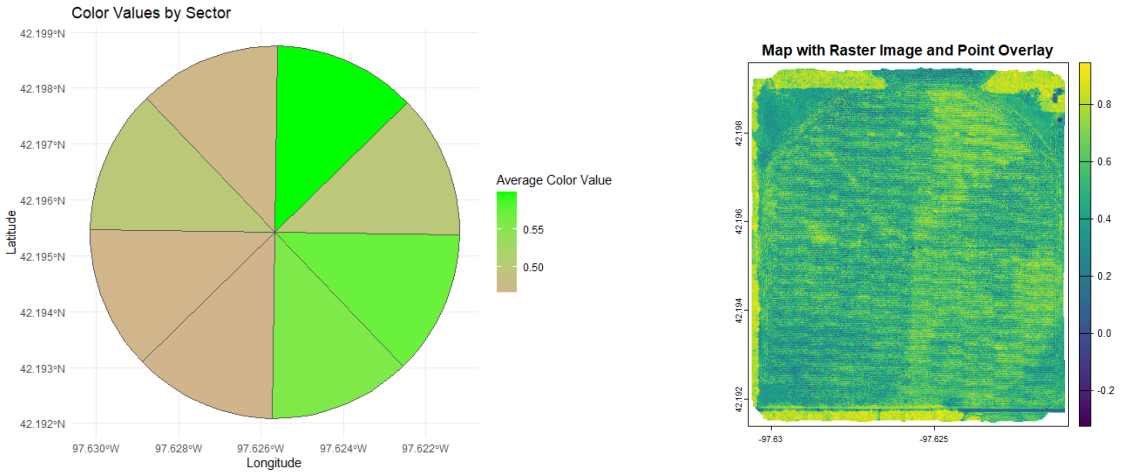


Figure 2,3: Drone and NDVI Imagery taken on 9/25/24 of the field following Trivapro™ applications against untreated check applications.

Summary:

- There were no differences in moisture, yield, or marginal net return between the application of Trivapro® and the untreated check.
- Drone and NDVI imagery did capture differences in color value after applications.
- In sites and years where foliar disease becomes an issue, fungicide may provide better protection.