

Evaluating BLACKMAX® 22 and Extract Powered by Accomplish® in Corn

Study ID: 1430001202401

County: Adams

Soil Type: Hastings silt loam 0-1% slope

Planting Date: 4/30/24

Harvest Date: 10/17/24

Population: 33,500

Row Spacing (in): 36"

Hybrid: Channel® 213-19STXRIB

Reps: 4

Previous Crop: Soybean

Tillage: No-till

Herbicides: **Pre:** 12oz/ac TriVolt™ + 22oz/ac

Roundup® + 1qt/ac atrazine **Post:** 1.5qt/ac

Harness® Maxx + 1pt/ac atrazine + 10oz/ac

DiFlexx® + 22oz/ac Roundup PowerMAX®

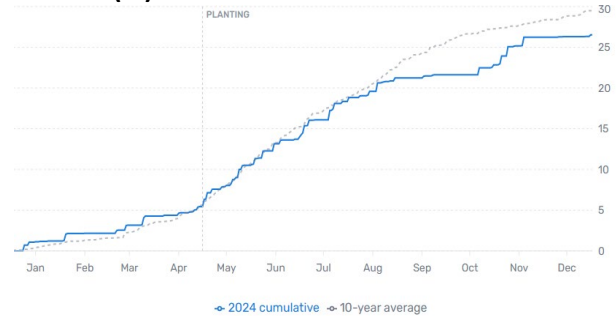
Foliar Insecticides: 8 oz/ac Hero® on 7/15/24

Foliar Fungicides: 8oz/ac Delaro® Complete on 7/15/24

Fertilizer: 170 lb/ac 32%-0-0 UAN preplant, 5 gal/ac 10-34-0 in-furrow, V8: 35 lb N/ac (32-0-0) through pivot, R2/3- 35 lb N/ac (32-0-0)

Irrigation: Pivot, Total: 5.23"

Rainfall (in):



Introduction: Two plant nutrition products manufactured by Loveland Products were tested for their effect on corn yield. Extract® Powered by Accomplish® (Extract® PBA) and BLACKMAX® 22 were each applied at planting with 10-34-0 starter fertilizer. Extract® PBA is a blend of Accomplish® LM, a fertilizer biocatalyst, and an N source that promotes the release of nutrients from crop residue and soils. The goal of the product is to optimize plantability and crop emergence, and extend nutrient availability later into the growing season. The goal of BLACKMAX® 22 is to enhance applied nutrient availability and uptake, nutrient mineralization and solubility, and promote beneficial soil microbes.

Early season stand counts were taken on May 21, 2024, when the plants were in the V1 stage. This is the third year this grower has evaluated these products.

Results:

| | Stand Count (plants/ac) | Moisture (%) | Yield (bu/ac)† | Marginal Net Return‡ (\$/ac) |
|-----------------------------|----------------------------|--------------|-------------------|---------------------------------|
| Check | 31,750 A* | 14.9 A | 241 A | 1,050 A |
| BLACKMAX® 22 | 31,875 A | 14.8 A | 240 AB | 1,031 AB |
| Extract® PBA | 32,188 A | 15.0 A | 234 B | 1,012 B |
| BLACKMAX® 22 + Extract® PBA | 31,687 A | 14.9 A | 241 A | 1,032 AB |
| P-Value | 0.506 | 0.767 | 0.040 | 0.033 |

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

†Bushels per acre corrected to 15.5% moisture.

‡Marginal net return based on \$4.35/bu corn, \$11/ac for BLACKMAX® 22, and \$6.50/ac for EXTRACT PBA.

Summary:

- There were no significant differences in stand counts or moisture between treatments.
- A significant difference in yield was found between the check (241 bu/ac) and the Extract® PBA (234 bu/ac).
- Furthermore, a significant difference was found in marginal net return between the check (\$1,050/ac) and the EXTRACT PBA (\$1,012/ac).
- Planting conditions and scenarios may influence early season nutrient uptake.