

Starter Fertilizer on Corn

EXPERIMENT INFO

Planted: 05/24/2019

Harvested: 12/21/2019

Hybrid: MZ 4368SMZ with Fortenza (3100 CHU)

Population: 33,000 seeds/acre

Row Width: 30"

Prev. Crop: Black Beans

Plot Size: 12 rows x 1,300'

Nitrogen Application

07/15/2019

broadcast 15 GPA High NRG-N using 5-band streamer nozzles

Sidedress Application

07/07/2019

35 GPA High NRG-N

Soil Data

pH: 6.5 - 6.9

CEC: 4.9 - 6.7

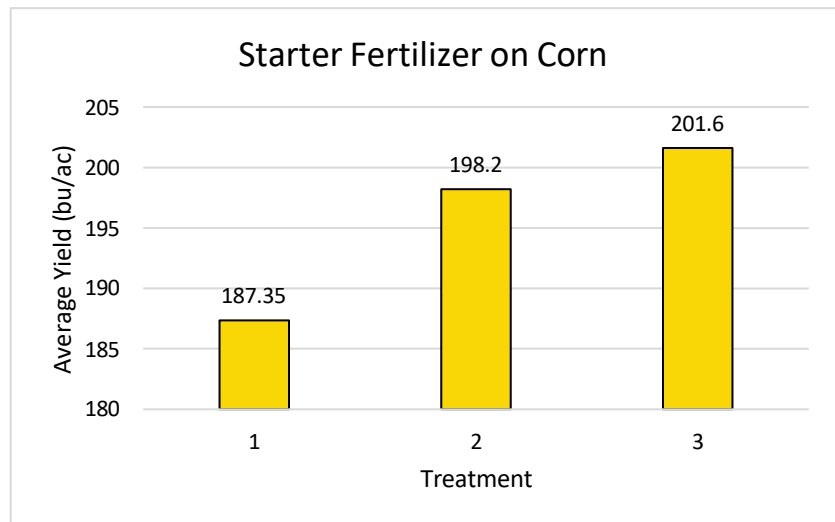
% OM: 1.5 - 2.1

%P: 12 - 16

% K: 1.6 - 3.7

% Mg: 10.5 - 16.8

% Ca: 56.1 - 68.0



Treatments

- 1) 3 GPA ProGerminator + 3 GPA Kalibrate + 1 L/ac eNhance + 1 L/ac Micro 500
- 2) 3.7 GPA ProGerminator + 3.7 GPA Kalibrate + 1.1 L/ac eNhance + 1.1 L/ac Micro 500
- 3) 4.6 GPA ProGerminator + 4.6 GPA Kalibrate + 1.5 L/ac eNhance + 1.5 L/ac Micro 500

Conclusions: While Treatment 3 provided the highest yield at **201.6 bu/ac**, Treatment 2 provided the best economic return at **198.2 bu/ac**. The additional fertilizer in Treatment 3 did not provide enough of a yield advantage to make the additional fertilizer cost pay off.

Economics: Treatment 2 provided the strongest economic return. Treatment 2 generated an extra **CAD\$36.23/acre** in revenue over Treatment 1, while Treatment 3 generated an extra **CAD\$26.70/acre** in revenue over Treatment 1.

For these calculations, the fertilizer pricing was based on March 30, 2019 retail prices. Corn pricing was based on the Grain Farmers of Ontario's average weighted price for Oct. 2019 of CAD\$220.52/tonne. Finally, the cost of drying to 15.5 per cent moisture was calculated using Manitoba Agriculture's Grain Drying Cost Calculator (mbdiversificationcentres.ca/grain-drying-cost-calculation-tool/.)