



RESEARCH UPDATE: CORN

TRIAL DETAILS

LOCATION	COOPERATOR	PLANT DATE	HARVEST DATE
Shelbyville, Ky	Monty's Plant Food	April 27, 2021	October 8, 2021

TRIAL DESCRIPTION AND EXPERIMENTAL DESIGN

This field trial was replicated 3 times and arranged in a strip plot design. Soil properties: pH: 5.6, OM: 2.3, CEC: 12.8%, BS-K: 2.9%, BS-Mg: 6.9%, BS-Ca: 55.9%, BS-H: 33.7%, BS-Na: 0.38%.

TREATMENTS

Treatment	Rate*	Application	Row Spacing	Plot Size	Reps
MLC + AgriSweet Midnight	2 qt/A 2 qt/A 1 qt/A	Broadcast Foliar (V5)	30 in	40ft x 400 ft	3
Control	--	--	30 in	40ft x 400 ft	3

APPLICATION

The treated plots received 2 qt/A of Monty's Liquid Carbon (MLC) and Agri-Sweet broadcast pre-plant at burndown. At V6, 1 qt/A of Midnight was sprayed foliar.

TRIAL RESULTS SUMMARY

The Monty's treatment had greater yield with 4.78 bu/a more compared to the control. Broadcast application of MLC and Agri-Sweet significantly increased P, K, and Mg tissue levels by V2-V3 stage of corn (Fig. 2). Within 30 DPA, a significant increase in soil P and Mg were measured due to the Monty's treatment (Fig. 3). At harvest, the Monty's program significantly increased soil OM (Fig. 4). An average ROI of \$4.75/A was achieved from this program.

RESULTS

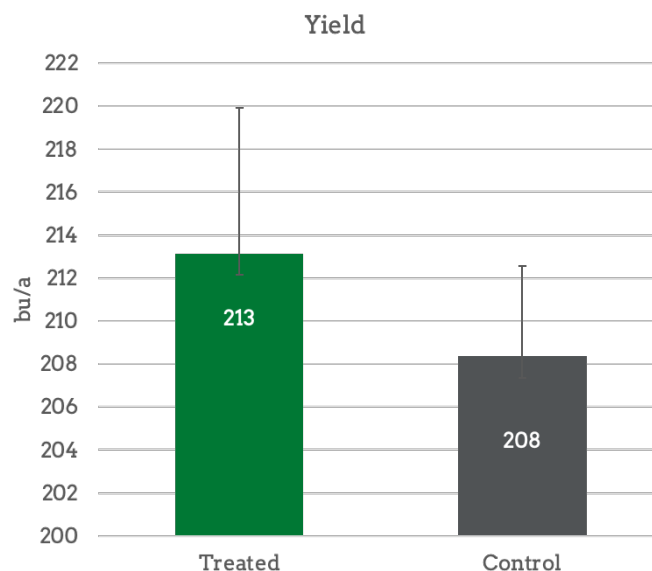


Figure 1. Average yield in Bu/A and ROI calculated at \$5.45 bu.

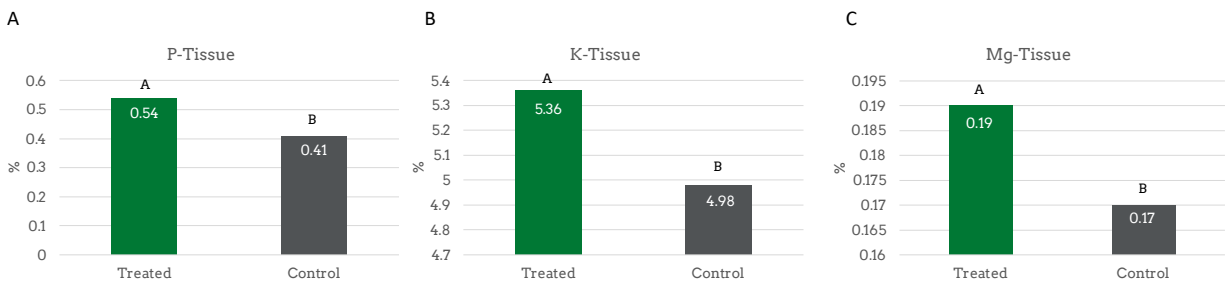


Figure 2. Tissue levels of (A) P, (B) K, and (C) 30 days after MLC + Agri-Sweet broadcast application. Letters above bars that are different represent statistical significance at a p-value of 0.10.

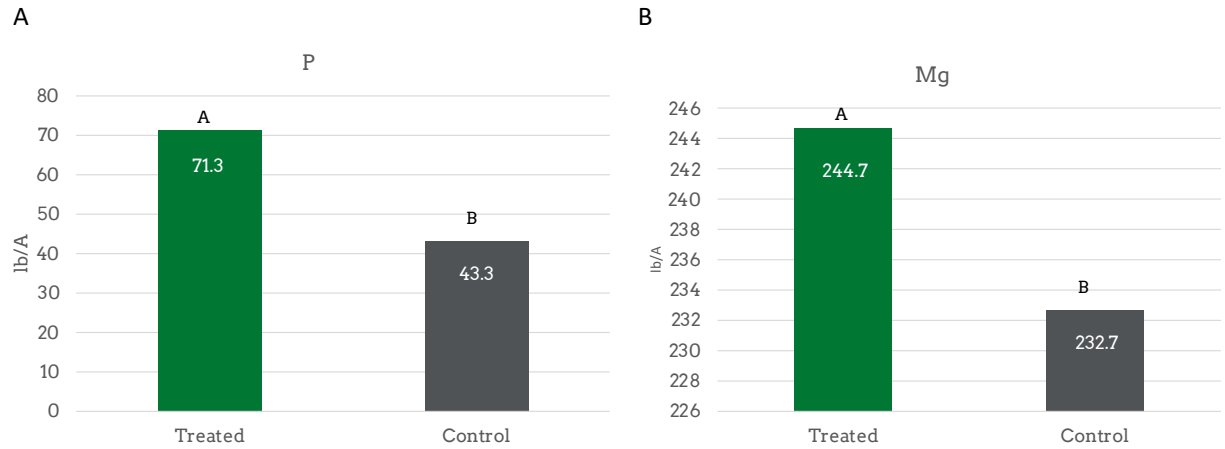


Figure 3. Soil levels of (A) P and (B) Mg in lb/A 30 days after MLC + Agri-Sweet broadcast application. Letters above bars that are different represent statistical significance at a p-value of 0.10.

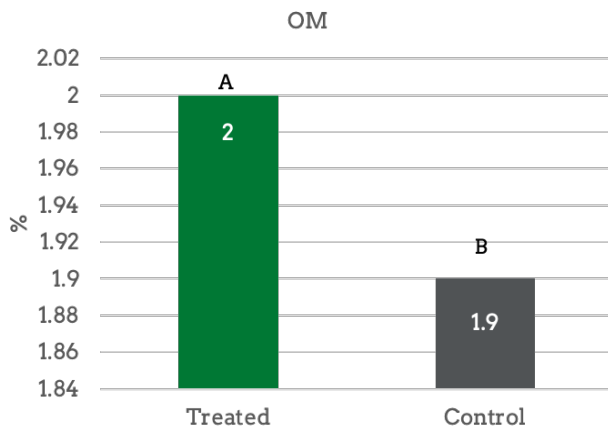


Figure 4. Soil organic matter (OM) at harvest. Letters above bars that are different represent statistical significance at a p-value of 0.10.