Corn Omission-Addition Trial Envita Results

Connor Sible and Fred Below Crop Physiology Laboratory Department of Crop Sciences University of Illinois Urbana-Champaign

4 35-1

Corn Omission Plots Champaign, IL, 2020



Trial Specifications

Location

Champaign, IL

Field Preparation

Fall Chisel + Spring Field Cultivation

Previous Crop

Soybean

Hybrid

G14N11



Standard Management vs. Enhanced Management In Corn

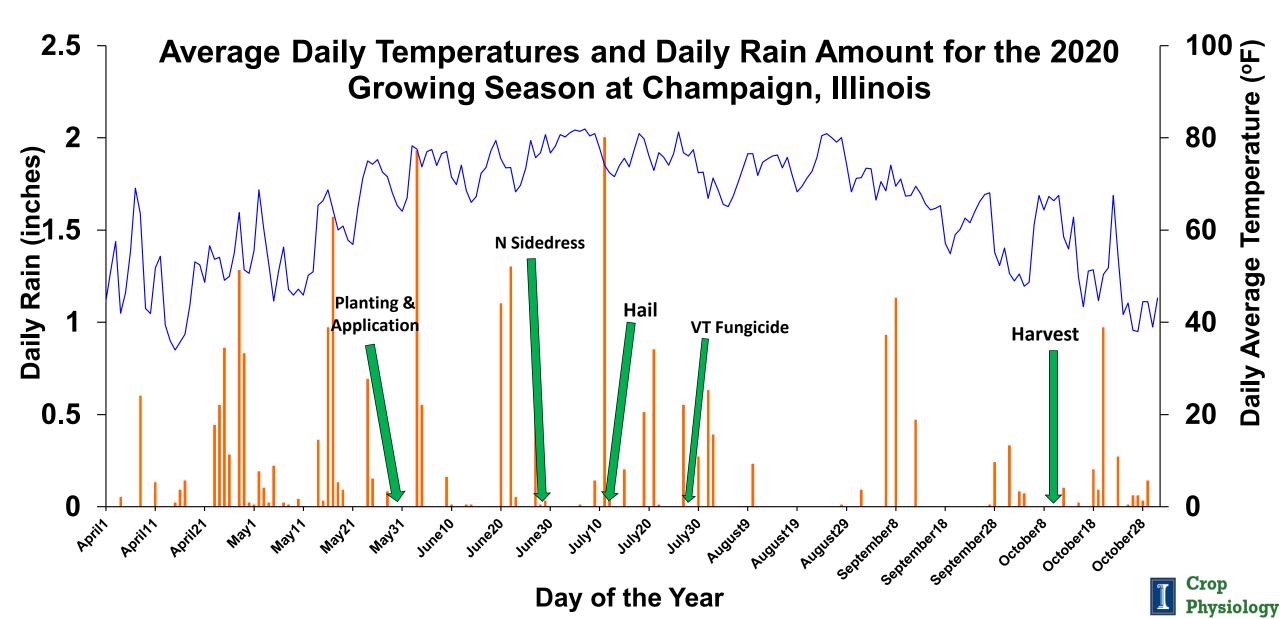
Management System

Management Practice	Standard _†	Enhanced _†
Population	36,000	44,000
Pre-Plant N	160 lbs as UAN	160 lbs as UAN
In-Furrow Biological	None	Envita (3.2 oz)
Upfront Fertility	None	80 lbs P ₂ O ₅ and 60 lbs K ₂ O
In-Season Fertility	None	60 lbs N
Foliar Protection	None	Fungicide + Insecticide @ VT Growth Stage



† All rates applied on a per acre basis

Weather Data for Champaign, IL 2020



Effect of Envita on Corn Grain Yield **Yield Treatment** bushels per acre — **99 Standard Management 98 Standard Management with Envita** - 1 112 **Enhanced Management 99 Enhanced Management without Envita** - 13*

Average of 20" & 30" rows at Champaign, IL during 2020.





- There was an intense hail storm on July 11th that led to 50% leaf defoliation, followed by a dry August during grain fill. These weather events resulted in below-average yields for the Champaign area.
- Adding Envita to a standard system resulted in no change in grain yield from the control treatment
- Removing Envita from an enhanced system resulted in a 13 bushel per acre loss, indicating response to Envita is optimized under a full management production system