

2023 On-Farm Corn Fungicide Application Study - Plane vs. Drone

Published on Thu Dec 14 2023

2023 Multi-Location Results

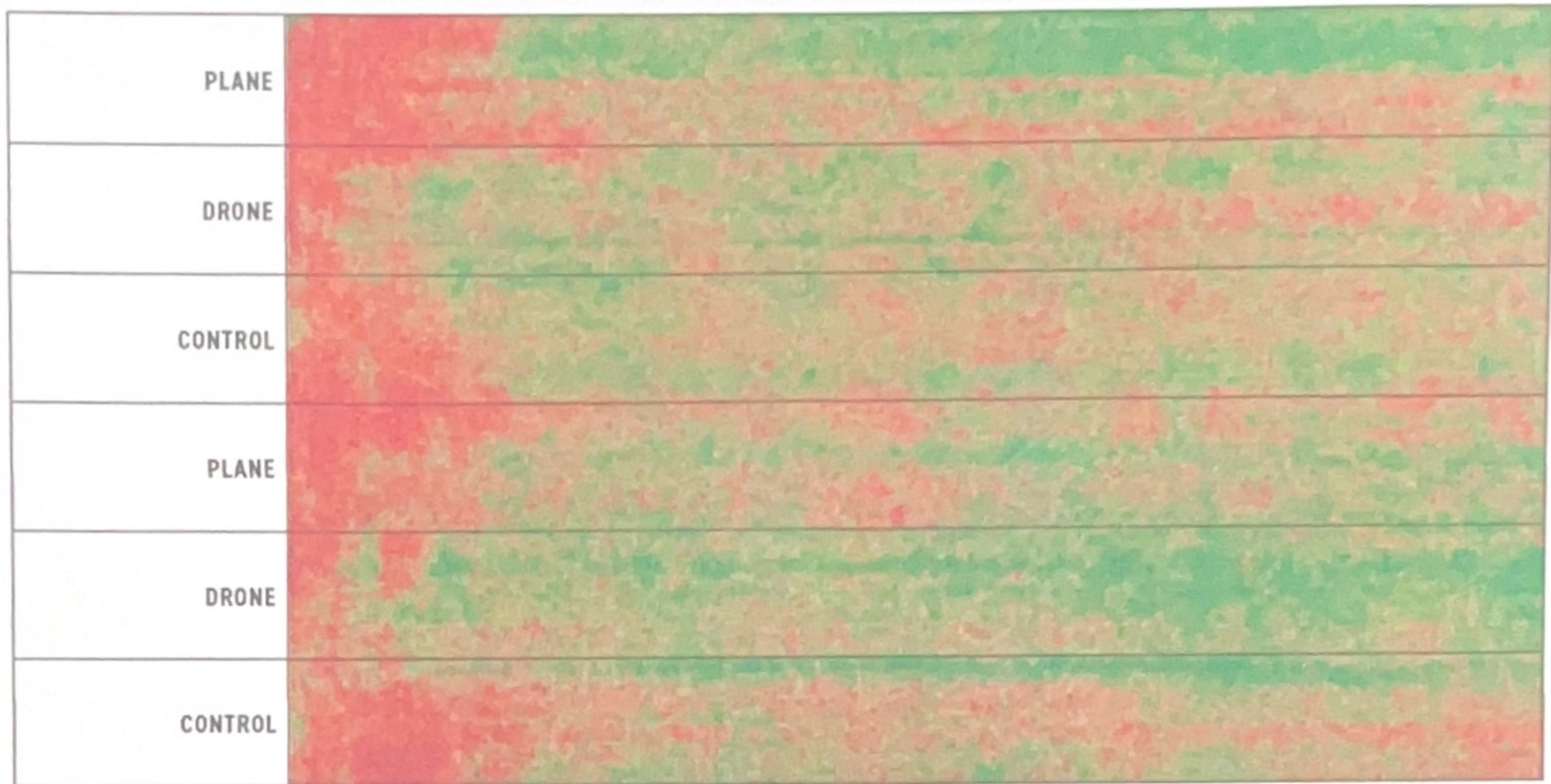
R1 TREATMENTS	APPLICATION METHOD	PERCENT MOISTURE	BU./A.	BU./A. DIFFERENCE	RETURN ON INVESTMENT
Control: No Fungicide	-	19.6	246.1	-	-
Fungicide	Plane	19.7	248.8	+2.7	-\$8.66
	Drone	19.7	252.4	+6.3	+\$11.83

Corn \$5.69/Bu. Fungicide \$24.02/A. Application costs are not figured in the calculations. These results are based on the disclosed study parameters and participating sites.



None of these fields showed disease pressure at the time of application. However, fields one and two did show some Tar Spot late in the season, but not enough to cause concern. Overall, the drone provided the greatest yield advantages, even with the lack of disease. Plant health benefits were observed in all treatments.

Plant Health Map - Field 1



2023 Fungicide Application - Plane vs. Drone Return on Investment

Field 1: LA Harpe, IL | Total Acres of Trial Blocks: 16.2 Acres



FIELD INFORMATION | Planted 5/12/23 | Harvested 10/17/23 | Population 33,600 Seeds/A. |
Row Width 30 in. | **Previous Crop** Soybeans | **Tillage** Fall: No-Till, Spring: Vertical-Till | **Total Nitrogen** 210 units

Field 2: Marietta, IL | Total Acres of Trial Blocks: 12.2 Acres

Plane

\$2.72

Drone

\$14.67

FIELD INFORMATION | **Planted** 5/2/23 | **Harvested** 9/28/23 | **Population** 36,000 Seeds/A. |

Row Width 30 in. | **Previous Crop** Corn | **Tillage** Fall:

In-Line Rip, Spring: Field Cultivate | **Total Nitrogen** 220 units

Field 3: Jamestown, OH | Total Acres of Trial Blocks: 5.5 Acres

Plane

-\$16.62

Drone

\$15.81

FIELD INFORMATION | **Planted** 4/18/23 | **Harvested** 10/24/23 | **Population** 34,000 Seeds/A. |

Row Width 30 in. | **Previous Crop** Corn | **Tillage** Fall: No-Till | Spring: Vertical Till | **Total**

Nitrogen 220 units