

# Optical Spot Spraying Technology

## WEED-IT Quadro: 2021 Evaluation

Evaluate different modes of the WEED-IT Quadro's performance in real pre-seed spraying field conditions.

### Method:

- 4 treatments (untreated, spot spray, dual mode, full spray)
- 2 fields
- 4 replicates
- 0.44 acres replication size

### Equipment Settings

**Target rate:** Spot spraying: 7.5 gallons/acre  
Bias: 7.5 gallons/acre (spot) + 5 gallons/acre (cover)  
Full cover: 7.5 gallons/acre

**Pressure:** 45 psi

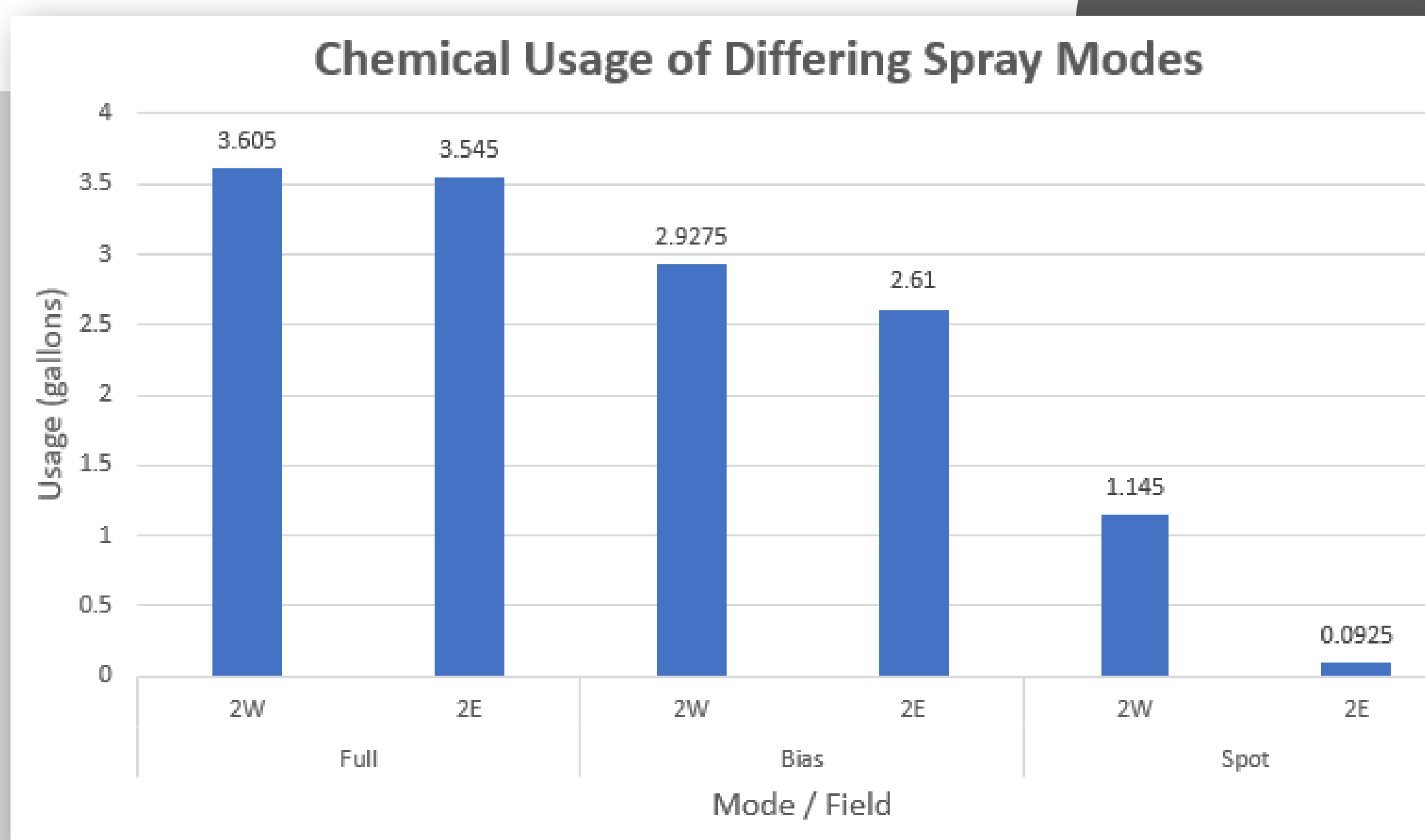
**Speed:** 11 km/hr

**Nozzle:** TeeJet TP 40-02

**Margin:** 100 mm

**WEED-IT sensitivity:** #7

## Results



*The remainder of the field outside the trial was treated in spot spray mode using the same settings as the trial resulting in **85.6%** chemical use reduction.*



*Weed evaluations in the field.*



## Future Research:

### Canola Stubble Field Trial

**Purpose:** Evaluate WEED-IT Quadro's ability to distinguish weeds from canola stubble in the spring, and study the effects of the different application types on yield.