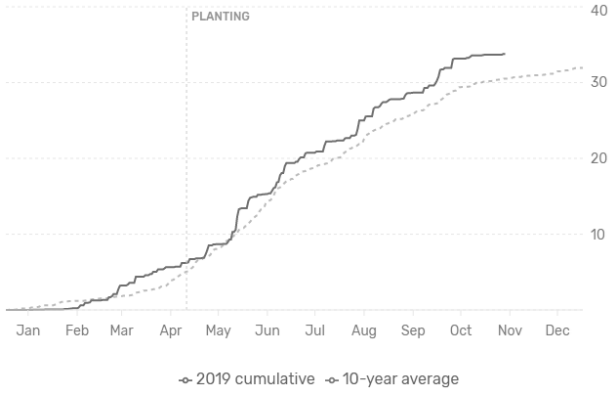
Impact of Planting Speed on Corn Yield

Study ID: 0085141201901
County: Platte
Soil Type: Gibbon silt loam occasionally flooded; Grigston silt loam wet sub-stratum
Planting Date: 4/25/19
Harvest Date: 10/22/19
Seeding Rate: 32,000
Row Spacing (in): 30
Variety: DEKALB® DKC63-57
Reps: 4
Previous Crop: Soybean
Tillage: No-Till
Herbicides: ***Pre:*** 2 qt/ac Degree Xtra®, 32 oz/ac Roundup PowerMAX®, 3 oz/ac Balance® Flexx, and 6 oz/ac Sterling Blue® with Superb® HC and 3 oz/ac Class Act® ***Post:*** 50 oz/ac Halex® GT, 16 oz/ac atrazine, and 22 oz/ac Roundup PowerMAX® with Class Act® at late post V6
Seed Treatment: Acceleron® Basic 500
Foliar Insecticides: None
Foliar Fungicides: None

Fertilizer: 100 lb/ac MicroEssentials® SZ™ (12-40-0-10S-1Zn) in March; 10 gal/ac of mixture of 90% UAN (32%) and 10% thiosulfate with planting, 5 gal/ac Kugler LS 624 (6-24-6-1S) in-furrow, 43 gal/ac of mixture of 90% UAN (32%) and 10% thiosulfate sidedress on 6/15/19
Irrigation: Pivot, Total: 5"
Rainfall (in):



Introduction: This study evaluated the impact of planting speed on corn yield when using Precision Planting® SpeedTubes. Corn was planted on April 25, into green cover crop. The cover crop consisted of 30 lb/ac rye, 2 lb/ac radishes, and 5 lb/ac canola and was planted on 10/25/18 and terminated with herbicide on May 1 at a height of 12". Corn planting was conducted at three speeds: 5.5 mph, 6.5 mph, and 7.5 mph. Stand counts (taken on June 7, 2019), ear counts (taken at harvest), and yield were evaluated.

Results:

	Moisture (%)	Stand Count (plants/ac)	Ear Count (ears/ac)	Yield (bu/ac)†
5.5 MPH	16.1 A*	30,922 A	31,417 A	258 A
6.5 MPH	16.1 A	31,234 A	31,250 A	258 A
7.5 MPH	16.2 A	30,281 A	31,125 A	257 A
P-Value	0.105	0.116	0.410	0.750

*Values with the same letter are not significantly different at a 90% confidence level.
†Bushels per acre adjusted to 15.5% moisture.

Summary:

- There was no difference in ear counts, grain moisture, or yield at the three planting speeds evaluated.
- Net return was not calculated for the study as it depends on potential time and labor savings for increased planting speed.

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