**Depth of Planting Study**

Six different planting depths were compared beginning at 1 inch and ending at 3.5 inches in half inch increments.

**Results:** Agronomists have long argued that corn must be planted at least 1.5” deep for adequate nodal root development. This study confirms that notion with yield results.

Planting just ½ inch shallower than the 1.5 inch minimum resulted in a 28 bushel per acre yield loss from our optimal depth of 2 inches.

Planting depths from 1.5 to 3 inches deep allowed for uniform emergence and adequate nodal root formation. In 2016, our yield variations were not as high as we saw in our 2017 study for seeds planted from 1.5 inches to 3.5 inches. This is likely due to the wet, cold planting conditions that produced delayed but fairly uniform emergence. Stand reductions were seen in the 1.5 inch and 3.5 inch planting depths.

**Equipment Solution:** White planters come standard with the most accurate depth control system in the industry. Rows may be calibrated prior to the season so that depth is accurate and known for all rows.

**Payback:** Up to $98 per acre improvement in profitability.** Consider trade difference and number of acres of corn grown to calculate acres required to pay for improved depth control.

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* Summary Data from six crop tour sites: New Hampton, IA; Gridley, IL; Judson, MN; Winthrop, MN; Galva, IL; Aberdeen, SD; New Ulm, MN

**Assumes 28 bushel per acre average yield advantage when planting at least 1.5” deep compared to 1” deep at $3.5/bushel