

WHAT WE ARE SEEING

The Pence Group corn plot at headquarters is just about one-month post-emergence. The perfect time for our team to get out in the field and check in on our different research trials.

One area of focus for us this year is the correlation between the timing of emergence related to other plants in the field and how this timing might dictate final yield per plant.

Our goal, of course, is to have every plant in the field emerge on the same day. You know how this played out, don't you? The reality is that across the three trials we are studying, we noticed varied emergence times:

- Day 1 = 23% of plants emerged
- Day 2 = 27% of plants emerged
- Day 3 = 27% of plants emerged
- Day 4+ = 23% of plants emerged

EXPECTED RESULTS

Precision planting has published research that indicates plants emerging 4+ days after the first emerging plants, can suffer up to a 70% yield drag compared to the first emergers. The early emerged plants win the advantage from day one as they have had more time to benefit from sunlight and water, developing an early root mass gain. Naturally, the later emergers fall behind in comparison. Thus the yield drag.

VISUAL RESULTS

THESE PLANTS WERE SIDE BY SIDE IN THE SAME ROW.



THIS IS A TWO DAY DIFFERENCE!

Look at the difference two days can make! The first emerging plant has overall greater plant health--just look at the root system alone! Stalk development is stronger, growth stage progressing as expected. Meanwhile, the "late bloomer" has a weaker root and stalk structure and isn't growing at the same pace. These corn plants are entering their fastest stage of development but will the late emerger be able to keep up? This physical evidence would suggest not.