

EFFECT OF PRECISION MAIZE PLANTING FOR CROP GROWING AND YIELD

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Corn is very sensitive to environmental influences during germination. The germination period of maize is related to the quality of planting.

The latest precision technologies can be well applied to corn planters. I will present the effects of new precision planter systems for crops in my presentation. These effects are measurable on maize germination homogeneity, maize plant growth, and yield. New precision systems make plant to plant different setup on the planter. Precision systems work based on real-time data, precision systems work automatically. Precision systems adapt to the condition of the soil.

In my presentation I present a 2-season trial of a new corn planting technology solution from 2020 and 2021. My testing system is new. I did the planting in 4 different tillage systems. I worked on 1 parcel with conventional tillage (rotation) and 3 different plots without rotation (reduced tillage system, soil protection tillage system and strip tillage system). I present the results of innovative tillage systems and new planting technology in Hungary. These results are useful for practice.

My presentation shows that homogeneous germination has a significant effect on the yield potential of the crop. I measured the germination of the crop according to the sowing method and tillage method. I marked the plant with different germination times. I measured the unique product of each marked plant. The precision seed drill has a great effect on homogeneous germination. The results of my research show: more homogeneous crops will be, if we use a new system of planting technology.