



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Hardin County Extension News Release

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Planting Considerations for Corn and Soybean

Hardin County – May is here, and the planting season will speed up with better weather in the coming days/weeks. According to the USDA-NASS report for the week ending 04/23/23, 6% of Ohio's soybean and 6% of Ohio's corn acres were planted. Relative to the 5-year average (2% planted, both crops), that suggests a quicker start for the same period before.

Early planting dates can bring advantages and disadvantages for both crops. Following the OSU Agronomy Guide recommendations, the following is a list of key reminders/considerations for planting season this year. Planting corn and soybeans after soil temperatures reach the 50°F mark is recommended. We recommend measuring ½ - 2 inches below the soil surface in the early morning.

Generally, early planting comes with the risk of late spring frost, insect/disease losses, and slug damage. However, timely planting is important to maximize yield. In Ohio, we have measured a 0.5 bushel per acre reduction in yield for each day soybeans were planted after the end of April. Similarly, grain yield can decrease to 1.75 bushel per acre per day for corn if planted after the end of April.

Plant soybeans 1 – 1.5 inches deep where tillage practices are being used. If in no-till fields, ¾ - 1 inch deep is recommended. Shallow planting may emerge more quickly, but early planting may have a higher risk of herbicide exposure. Higher risk of losses from soil crusting at greater planting depths if soil crusting is a concern. Check planting depth consistency.

Plant corn 1.5 – 2 inches deep. Adjust depth for field and weather conditions as needed. Greater planting depths may delay emergence. Shallower depths may cause poor root

development, with nodal roots not developing properly and potentially leading to “floppy” or “rootless” corn. Check planting depth consistency.

For May planting dates, 100,000 – 120,000 plants per acre is recommended as the target plant population in soybean. The seeding rate in soybean is recommended to be ~25% higher than the target plant population. It is recommended to factor in crop value and seed cost to determine the optimal economic seeding rate.

Depending on the corn hybrid and production environment, recommended plant populations (or final stand) have ranged from 24,000 to 34,000+ plants per acre. Adjusting the seeding rate to factor in germination and emergence losses is necessary. To calculate the planting rate (seeding rate) in corn, consider the following formula: $\text{Planting Rate} = \text{Desired Population per Acre} / (\text{Germination} \times \text{Expected Survival})$.

As planting season picks up, we wish the best for everyone. If there are any questions about planting or outside of planting, do not hesitate to contact OSU Extension. Follow planting and other Agronomic Crop Updates in the C.O.R.N. Newsletter (corn.osu.edu) or visit the Ohio State Agronomy YouTube channel.

Article written by OSU Extension Ag Crops Team and edited by Mark Badertscher-OSU Extension, Hardin County.