

# Weekly Article

4-10-2023

## To Plant or Not to Plant?

Hello, my name is Richard Purdin with OSU Extension, Ag and Natural Resource Educator, and Community Development Educator for Adams County. I hope to better inform local producers and the public of the latest news in the world of agriculture. I think it is safe to say that spring is definitely here and hopefully, it will stick around for a while. Easter weekend was beautiful, a little chilly in the morning but warm in the afternoon. Cool nights and warm days are recipes for fast-growing pastures and busy fieldwork. The week of April 10-17 looks to be very favorable for spring field work with dry and warm weather in the forecast. I have had a few producers ask me if I thought it would be a good idea to start planting corn or soybeans or is it too early? This is always a challenging question for row crop farmers this time of year. It is easy to get excited when the days get warmer, and the soil starts to firm up enough to hold up equipment. With that said there are many other factors to consider before pulling the planter out of the barn. No matter if you are planting corn, soybeans, alfalfa, or vegetables in the garden it is important to understand your growth zone and the last day of a potential killing frost. It is also important to learn about the hardiness of the plant you are planting and the potential growth effects that be incurred by planting early in the season. So, before you hit the field with the planter, I would challenge you to ponder these thoughts first.

1. **What is our growth zone and last day of killing frost-** According to the USDA Adams County Ohio is located in growth zone 6a. According to the National weather service, the last freeze date for Southern Ohio Counties commonly occurs between April 29-May 5<sup>th</sup>.
2. **Check the soil temperature first-** It is always good to check the soil temperature first before planting. Check the temperature at the depth at which the seed will be planted. For example, corn should be planted between 1-2 inches and the minimum germination temperature is 50°F. I would like to see this temperature on the upswing rather than the downside. Look at the forecast ahead- if each consecutive day after planting gets warmer with little chance of precipitation, planting at the lower temperature range would be safe but if there is a cold rain in the near future avoid planting. Many seeds need to absorb or imbibe at least 50% of their weight in moisture to germinate, if the seed absorbs cold water this could send the seed in shock preventing germination.
3. **Dry conditions beat wet every time-** before planting dig up some soil and check the moisture content. If the soil is moist enough to form a ball without cracking or crumbling this is a good condition for planting. If the soil is so wet that the soil cannot hold together then the conditions are probably too wet for planting. Planting in wet conditions can cause compaction to the field and side wall compaction of the seed furrow. Heavy clay soils can compact very easily and then turn dry restricting root growth. Planting in the mud never pays!
4. **Consider field history of the disease-** Cool wet soils can be a harvard for diseases and some potential pests that like to feed on young seeds and seedlings. Pests such as seed corn maggots, white grubs, wireworms, and slugs are all early-season pests that like to chew and feed on the seed and or seedling roots. Early season diseases such as sudden death, pythium root rot, Rhizoctonia root rot, and phytophthora. Many of these diseases overwinter on past years' crop residues or in heavy residue from cover crops or sod forages as well.

5. **Understand plant hardiness** – Some crops are more adequate for early planting than others depending on the life cycle and growth habits. Many root crops like potatoes, onions, beets, and radishes can withstand colder temperatures due to their large amount of energy reserves and amounts of carbohydrates and sugars to keep the plant growing strong. On the flip side seeds like alfalfa, clover, and grass seed have very little energy reserves and need to be seeded very shallowly to aid in germination and development. Some plants are more tender than others once germinated Soybeans are considered c3 plants meaning that they are actually more resistant to cooler temperatures compared to corn which is a c4 or summer annual grass that is less resistant to cooler temperatures once established. Soybeans are most vulnerable to frost early in germination (in the curl) when the cotyledon emerges from the soil. This is the actual growing point of the plant. Corn's growing point is a bit more protected, just under the soil surface.
6. **Patience is a virtue-** Early birds don't always get the worm they are hoping for being patient and letting the condition of the soil and the plant growing environment get adequate first can pay dividends. Remember planting season is where it all starts, it can be the difference between a good, bad, or just downright ugly crop come harvest season.

**Other information:**

- Crop Revenue Loss Assistance through the second phase of the Emergency Relief Program (ERP), the deadline is June 2<sup>nd</sup>. To learn more, call your Local Farm Service Agency.
- April 29<sup>th</sup>. 10:00 am, Energy Development Briefing Concerning Utility-Scale Solar Energy Projects. This event is being put on by the Ohio Farm Bureau Federation. Please RSVP to Adams County Farm Bureau by emailing [adams@ofbf.org](mailto:adams@ofbf.org) or call at 937-378-2212

**Ag Educator Words of encouragement** – Farmers who wait for perfect weather never plant. If they watch every cloud, they never harvest. **Ecclesiastes 11:4**