



Agronomy Notes for Week Ending April 30, 2011

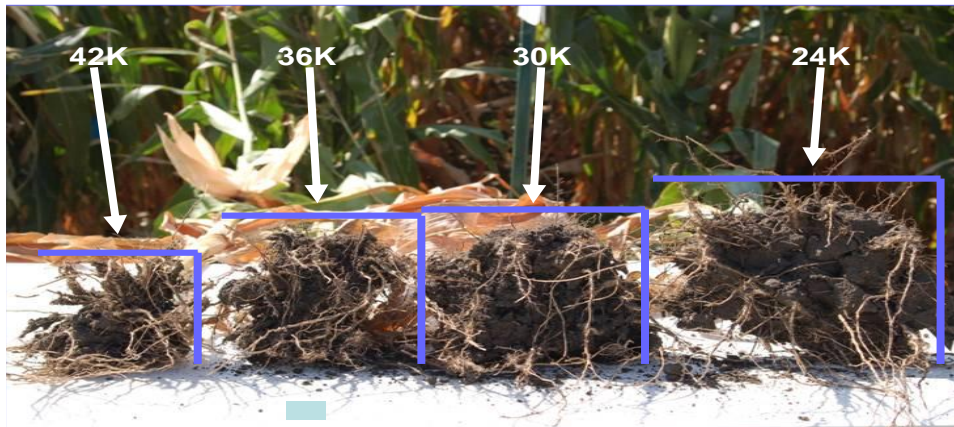
As you look back at the month of April we were cool and wet with very little field work being done. Soil temperatures at both the 2" and 4" depth have been in the mid 40's, which is 5-10°F cooler, than the 25 year average. Our precipitation is 1.5+ inches above average for the month of April.

Hybrid Maturity- The old rule of thumb in picking hybrids was spread out your maturity and risk by planting 20-25 % of your corn to an earlier day hybrid, 50-60% to your normal maturity, and 20-25% of your corn to a later maturity. By spreading your maturities out you spread your risk during pollination, as well as helping to manage your moisture levels in the fall.

With today's hybrids we have 105 day hybrids that tassel and pollinate like 96-98 day hybrids which makes it easier to put the right genetics on the right field making the pollination and dry down issues less of a concern. If you and your Central Valley Agronomist have placed a certain hybrid on a field and it is 105 day hybrid or less I would keep that **hybrid on that field until May 15. The only reason to switch hybrids prior to that date would be if you had a large percentage of your acreage to 105 or later day corn, or if you had placed hybrids that would typically be wetter in the fall compared to other hybrids at the same day length or maturity.**

Planting Depth- By keeping planting depths at 1.5-2 inches you allow the corn seed to germinate and grow with less temperature and moisture variations than shallower planted seeds. (By shallowing the planting depth to less than 1.5 inches the plant root system will not develop normally and will increase yield reduction due to drought, wind, insect damage, and herbicide interactions.) It is a standard recommendation to increase planting depths $\frac{1}{4}$ to $\frac{1}{2}$ inch more than your desired depth to insure that after the soil settles you are at a 1.5 -2 inch planting depth.

Planting Population- In the last few years we have seen plant populations increasing with some seed companies recommending increases up to and over 36K in a 30 inch row on every acre. Not every acre has the ability to handle an increase in plant population due to soil type or soil fertility. Conversely, not every hybrid has the ability to handle the increase in plant population due to plants getting taller and stalks getting weaker, but also to the roots mass getting smaller.



This smaller root mass limits the plants ability to access nutrients and water, it also limits the plants ability to anchor itself in a high wind or storm event increasing the likely hood of stalk and or root lodging and yield loss. This smaller root mass also limits the plants ability to overcome any injury from insects such as corn rootworm larvae.

Tillage-Tillage in a wet spring is a Darned if you do and Darned if you don't situation. Everyone tries to work ground at least 1 day ahead of planting which allows the ground to warm up and dry out. By waiting at least a day before planting, you decrease the potential for sidewall compaction when the planter goes through, but by waiting a day you increase the potential for getting rain and not getting that field planted. In a wet spring it is a delicate balance but in most cases it pays to wait.

Zinc and Liquid Starter-Time and temperature as well as the quality of product are factors that cause many problems with Zinc in liquid starter. If you combine a low quality "cheap" Zinc into a liquid starter source and the temperature of the product drops due to the weather being cooler, the clock starts to tick against that "cheap" Zinc staying into solution. As the temperature stays cool and the time frame increases that "cheap" Zinc will start to precipitate out. Once that Zinc source has precipitated out you don't want to run that through the planter, if you can, spray it out on a farm with a low phosphorous soil test and use a higher volume nozzle so you don't plug. Poor quality liquid starter can cause the Zinc to precipitate out however in most cases it is the "cheap" Zinc that causes the problem.