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Extension Crop Update

This newsletter, and previous issues from recent years, can be found on-line at: http://www.extension.iastate.edu/plymouth/info/cropupdate.htm

Off to a good start? We are fortunate in this part of the state to have a start at corn planting. Some of my counterparts across Iowa have indicated that little has been done, and there is significant water standing in fields. I hope we get a good window of opportunity to continue our progress soon. The Ag Statistics crop report summaries would say that we average about 4.5 suitable field work days per week at this time of year. I hope we get at least that much next week!

Soil temperatures have dropped to the low 40’s again the last couple of days at the 4” depth. Check out this web site, select the weather station you want to look at, change the beginning and ending dates to look at more than a few days and you can see what the temperatures are at the 4 inch and other depths. Of course, those cold soil temperatures cause some concern for how these planted seedlings will respond. Because there were several days between planting and these really cold soil temperatures, my guess is that most of these fields will be fine. However, monitoring fields as the corn emerges will be a great idea this year.

Bob Nielson from Purdue has a few good articles on emergence that may be of interest to you. The first is “The Emergence Process in Corn,” which is a great review of how the seed normally develops into a seedling, with some troubleshooting considerations. The second, which he printed yesterday, is titled “Cold Temperatures and Injury to Newly Planted Corn,” a quick summary of what problems can happen in these cold time periods at germination. The final one, from a couple of years ago, is titled “Corkscrewed Mesocotyls and Failed Corn Emergence.” This offers a more complete discussion of why this happens, and adds good pictures to the discussion, too. I hope you don’t need any of these on your farm, but in case you do I thought I would make these references available for you.

Dr. Nielson maintains a web site that I use a lot, called “The Chat ‘n Chew Café.” This site not only has his articles linked, but it also links articles from Extension agronomists throughout the Midwest. Kind of a one-stop shop to see what is happening around the Corn Belt. Take a look!

Soil Moisture Results – We finished sampling our normal soil moisture sites late last week. We normally target the 15th of April, but the ground was still pretty frozen when I tried the first one, so I put it off a week. A note – these results do NOT include rain that fell this week. Remember, our soils can hold about 10 to 11” of plant available water in the 5 foot depth that we sample. The long term normal moisture levels for these soils in the spring are about 7” for this region, but in recent years our average has been higher than that. We also know that roots in many fields went deeper than five feet, but we do not analyze those deeper depths for moisture content.
Click here to see a map showing these results by county. The numbers in parenthesis are the levels of moisture found on November 1, 2013. Many sites looked to be at or a little above that long term average. Sites in western Plymouth County, central Monona County, near Sibley and south of Melvin were all showing lower than average moisture levels, and could use a bit above average rainfall for recharging the soil before the real crop moisture demand begins in mid-June.

**Marestail in No-till Soybean:** Many producers I visit with that have tried no-till soybean tell me that they think it works great. Our on-farm projects and other research seem to show that if the soil is reasonably well drained soybeans will yield the same. This certainly helps reduce the erosion from fields! But, one problem that is often mentioned is the control of marestail.

Mark Loux from Ohio State University wrote a publication in conjunction with Bill Johnson from Purdue titled “Control of Marestail in No-till Soybean” that I find useful. They talk a lot of using fall herbicides to set it up, which might be a good idea if pressure is really heavy - but I think point number two is the most important. It says “Apply effective burndown herbicides in spring. Do not plant into existing stands of marestail. Start weedfree at the time of planting by using one of the following preplant herbicide treatments, applied when marestail plants are still in the rosette stage,” then it proceeds to share some product suggestions. This statement, I believe, is the key thought for managing this weed. If you are no-tilling, take a look!

**No-till Planting Equipment On-line Video** – Yesterday a colleague shared a link with me about a video posted on the Plant Management Network website featuring Paul Jasa from the University of Nebraska, titled “No-till Planting Equipment, Adjustments & Operation.” Last night I watched that hour-long video, and really appreciated what Dr. Jasa covered in the session. If you are no-tilling or considering it, I would encourage you to watch this video. Yes, there are some things I might disagree with – and you likely will, too. Most of his work is done in Nebraska, but he also talks about more challenging environments found in other parts of the country. Paul not only talks about setting the planter, different attachments, planting depths, but also gives his opinion and reasons why he likes and dislikes certain things. I wish I had a chance to share it with you earlier in the winter, but if it is still unfit to plant on your farm, consider taking a look. Many of his hints would also be helpful in tilled situations, too.

**HAVE A SAFE SPRING!**