March 11, 2013

Dear Producer/Ag Industry Personnel:

Included in this newsletter are various items that may prove useful to you. As always, please don’t hesitate to call us at (870)222-3972 or (870)382-4785 with any questions or comments.

**Corn Planting**

Corn planting time is here for some and just around the corner for others. When preparing to plant, keep in mind that corn growth and development responds primarily to temperature and is not controlled by day length. Thus, the calendar date is not as important as soil temperature and air temperature when considering when to plant corn. **Good germination and emergence are expected when the soil temperature at a 2-inch depth is 55°F by 9 a.m. for three consecutive days.**

Seeding rates for corn should be set based on achieving a final plant population of 30,000-34,000 plants/acre. Most seed companies recommend a specific planting range for each hybrid, so check with the seed company for more information on the hybrids you are planting. Keep in mind, however, that higher plant populations may lead to lodging problems once the corn matures. Lodging can especially be a concern on hybrids with poor stalk strength, in fields with high plant populations, and in fields where the corn is allowed to “dry-down” in the field to a lower moisture prior to harvest.

**Corn Fertility**

Our corn nitrogen recommendations differ according to soil type. For maximum yield potential on silt and sandy loams, we recommend a total N application for the season around 220-230 lbs N/acre. On mixed to heavy soils, we recommend a total N rate for the season around 250-260 lbs N/acre.

The first N application should be made pre-plant or at planting and contain about 40% of the total. We like to recommend adding ammonium sulfate in the first application to address any sulfur issues. DAP can also be added in the first application to address any phosphorus issues. Remember, the N components of both ammonium sulfate and DAP can be counted toward the total N. The second application should be made at about the V6 growth stage and contain another 40%. The remaining 20% (approximately 100 lbs of urea) should be added at pre-tassel, about V15-V17 growth stage, depending on the corn hybrid.

Zinc is the micronutrient most likely to be found deficient for corn. The deficiency typically occurs at the V2 through V8 growth stages. Zinc sulfate is the preferred inorganic source for soil applications since it dissolves fairly easily and should be at least 50 percent water soluble and should be applied based on soil test recommendations. If using foliar Zn, applications should be made with chelated Zn at a rate of 1 pound Zn per acre around the V3-V6 growth stage. Foliar Zn can be mixed with post-applied herbicides, unless the herbicide label recommends otherwise.

**Grain Sorghum Planting**
Grain sorghum can be planted over a wide range of planting dates. However, in general it is recommended that it be planted as early as possible in the spring. Grain sorghum planting should be delayed until the soil temperature in the morning warms to 65°F at 2 inches below the soil surface.

When planting, the ultimate goal is to plant the seed as shallow as possible and still obtain good soil to seed contact. When planting early in the spring when soils are cool and wet and rainfall is likely to occur soon after planting, a planting depth of 0.75 to 1 inch is best.

Seeding rates depend on whether the field will be irrigated or not. Under irrigated circumstances, an ideal final plant population would be 80,000-100,000 plants/acre. Under dryland situations, a final plant population of approximately 50,000 plants/acre is recommended. When setting the planter to achieve the desired final plant population, assume 80% of the planted seeds will emerge.

**Glyphosate Resistant Pigweed**

As most of you are probably already aware, glyphosate resistant pigweed is here. Since becoming resistant to glyphosate, it has become public ‘weed enemy number one’ in many of our fields. Our recommendation is that if you have pigweed, assume it is resistant to glyphosate and treat it accordingly. If it is not currently resistant, chances are it will soon be.

The overall goal in resistant pigweed management should be to not let any pigweed plants mature and produce viable seed. In best case scenarios, this goal would be achieved by not letting any pigweed emerge by using pre-emerge type herbicides or utilizing other technologies, such as Liberty Link, for post emergence control. However, pre-emerge herbicides are not always 100% effective because they need a rain event or irrigation to become activated and some producers are hesitant to try new technologies such as Liberty Link (as a side note, we have data that shows Liberty Link soybeans will yield comparable to any Round-Up Ready variety and Liberty Link cotton is well on its way to very good yield potential).

If you are in a Round-Up Ready system and your pre-emerge herbicides don’t get activated uniformly or timely, over-the-top herbicides that are effective at controlling resistant pigweed post emergence are limited, especially in cotton. Included with this newsletter is a brochure that contains some detailed information on resistant pigweed management in soybeans and cotton and some specific herbicide programs to consider when making your weed control decisions this season.

All activities announced in this newsletter are open to all eligible persons without regard to race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status. Persons with disabilities who require alternative means for communication of program information (large print, audiotapes, etc.) should notify the county extension office as soon as possible prior to the activity.

As always, if you have any questions, comments, or issues you would like more information on, please don’t hesitate to contact us at (870)222-3972 or (870)382-4785.

Sincerely,
Wes Kirkpatrick
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