



Welcome to Ground Work

Scouting Tidbits

5/31/12

The unusual spring weather has brought about varying conditions across the Midwest that should cause growers to be extra vigilant in checking crop fields.

Be sure to check for stand establishment and early growth and vigor.

- Heavy rains in some areas have brought about seedling diseases with a number of fields needing to be replanted.
- Some areas that missed the rains have concerns with seeds lacking adequate moisture for germination.
- The mild winter and spring have allowed high numbers of overwintering insects that are causing problems in some places.
- The first step is to determine if there is an adequate stand to keep or if replanting should be considered; or even switching to another crop if it is too late to replant.

Be sure to dig some plants up and observe the roots. Are they a healthy white color? Or are they darkened by the presence of disease? Look to see if root hairs have been eaten by insects. You can also observe leaves for the

presence of any foliar diseases.

Be sure to note any weed problems that need to be dealt with while there is still time to do so.

This is a good time to evaluate the nutrient status of crops. A **soil nitrate test** can be used for corn as a guideline to determine if there is adequate nitrogen to grow the crop. **Tissue testing** can be done to determine crop nutrient status.

- Soybeans at first through third trifoliolate – cut plant off one inch above ground and send 25 plants. For plants taller than this use most recent fully developed trifoliolate.
- Corn 4-12 inches tall – cut plant off ½ inch above ground and send 20-25 plants. For plants taller than this use most recent fully developed leaf.
- For more information about collecting samples, check our website, www.agrienergy.net, in the Lab Services section.

Corrections can be made with sidedress or foliar applications. Remember when making soil applications of fertilizer that the nutrients either need to be placed into moisture, or you need to receive enough rain for moisture-to-meet-moisture for the nutrients to be available to the crop. If nutrients are placed into dry dirt, they will not be lost, but will also not be available to the crop until a rainfall event.

If you are in an area that received heavy rainfall and have soil crusting, you should **take some action to break up the crust**. A crusted soil cannot breathe and will become anaerobic. This is the condition that set up the seedling diseases that caused stand loss.

- A number of tools can be used to help alleviate this condition, including a rotary hoe, row crop cultivator, fertilizer knife or even just a fertilizer coulter will help to aerate the soil and allow for the propagation of beneficial microbes.
- Leaving a mulch of loose soil on the surface will help to conserve moisture also. Subsoil moisture will move toward the surface by capillary action until it reaches a change in soil particle size or soil density. The mulch of loose soil will stop the upward movement of water where that change occurs.
- For people needing a non-mechanical solution to the problem, broadcasting 3-5 gallons of **Practi-Cal** and 2 gallons of **SP-1™** would be an option.

Corn rootworms are getting an early start this year and could be particularly troublesome as they attack plants at an earlier growth stage than normal. It has been observed in the past where there is corn rootworm pressure that throwing loose soil around the base of the corn plant can be very beneficial. If you do "ridge" soil around the plant be sure to leave some loose soil in the middle of the row.

This is shaping up to be a year when season long scouting may be more important than ever.