

# Monty's Crop Management Technical Bulletin

## Flooding

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Excessive rainfall can cause four distinct problems: compaction, nutrient deficiency, disease, and delays. Each potential problem needs to be evaluated and possibly addressed in order to maximize crop performance.

#### Delays and Replanting

The initial problem is that many crops are washed away or destroyed. If this occurs early enough in the spring, there may be time to replant or switch crops. Even if the crops survive you will still have lost days of production and growth. All of these scenarios will result in lost yield.

#### Disease

While the water was washing crops away, it was washing in bacteria and disease. Anything that was upstream of you could now potentially be in your fields. Farmers who have not had a problem with soil-borne disease in the past will need to keep watch this season.

#### Compaction

In addition to dirt, soil is usually filled with moisture, microorganisms, animal life, and air (pore spaces). As the soils flood, all of the air is removed and the soils collapse. "When that happens, anaerobic bacteria (the harmful kind) develop rapidly as beneficial bacteria die off along with microbes and animals like arthropods and earthworms. The soils will have to dry out and air return to the soil before this situation can be reversed," according to Dennis Stephens, President of Monty's Plant Food Company. CCA Joe Dedman cautions, "Be careful about going into those fields if they are wet. By going in too early, the heavy equipment and seeder will cause hard-pans and sidewall compaction issues that will compound an already bad situation."

#### Nutrient Deficiencies

Denitrification can occur when excess water depletes your soil of available nitrogen. Even though traditional nutrient applications may be necessary to replace those lost to leaching and run-off, Dedman indicated that Monty's Soil Conditioner in conjunction with Monty's fertility applications "will help boost efficiency and help increase micro-nutrient uptake by stimulating the soil biology and helping to stabilize your nitrogen source." Even if your crop has survived, you will likely notice signs of nutrient deficiency early in the season. Watch for signs of manganese deficiency in soybeans and potash shortages in corn.

#### Monty's Recommendations

- *Crops under water:* Once fields dry, apply Monty's 8-16-8 along with Monty's Soil Conditioner.
- *Replant and delayed planting:* Incorporate Monty's Pop-up Program at seeding as part of your traditional nutrient management.
- *Compaction:* Apply Monty's Liquid Carbon directly to the soil as soon as your fields are dry enough to re-enter.
- *Nutrient deficiency and disease:* Apply the appropriate Monty's product for the current stage of development. If your crop is younger than V3 use Monty's 4-15-12, from V3 to reproductive stage use Monty's 8-16-8, and beginning at early reproduction stage forward use Monty's 2-15-15. All of these applications should be made in conjunction with Monty's Soil Conditioner and may be made as a tank mix with most other crop chemicals. These applications can provide nutrients that your crops will need to help minimize the effect of these crop stresses.

The best advice, stay out fields until they are dry enough to work. Then, look at the calendar and determine which crops make sense with the season you have left. Also, treat your fields with Monty's Pop-Up program at reseeding to get those plants germinated as quickly as possible and make the most of the time remaining. Monty's Soil Conditioner may also help restore the pore spaces and the microbial populations to inundated fields. Check with your local Monty's dealer or Monty's rep for details related to your specific situation.



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