

2008 is shaping up to be a year of extreme prices and weather. We were dealt a cold, snowy winter and wet cool spring and early summer, which made it difficult on livestock farmers and on anyone who tried to do much spring manure or N application. Because of the lateness of the calendar, much field work was done under less than ideal conditions leading to moderate to severe compaction in most fields. This was followed by frequent rains and excess moisture which often kept soil saturated and led to low oxygen in the soil surfaces. Add in the unprecedented flooding and some high winds and we have had 7 months of 2008 which will be in our memory forever. Here are my comments on corn and alfalfa in our area this year:

Corn Comments

- 1) **Yellow corn** was common in many areas of fields this year. Early on this was often due to excess compaction and/or a lack of Nitrogen (N) in the upper root zone. This was more evident in continuous-corn fields, partially due to competition for N with bacteria decomposing corn residue. Saturated soils often did not have enough oxygen to allow the roots to take up N, and this was magnified when a compacted soil layer kept the root zone saturated. Corn that is still yellow probably is truly deficient of Nitrogen. I have been in an airplane twice in the last month and it is obvious that many field areas lost N due to leaching, denitrification, or runoff. These areas truly are deficient in N now and they have already greatly reduced potential yields in those areas. A partial remedy is to apply Nitrogen as a foliar feed to those areas. This can be done with a fungicide using a plane or ground-rig.
- 2) **Disease development** has been slow this year, partially due to less heat units and later planting. The disease most prevalent now is Common Rust (CR). CR lesions can be confused with Grey Leaf Spot (GLS), however CR lesions have raised pustules and when you rub your finger on the upper surface of the lesion; you will get a reddish dust on your finger. Although CR is not often considered that big of a problem in this area, it can have profound effects by predisposing the plant to more GLS and Northern Corn Leaf Blight (NCLB), as well as directly hurting yield. If you remember 1993 and 1999, we had significant CR and it affected both yield and standability. I have seen GLS (small parallel lesions) and NCLB (large boat-shaped lesions) just getting started in the past week or so, but if conditions continue to be wet with heavy dews, both diseases could become quite pronounced. We are a long way from physiological maturity and plants get much less resistant to leaf diseases as they get mature, so based on the climate pattern we are in, I would say **fungicide application** is warranted in many cases and it could still be done over the first 2 weeks of August. I would spray based on the health package of the corn variety, the previous crop, whether the plant had corn borer (CB) protection, and if the field is in a low lying area which would get more dew. Obviously the worst case may be an unhealthy, non-CB hybrid which was planted corn-on-corn. Hybrids with base genetics of M43-43, M56-40, M57-52, M57-54, M57-65, M58-54, M64-61 (if CR), and M69-71 could benefit the most from fungicides.
- 3) **Insects** have generally been light this year, with exception of Fall Armyworm and first generation European Corn Borer. Western Bean Cutworm moths have generally been very light in our customer's traps. We have 30 rootworm beetle screen traps placed in our customer's rotated corn fields and several have caught no beetles, while the feedback I currently have would say the remainder have been light (under 10 beetles/trap). This would indicate that most first year corn would not require rootworm corn, however your Miller Seed Expert can help you decide what is best for

your fields. Any corn (including wet spots) which is not fully silked by now (first week of August) needs to be scouted for rootworm beetle feeding on silks and pollen. If you find feeding to be significant, an immediate application of an insecticide such as Warrior® is warranted. Due to the observed first generation ECB damage, I would consider automatically including Warrior® in any fungicide application on your refuge or non-CB corn.

- 4) **Weeds** are problematic in many fields this year due to excess leaching and runoff of herbicides, late canopy of corn, and a large amount of weeds emerging after contact herbicides were applied due to continued excess rainfall. Weeds not only can dramatically reduce yields, but they can increase the disease pressure (slow drying in the morning). Weeds also could slow harvest and increase weed pressure next year. A late herbicide application in weedy fields or field areas is an important management tool to consider this year.

Alfalfa Comments

- 1) **New spring seeding:** This year has been the most challenging year in recent history to establish a new seeding of alfalfa. Alfalfa root development generally has been poor due to compacted and saturated soils. Much alfalfa emerged rapidly, only to stop growing. We looked at several fields with an alfalfa specialist last week. Most fields appear to have much alfalfa which is simply existing in a tiny plant state and not actively growing. His advice is to wait until the third week of August to decide if the potential has been damaged enough to warrant replanting. In the meantime, about all you can do is to avoid excess compaction, mow competitive weeds, and use Select® herbicide to control unwanted grasses. Checking soil pH and fertility and making needed applications of liquid lime and potassium may help long term, as will improved drainage. Your Miller team is always available to help make decisions about replant and we will furnish seed at 50% of retail cost if a replant decision is made on a 2008 spring seeded Miller alfalfa variety field.
- 2) **Fall seeding:** Be sure to be patient and let soil dry appropriately before working or seeding alfalfa this fall. Working compacted soil to improve the oxygen supply to the new roots and planting in soils with a pH approaching 7 with adequate potassium is important. If you have a field that has soil that is generally considered to be wet on 25% or more of the field we suggest planting MA-41BR, which is a branched rooted variety. Ideally we want alfalfa seeded by the end of the third week of August, but seeding can occur through Labor Day.
- 3) **Established alfalfa:** Compaction from haymaking equipment and fertilizer application is noticeable this year, with the alfalfa being stunted and in some cases yellow in compacted or water logged areas. Leaf hoppers have been lighter than normal this year. Where alfalfa was stressed by excess water and compaction, an application of Select® herbicide to control unwanted grasses may be warranted, assuming you have pure alfalfa. Cut alfalfa if it is weedy or has stopped growing and generally the next cutting will be better. Avoid compaction when making further cuttings, but always remove all "rained on" hay in a timely manner. Try to leave hay lay fallow for 6 weeks in September and October to recharge the roots, unless you plan to go to another crop next year.

In closing, you simply need to continue scouting and remedying insect, disease and weed concerns in your fields. At current prices, yield loss thresholds are considerably lower than they have been previously. We need a late frost to properly mature our crop and insure adequate stalk strength for good standability. Be sure your combines and driers are tuned and ready for harvest as it will be very important to harvest quickly, once corn is mature this fall.

Talk to your Miller Seed Experts

- **Chad Gillam 319-330-8021 (South of I-80)**
- **Jon Meester 319-325-6190 (North of I-80),**
- **or myself (Bob Miller 319-325-6158)**

for any corn or alfalfa questions. We would like to walk fields with you and also like helping others you know who currently do not use Miller corn or alfalfa. Let us know soon, any fall alfalfa needs you may have. We have attractive prepay options for elite corn hybrids with the right traits for your farm. The more we learn from you now, the better we can place the right hybrids on each of your fields!