

The Arthur Companies Inc

Amber Waves

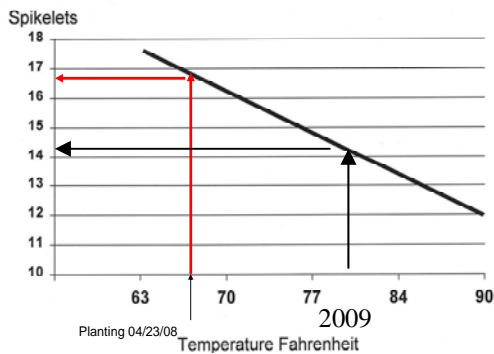
Issue 6-2009

June 26th, 2009

Small Grain Management

There are two very critical stages for wheat. One is during the 4-5.5 leaf stage when the spikelets are formed and the other is during flowering when kernels per spikelet is determined. A cool season crop like wheat develops better during cool conditions and the average maximum temperature during the spikelet formation is very critical for the end bushels. Temps too high shortens the head, less spikelets. (see graph below) Early planted wheat usually will have a higher spikelet count than later planted. See NDAWN table below.

This year wheat planting was delayed and even though May and early June was cool (see accumulated growing degree days below vs. normal) we experienced higher temperatures during the 4-5.5 leaf stage than last year. Based on this data we have lost some of the top yield potential.



Relationship between maximum daily temp. during the Haun 4.0-5.5 leaf stage and number of spikelets per head.

Aphids in Wheat

Low populations of aphids have been showing up in wheat fields across the area. We have been commonly observing 25% of stems infested with an overall average less than 1 aphid per stem. The most we have seen is 80% of stems infested and an average of 2 aphids per stem. This is still well below the action threshold of 80% of stems infested and an average of 12 to 15 aphids per stem, if the wheat is in the seedling to boot stage. As the wheat heads out, the threshold increases to 20 or more.

The natural question is if we can wait until the wheat is heading out and tankmix a fungicide with an insecticide. The problem is that aphids cause the most damage while wheat is in the vegetative to boot stage, so if the aphid numbers really take off we may not be able to wait that long.

The take home message is to keep monitoring fields. There are predators and diseases that can really slow down the population growth of the aphids if the conditions are right. However, left unhindered with favorable environment aphids can reproduce very quickly. Use Lorsban at 1/2 pt/ac. Cost: \$2.90/ac. Cobalt (Lorsban+Proaxis) is another option. Rate 7 oz, \$3.25/ac

Leaf Diseases and Head Scab

The NDSU Small Grain Disease Forecasting web site has been activated for 2009. This site provides information on the risk of tan spot, Septoria blotch, wheat leaf rust and Fusarium head blight (FHB = scab). A user of the site picks the NDAWN weather station closest to their field and picks the growth stage of the crop to get information on disease risk. The flowering growth stage must be picked for information on risk of FHB. The NDSU web address is:

<http://www.ag.ndsu.nodak.edu/cropdisease/cropdisease.htm>

The link is also posted on our website.

With the weather conditions we have had leaf diseases are a major concern in small grains. The goal is to keep the flag leaf healthy as long as possible. If no fungicide has been applied a flag leaf application should be considered, Stratego or Headline. Flag leaf will emerge shortly in some early planted fields. Based on the NDAWN model the last week has been favorable for tan spot and rust development.

Proline 3+3 (Proline+Folicur) or the premix Presaro have been in NDSU trials for several years and are significantly better than Folicur alone. Presaro should be applied at early flowering which is no different from Folicur. The timing is very important. See your agronomist for more details.

Use rate: Proline 3 oz + Folicur 3 oz Cost: \$14.90/ac

Prosaro 6.5 oz Cost: \$15.48/ac

Add Premier 90 or TrophyGold 1pt/100 as a sticker. 20 GPA performs better than 15 GPA.

Data based on NDAWN station in Galesburg 06/22/09 ND.

Date	Wheat Normal AGDD (°F)	Wheat AGDD (°F) 2009	Estimated Growth Stage	Average High Temp 4-5.5 leaf
2009-05-09	1251	1090	6.9	78°F
2009-05-16	1079	957	5.9	80°F
2009-05-23	886	804	4.9	Est 83°F
2009-05-30	684	618	3.6	Est +80°F



The Arthur Companies Inc.
PO Box 145 Arthur, ND 58006-0145

Arthur	Joe, Josh, Ola, Scott, Tom, Torey fax	967-8312 967-8381	1-888-967-8312
Ayr	Alan, Luke, fax	668-2973 668-2453	1-800-881-8522
Page	Steve, Justin	668-2203	1-800-726-8964

Glyphosate Additives and Drift Control products

We carry several additives to reduce the unwanted drift. Here are some of the benefits these products offer:

- improved retention of spray (less bounce)
 - improved spray pattern
 - Keeps spray on target
 - improved canopy penetration – Better coverage
 - Array contains AMS, a drift control and deposition agent. Use 9lb/100gal. Use 4.5 lb + 5lb AMS for low drift nozzles. Cost: \$1.11/acre
 - Sedate is a liquid drift control product. Use 1pt/100. Cost: \$0.32/acre. Add AMS when using this product.
 - Veracity is a AMS replacement, drift control, and deposition agent all in one jug. Use 3 qts/100. Cost: \$1.11/acre
- Cost per acre based on 7 GPA

Volunteer RR Corn in RR beans

A University of Minnesota study found that soybean yield was reduced 1% for every 75 clumps of corn per acre (they referred to a clump as 8 plants). The best way to control this corn is spraying the low dose on little corn, even if it means doing the light rate with both round-up sprays. 300 clumps per acre more than pays for adding the low dose of either product in both round-up passes. For reference, if the soybeans were in 30 inch rows, 1 clump per 60 feet of row justifies spraying.

1 qt/ 100 gal water of Trophy Gold is the best adjuvant to use when mixing round-up and a grass herbicide.

Select Max

Up to 12" corn	6 oz/acre	\$5.93
Up to 24" corn	9 oz/acre	\$8.89
Up to 36" corn	12 oz/acre	\$11.86

Assure II

Up to 18" corn	5 oz/acre	\$4.52
Up to 30" corn	8 oz/acre	\$7.23

The round-up rewards program pays from \$1.30 to \$3.90 per acre towards Select Max.

How late can I spray the corn?

All crops are developing fast during current weather. This is a short review of late season weed control in corn.

Grasses

Steadfast is labeled up to the 5 leaf collar stage (V5). Most corn is past this stage now. Option and Accent are labeled up to the 6 leaf collar stage (V6). Spraying any grass herbicide now is somewhat risky as most corn is at or beyond the V6 stage.

Broadleaves

For broadleaf weed control Status is a great choice. It is safe on corn from V4 up to V10 or 36 inches. On conventional corn 5oz of Status with surfactant at 2qt/100gal and AMS at 5lb/100gal will do an excellent job of broadleaf control. On Roundup Ready corn 2.5oz of Status with Roundup and AMS will help control larger and tough to control broadleaf weeds.

Callisto is labeled up to 36" corn but is weak on kochia. If Callisto is sprayed on larger weeds the 3oz rate should be used.

Laudis is labeled up to V8. Add Atrazine if buckwheat is one of the weeds you are after. Laudis gives some residual on both grasses and broadleaves.

Roundup Ready 2 corn can be sprayed up to 48 inches tall with labeled glyphosate products.

Last year Resource was used in both corn and soybeans with great success. Add 2-4 oz/ac to the Roundup up to V10 corn. 3-4 oz recommended on larger buckwheat. Expect some bronzing in beans during high temperature and high humidity.

Growing Degree Days

After a challenging spring the crop looks very good considering everything. GDDs are ahead of last year (based on May 15th planting date) but considering the later planting we are still behind last year. A few more warm days and we will catch up and pass the coolest growing season recorded....2008.

NDAWN Prosper	Corn GDD (F°) 2009	Corn GDD (F°) Planting May 1, 2008	Corn GDD Normal (F°) May 15th planting
05/15-06/23	500	549	529

Growth Stage

Almost all pest management decisions for corn are based on the vegetative stage. These are identified by the number of collars present on the corn plant. The leaf collar is the light-colored collar-like "band" located at the base of an exposed leaf blade, near the spot where the leaf blade comes in contact with the stem of the plant. Leaves within the whorl, not fully expanded and with no visible leaf collar are not included. For example, a plant with 3 collars would be called a V3 plant, however, there may be 6 leaves showing on the plant.

