

Agromony News

Eastern Region, No. 3

May 1, 2006

PLANTING DATES FOR OPTIMUM YIELD

Long-term studies from the east-central Corn Belt indicate that corn yields tend to be highest when plantings are made from approximately the last two weeks of April through the first 10 days of May. Given our slow start this year across the mid-section of the Region, keep in mind that good yields are still possible even if planting is delayed until mid-May. However, yield losses will begin to accelerate significantly after that time.

Corn Yield as Affected by Planting Date*

Date	% Full Yield
April 15	97
April 20 to May 5	99-100
May 10	97
May 15	95
May 20	91
May 30	81

*30,000 final population, Univ. of Illinois

NO NEED YET FOR CONSIDERATION TO SWITCH CORN HYBRIDS

As wet conditions continue to delay planting in areas of the eastern cornbelt, growers may begin asking if they should switch to earlier maturing hybrids. Recent Studies in Ohio and Indiana have shown no benefit in switching from "normal" full-season hybrids to earlier hybrids before the end of May. This should also hold true for southern Michigan. Results of these studies found that hybrids of various maturities can "adjust" their growth in response to a shortened growing season, and will develop faster, and flower with less heat units, than when planted "on-time". Observed decreases in required heat units from planting to black layer averaged approximately 6.8 GDD's for each day of delayed planting. In addition, most of our newer genetics tend to dry down faster than those of several years ago, and this should also be considered along with maturity.

QUICK BURNDOWN FOR WOOLY FIELDS

Growers looking for quick burndown of woolly no-till fields or as an aid-to-tillage have limited options. Typically, translocated herbicides such as glyphosate and 2,4-D work slowly unless daytime temperatures are in the 80's. Also, if using 2,4-D one needs to wait 7 days before planting. Under normal spring weather conditions with significantly lower air temperatures, Gramoxone-based programs will provide quicker burndown of weeds without a waiting period, but may not be as effective on perennials or large annual weeds. For corn, consider Gramoxone + atrazine or atrazine premix or Lumax/Lexar. For soybeans, consider Gramoxone + Sencor or Canopy or Boundry or Domain. Add **Preference, Prime Oil or Superb HC** for an adjuvant. The addition of Aim or Valor, with **Preference or Class Act NG** to glyphosate can accelerate burndown, but they won't be as quick as Gramoxone based treatments.

BE ON ALERT FOR BEAN LEAF BEETLE IN EARLY PLANTED SOYBEANS

Scout early planted fields for heavy populations and feeding damage. Over-wintering adults are usually attracted to the earliest emerging soybean fields.



Look for small, ¼ - inch long beetles of various colors, mostly with spots on their wing covers and always with a black triangle behind their head. Damage to soybeans can be severe from emergence through the first trifoliolate stage. Damage to the growing point or destruction of the cotyledons, prior to the emergence of the unifoliolate leaves, weakens the plant and can cause significant yield losses. Treatment may be warranted if 5% or more of the plants are affected by this type of damage. Feeding on the trifoliolate leaves is less damaging with treatment generally not

warranted unless 40% defoliation occurs. AgriSolutions **Arctic at 2-4 ozs/A, or Delta Gold at 1.5-1.9 oz/A** are very effective treatments for the control of Bean Leaf Beetle.

WATCH FOR THE ADVANCE OF POWDERY MILDEW IN WHEAT GROWING AREAS

Powdery mildew is being identified in many fields. This disease is typically found on the lower leaves and stem where it is less of a concern, but it can develop rapidly up the plants when field conditions are moist and temperatures are cool (55°F - 75°F). This often occurs in higher rainfall areas, especially with dense stands or high nitrogen environments. Spraying is recommended when 3 or more lesions are found on the flag leaf or the leaf just below it. For control, products with the highest efficacy based on university ratings, include PropiMax at 4 oz/A, Quilt at 14 oz/A, and Tilt at 4 oz/A. Adding appropriate adjuvants such as **PowerLock™ (Preference + Interlock)**, can improve canopy penetration and spray coverage. **Croplan Genetics** wheat varieties with very good to excellent powdery mildew resistance include 514W, 517W, 569W, 8308, and 8309.

VIRUS DISEASES IN WHEAT

A relatively mild winter and early spring in the south, may have contributed to possible aphid activity and resulting infections of barley yellow dwarf virus (BYDV) in southern wheat areas. The primary vectors of this virus are the oat-bird cherry aphid and the English grain aphid. Aphids fly into the area on storm fronts or are able to survive mild winters. Leaf discoloration caused by the virus infection in the spring range from yellow to red and sometimes purple, extending from the leaf tip to the base and from the leaf margin to the mid-rib. If plants are infected in the fall losses can be more than 30%. Infections that occur in the spring are less injurious, and infections that occur after heading cause only minimal loss. Primary control is achieved by planting after the “fly free date” and choosing “resistant” varieties. **Croplan Genetics** wheat varieties rated with very good resistance to barley yellow dwarf include 517W, 549W, 554W, 8308, and 8309. Chemical control of aphid vectors to suppress BYDV is most effective in

the fall shortly after wheat emergence. Recent research from the University of Kentucky would indicate benefit from fall insecticide treatment if there are as few as 3 aphids per foot of row within 30 days following emergence, and 6 aphids per foot of row from 30 to 60 days. Insecticide treatment for suppression of aphid vectors in the spring, was generally not practical for controlling barley yellow dwarf.

ALFALFA WEEVIL UPDATE

Hatch of alfalfa weevils, which typically occur between 200-300 accumulated heat units (base 48° F), has most likely occurred as far north as southern Michigan. All fields throughout the Region should now be checked for signs of feeding damage, and treated as necessary. The Ohio State University has developed an easy to use guideline using levels of tip feeding, weevil larvae count, and alfalfa plant height to trigger a corrective action. When alfalfa reaches 16 inches or more in height, growers should consider an early harvest rather than spraying. In fields which are cut early for alfalfa weevil, regrowth should be monitored closely. Possible treatments for alfalfa weevil management include AgriSolutions **Arctic 3.2EC** at 8 oz/A, **Taiga-Z (Warrior)** at 3.2-3.8 oz/A, or **Yuma 4E (Lorsban 4E)** at 1-2 pt/A. Adding appropriate adjuvants such as **PowerLock™ (Preference + Interlock)** can improve canopy penetration and spray coverage.

Alfalfa Weevil Guidelines (OSU)

Alfalfa Height (in)	Tip Feeding %	Weevils Per Stem	Action
6	25	1	Recheck in 7 days
9	50	1	Apply rescue treatment
12	75	2	Apply rescue treatment