We have been able to get out of the office and observe some of our fall applied research plots and travel across the state. We have observed a number of fields starting to turn green, planters in the barnyard, and fertilizer applications. It must be time to think about early season weed control and crop planting! Here are a few items to consider.

*I have noticed my fields starting to turn green. Do I need to be controlling these weeds if I won’t be planting until late April or early May?*

Although we have had a cold winter and a relatively dry spring, warm weather between now and the beginning of planting season will result in robust winter weed growth that is difficult to control and utilizing valuable soil moisture. Since we are about 3 to 4 weeks before planting season, one should consider making a herbicide application to control vegetation in no-till fields if winter weed growth is 6 inches tall and likely to be 12 inches or taller by late April. If there are primarily broadleaf weeds present, economical products to use for an early April burndown include 2,4-D, glyphosate, and Gramoxone. If marestail/horseweed and/or dandelion is present, 2,4-D should be used as a component of the burndown program.

Early season burndown (without residual herbicides) should be considered if:

1. winter weed growth will require tillage and/or excessive herbicides rates for control prior to planting
2. soil moisture is limited and weed growth will further deplete moisture reserves
3. weed growth and plant residue will interfere with planting operations and seed placement

*Should you include a residual herbicide with the burndown treatment in early April?*

Research results indicate that weed control costs can become excessive if residual herbicides are used more than 15 days before planting. If wet weather delays planting, supplemental postemergence practices are usually needed to control escapes. Due to weather uncertainties, we recommend applying residual herbicides no more than 2 weeks prior to the planned date planting. Applying the residual products as close as possible to planting time will provide more weed control activity to the crop growing in the field.

For corn production, if an early April burndown is not needed and emerged weeds are present when burndown applications are made in late April and May, adding crop oil to an atrazine premix will control broadleaf weeds that are 4 inches tall or less and grass weeds are 1 inch tall or less. Other herbicides can be added to the atrazine premix to control larger weeds. If the emerged weeds are strictly broadleaf weeds, 2,4-D is a very
cost effective tankmix partner. For mixed grass and broadleaf species, use Roundup/Touchdown (or other glyphosate formulations) on large weeds and Roundup/Touchdown or Gramoxone Extra on small weeds. The addition of 2,4-D to Roundup is recommended to improve control of dandelions, and marestail/horseweed. Banvel/Clarity will improve control of alfalfa, clover or chickweed. The performance of Gramoxone Extra is enhanced when applied with atrazine, Extrazine, Bladex, and Sencor.

In soybean, University research has also shown that herbicide applications made prior to 15 days before planting without a split or sequential application at planting will usually provide poor control and are not recommended. The burndown herbicides Gramoxone Extra, Roundup/Touchdown and 2,4-D can be tankmixed with many residual herbicides. Gramoxone Extra and Roundup may be applied early preplant through planting.

Conversely, 2,4-D applications must be made at least 7 days (ester) or 15 days (amine) prior to planting soybean for application rates up to 1 pt/A, or at least 30 days (ester and amine) prior to planting if applied at 1-2 pt/A. When using 2,4-D in your burndown program for soybean, remember to plant seeds at least 1.5 to 2 inches deep to avoid crop injury from 2,4-D.

Authority, Canopy, Canopy XL, Sencor, Domain, Boundary, Steel, Squadron, and Gauntlet also provide residual and some burndown activity since they contain either a triazine (Sencor/Lexone, Domain, Boundary), a aryltriazolinone (Authority, Canopy XL, Gauntlet), sulfonylurea (Canopy, Canopy XL), imidazolinone (Steel, Squadron), or triazolopyrimidine sulfonanilide (Gauntlet) herbicide. Adding a spray additive is usually needed to maximize foliar activity. Consult the label for more specific information on weeds controlled and spray additives when utilizing these herbicides for burndown.

Other non-residual herbicides for preplant weed control in soybeans include: Assure II, Fusion, Poast Plus and Select. These herbicides control annual and perennial grass weeds.