



## Agronomy Update | Fall Applied Herbicides

Fall is a great time to start preparing for the 2026 growing season. Resistant broadleaf and grassy weeds continue to be a problem on farms. This makes it harder to rely solely on in-crop applications to manage these problem weeds. One of the most effective strategies to combat this issue is layering herbicides. By layering fall and spring applications it creates multiple lines of defense against tough to kill weeds.

### **Group 3 and 15 Granular Products**

Group 3 and 15 granular products would include ethalfluralin, trifluralin, and triallate. These products are applied and incorporated into the soil because they target germinating seeds and seedlings. Group 3's inhibit cell division in roots. Group 15's inhibit cell division and elongation in seedling shoots before they emerge above the ground. This is why these products need to have good soil contact. If the field has lots of trash, make sure to harrow and get the product into the soil! Apply these products when the soil is around 5 degrees Celsius.

### **Group 14 Products**

Group 14 products inhibit the protoporphyrinogen (PPO) enzyme which is part of the chlorophyll and heme synthesis. In short, Group 14 herbicides cause the plant to "burn" from the inside out by producing toxic molecules that destroy membranes in light! When applied in the fall, Group 14's will bind to soil particles and remain in the soil till spring. As the weeds germinate in the spring, they will absorb herbicide. When they emerge from the soil surface and are exposed to light, plant membranes will rupture and seedlings are burned off quickly after emergence. This will help to reduce weed pressure in the spring and as we move into in-crop applications. Apply as soil conditions are cooling.

### **Group 15 Products**

Group 15 products inhibit synthesis of very long-chain fatty acids. These fatty acids are critical for cell membrane formation and cell division in emerging roots and shoots. These herbicides act like a seedling stopper preventing roots and shoots from developing. Spring moisture is needed to activate some Group 15 herbicides so please read and follow label directions. Also apply as soil conditions are cooling.

### **Why Fall Application**

1. Fall applications allow for an early start on weed control. Group 3,14 and Group 15 herbicides offer residual activity that will suppress early emerging weeds.
2. Layering herbicides with a different mode of action will help to take pressure off in crop



applications. We typically use Group 1,2,4, and 9 herbicides in season and by layer Group 14 and 15 in the fall, it will assist in reducing the risk of herbicide resistance.

3. Fall applications can help reduce early season weed pressure. A cleaner field will allow crops to establish and utilize soil moisture and nutrients to get a good start.
4. Always check rotational restrictions to ensure the herbicide of choice fits into your next season's crop plan