

It's time to start thinking about weed control in the lawn. The weeds that are the most troublesome are those controlled with a pre-emergent herbicide.

What is pre-emergent weed control? Simply stated, it controls the weed before it emerges from the soil. The common misconception is that a pre-emergence inhibits weed seeds from germinating. Such is not the case. The seeds germinate, but as the young developing seedlings come in contact with the pre-emergent chemical in the soil, the seedlings die.

Although the concept is simple, a wealth of materials exists; thus, decision-making can sometimes be overwhelming. Which product works best? Before I discuss the various pre-emergent products, let's first look at what is called optimal timing.

Everyone seems to be in a hurry in the spring to apply a pre-emergent chemical. When applied too early, it usually doesn't inhibit the effectiveness for early season weed control, but it can cause failure for late season control. In eastern Nebraska, UNL Extension recommends applying pre-emergence near the end of April or first week in May. In Central Nebraska, it is recommended to apply the pre-emergent during the first or second week in May.

The best way to determine when to apply a pre-emergent is by checking the soil temperature. For crab grass control, one should have sustained soil temperatures during the day of fifty-five degrees for three or more days in a row. Fortunately, this homework has already been done for you. UNL Extension has been keeping soil temperature records for over fifty years. You can check the soil temperatures in your area by logging onto the university's website at <http://cropwatch.unl.edu/web/cropwatch/cropwatchsoiltemperature> As of May 1, 2013, the seven-day average soil temperature for the Kearney area has been 52°F.

What product do you choose?

Those products that contain the chemicals Prodiamine or Dithiopyr are herbicides that have a long residual effect. The trade name printed on the

bag for Prodiamine is Barricade®; whereas, the trade name for Dithiopyr is Dimension®. Since both are deemed long residual products, one application is usually all that is needed for seasonal control. One caution when using these products — if you choose to reseed in late summer, be aware there may still be residual herbicide in the soil that will inhibit the new seedlings.

The industry standard has been a product with a Pendimethalin base. Trade names for this product may be Halts®, Pendulum®, Accota®, Pre-M® or Prowl®. It's been around for years. Under typical Nebraska conditions, this product proves to be most effective with two applications: the first application at the optimal time, followed by another application in four to six weeks.

If you plan to over-seed or reseed in the spring and want to control crabgrass, you have one choice. The chemical is Siduron, with a trade name of Tupersan®. It can be applied directly over cool season grasses such as bluegrass or fescue. It inhibits the growth of crabgrass, foxtail and other annual weeds. If you don't use a pre-emergence in the spring when you are over-seeding, failure is often experienced because the grass seedlings can't compete with the weeds.

No matter what product you select, all need to be watered in. A good half inch or more is needed to activate the herbicide. If allowed to remain on the surface and not watered in, the chemical will photo-degrade and lose its efficacy.

All previously mentioned herbicides are synthetics. In recent years work has been done at Iowa State with a product derived from corn gluten meal. It is completely organic. Research has proven it to be an extremely effective pre-emergent herbicide in lawns and gardens.

As I began, it's time to start thinking about weed control in the lawn. For success — know all that you can about pre-emergent weed management before you begin.