

The Truth About Pre-emergent Herbicides

It's always easier to control weeds before they germinate compared to spraying them after they come up and grow. Many weeds, such as crabgrass and other grassy weeds are effectively controlled with a properly timed pre-emergent herbicide. Pre-emergents have come a long way in the 30 years I've been applying them, with better, safer, longer-lasting products available now with lower use rates. Any pre-emergent can be applied in the granular or liquid form. Most homeowners apply a granular, which has been coated with a pre-emergent. Professional lawn care companies mix the product into a liquid solution, while adding other products and even fertilizer to the mix. The liquid is then sprayed in a drench application over the lawn. With either method, the pre-emergent needs to be watered into the soil within a few days, where it binds to the soil surface, and stays active for several months. Once in the soil, as small weed seeds such as crabgrass germinate late in spring, the weeds are killed as they shoot up through the herbicide barrier.

Three keys to good crabgrass control are:

- Use a quality product.
- Apply it properly at the right time, at the proper rate.
- Water in the product.

We use the best pre-emergent available—Barricade (Prodiamine), and apply it a solid recommended rate of 29 oz/acre. Unlike many of our competitors, we apply one early spring treatment with this full rate, rather than making two treatments with half rates, while invoicing the customer twice. As you can see from the chart below, our full rate will control crabgrass for up to 7 months, which is plenty.



Pre-emergents need to be applied and into the soil at least a week prior to crabgrass germination. Crabgrass will germinate when the 4" soil temperatures stay at about 54 degrees for about four consecutive days with adequate soil moisture. We generally have our customers serviced with their pre-emergent by around March 26th. Seldom will I see crabgrass germinating before that, unless it's along a concrete curb, in bare ground, which will heat up faster in the spring. Even good products such as Barricade will not work though if they are not applied at a good

rate, and with a good application covering all areas of the lawn. Older products often required two applications, since they only lasted about 2-3 months in the soil before breaking down. Newer products, such as Barricade, will provide weed control for up to 8 months, as long as the proper rate is used. Therefore, one good treatment is required for season-long control of crabgrass and grassy weeds. If a booster application is applied, it is applied at a half rate in late spring or early summer, as the initial treatment starts to break down in the soil. This is done with a product we use named Echelon with our Round 3 treatment. Echelon has not only a booster rate of Barricade, but also a post-emergent herbicide named Dismiss for nutsedge and broadleaf weed-control.

NO pre-emergent is perfect. Things happen in nature to break it down quicker, such as excessive rain or irrigation. Mole activity or anything which disturbs the soil surface will negate the pre-emergent. And pre-emergents are only effective on crabgrass and grassy weeds. Some broadleaf weeds are on the label, but the control is very sporadic at best. And then, with weeds such as Nutgrass, other specialty types of products are needed such as Dismiss, which can act as a pre-emergent. So even with pre-emergents applied, some liquid post-emergent weed-control will be needed during the season. This, along with consistent turf fertilization, is why lawn treatments about every 6 weeks is the best way to control weeds.