

Pre-emergent Herbicides in Lawns

It isn't too early to be thinking about pre-emergence herbicides for lawns. Pre-emergence herbicides are ones that are applied before the weed seeds germinate. Generally these are applied in late March or early April, but last spring the soil warmed up much earlier than normal. As a result, pre-emergent herbicides were applied too late to be effective. According to Brad Fresenburg, MU Extension Plant Pathologist, the best time to apply a pre-emergent herbicide is when the temperature in the top one inch of soil has been 55 degrees F for five consecutive days. Once the soil temperatures reach 55 degrees, annual weed seeds begin to germinate. After the weed has emerged, the pre-emergence herbicide is not effective. Local soil temperatures can be monitored at the MU Agricultural Experiment Station near Linneus, the Forage Systems Research Center's real-time weather website www.aes.missouri.edu/fsrc/weather/linneus.stm. Once a pre-emergent herbicide has been applied it must be watered into the soil with either a half inch of irrigation or rainfall to be effective.

By monitoring the soil temperature and applying pre-emergent herbicides at the optimum time, the length of time the herbicide is effective is maximized. Several factors contribute to the length of time of control including rainfall and temperature. Timing herbicide application just prior to the emergence of early annual weeds ensures the most "bang for your buck."

The best way to fight weeds is to maintain a thick dense lawn which is mowed at a 3.5 inch height. Mowing at this height helps to shade out the annual weeds not giving them the opportunity to germinate. Shading will help reduce the number of perennial weeds such as dandelion and plantains as well.

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