



All Zones

Crabgrass can be one of the most difficult weeds to control. There are many factors involved when attempting to control crabgrass by pre-emergent herbicides. These include herbicide selection, application rates, soils, cultural practices, environmental factors and most importantly timing. Improper application timing in many cases is the leading cause of crabgrass breakthrough. Applied to late crabgrass will germinate and begin growth before the herbicide is incorporated into the soil. Applications made to early will have a depleted residual before all weeds seeds have germinated.

When it comes to application timing there are a few theories that are used regarding application. These theories have some relevancy but with changing weather patterns a more precise determination may be necessary. Pre emergent timing is often based off of ornamental plant activity. These plants may include forsythia as well as lilac. It is often recommended to apply pre emergent herbicides when these plants begin to bloom. This theory can somewhat be accurate but does the germination of crabgrass really correlate with these plants. This can be misleading. A good example of this would be a short period of above normal temperatures. These temperatures may cause ornamental plants to bloom but the soil temperatures may remain the same or increase only a little. Also the ornamental plants may have certain stresses on them which may delay the blooming period. Also a theory based on the thickness of your lawn may be used. This theory suggests a thin lawn should have herbicides applied a little early and later applications for thicker lawn in regards to forsythia blooming. As we have all seen crabgrass germinates and thrives just as well in thick healthy turf as weak thin turf. For these reasons turf managers must monitor soil temperatures when attempting to time herbicide applications.

Most universities base herbicide application timing by the temperatures of the soil. By monitoring the soil temperature turf mangers can accurately plan for crabgrass germination. By most indications crabgrass will germinate when the soil temperatures reach 50° to 55° F for at least 3 days. As mentioned above turf density can effect how the germination can continue to germinate into the summer. With inconsistency in weather patterns crabgrass is germinating earlier in certain areas. Unseasonably warm winter temperatures may cause earlier herbicide application resulting in subsequent applications thereafter. Florida may be good example of

this. Reports pertaining to average warmer temperatures in Florida may cause turf managers to begin monitoring soil temperatures in their area. Although more often used for agriculture crops and pest activity, growing degree days (GDD) use daily air temperatures to predict growth and division in insects and plants. For growing degree (GDD) information refer to the Phenology section of the attached TechLink document. The growing degree day (GDD) calculation can viewed on www.lesco.com.

To confidently make recommendations on application timing it is important to monitor the soil temps. The use of soil thermometers (002605) to record daily temperatures can provide accurate data for application timing. Soil temperatures can be monitored at your location and can be a valuable service for your customers. It may also provide additional sales for your location. Accurate recommendations along with quality herbicides will provide your customers with the tools they need for good crabgrass control.



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