

Prevent Weeds Before They Bloom

Now's the time to treat summer annuals, but make sure you have a plan

BY DAVE KOPEC

Many weed problems can be avoided. That is, you can prevent weed problems by controlling weed emergence.

This applies mostly to annual-type weeds, which are defined as those that germinate, grow vegetatively, flower, produce seed and then die. The cycle then repeats itself year after year. The time when annuals emerge and grow determines their classification. Because of this, there are basically two types of annual weeds: winter and summer annuals. This article focuses on controlling summer annuals before they germinate.

Summer annuals are weeds which germinate in the spring (or late winter in southern locations) when soil temperatures start getting warmer. This type of annual grows, flowers, produces seed during the summer and perishes in the following fall. Examples of summer annuals include grassy weeds such as crabgrass, goosegrass, stinkgrass, foxtails, and broadleaves such as spurge and knotweed.

Pre-emergent herbicides can be used to prevent seeds of summer annuals from becoming established in golf turf. It's better and easier to control these annuals from a pre-emergent standpoint instead of treating weeds after they are established.

Getting rid of weeds before they start is smart, but make sure you follow these four steps:

- Know what weeds are (have been) present.
- Know the most probable time of weed germination.
- Know the tolerance of the existing turf that is present.
- Be aware of reseeding restrictions, which may prevent new turfgrass seedlings from germinating as well.

The first point is critical, since not all pre-emergent herbicides control all weed seeds. The most familiar type of pre-emergence herbicides include the dinitroaniline group. These herbicides provide excellent control of grassy weeds, like crabgrass and southern



cupgrass. They may not provide as high a level of control on broadleaf weeds, like spurge, unless applied at the highest label rate listed.

Since not all summer annual weeds emerge at the same time, it's important to pinpoint when your weeds will start to grow. For example, crabgrass and cupgrass germinate earlier (55 degree F soil temperature)

than goosegrass, which germinates at higher soil temperatures (62 to 64 degrees F). Most spurges germinate at a soil temperature higher than that of crabgrass. Therefore, you may need to apply products in split applications (usually three weeks apart), or apply another product later.

It's also important to understand that not all turfgrasses react the same to the same pre-emergent product. For example, Surflan can be applied to dormant (spring) bermudagrass, but not to overseeded bermudagrass because it would be detrimental to ryegrass overseeding.

Another example is pendimethalin. If you seeded cool-season grasses in the fall or spring (as permanent grasses), this product could be harsh on the younger seedlings of turf, as opposed to the older and fully mature grass plants in the turf. Also, certain pre-emergent herbicides may be fully usable on cool-season grasses, but not be safe at all for bermudagrass.

If you're considering seeding additional permanent grasses into the turf (ryegrass, bluegrass or fescues) to cover bare areas, you need to understand what restrictions that will place on your choice of herbicides. All pre-emergent products will stop the desirable turf seed from germinating as well. In the southern United States, where bermudagrass is overseeded with ryegrass in the late summer/early fall, make sure the pre-emergent application for summer annuals is far enough away from the planned overseeding date. This information is printed on most product labels.

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