Best Management Practices: Postemergence Crabgrass Control

Description

Smooth crabgrass (*Digitaria ischaemum*) and large crabgrass (*Digitaria sanguinalis*) are two common crabgrass species found throughout cool and warm-season turf. Crabgrass is a pale green colored summer annual weed causing an unsightly mottled look to dark green turf. It begins germination when soil temperatures are approximately 53-57˚F for 3-5 consecutive days at a soil depth of 4 inches. Generally, this coincides with the appearance of forsythia blooms. Crabgrass is capable of producing up to 150,000 seeds per plant, which may remain viable in soil for several years. Because of this, crabgrass is one of the most troublesome weeds to control.

Habitat

Crabgrass can grow under adverse growing conditions and often grows faster than the desirable turf. It takes advantage of canopy voids in desirable turf created by scalping, low mowing heights, insufficient nutrient availability or thinned areas due to other pest damage or pressure. Both species can survive in wet and dry areas.

Identification

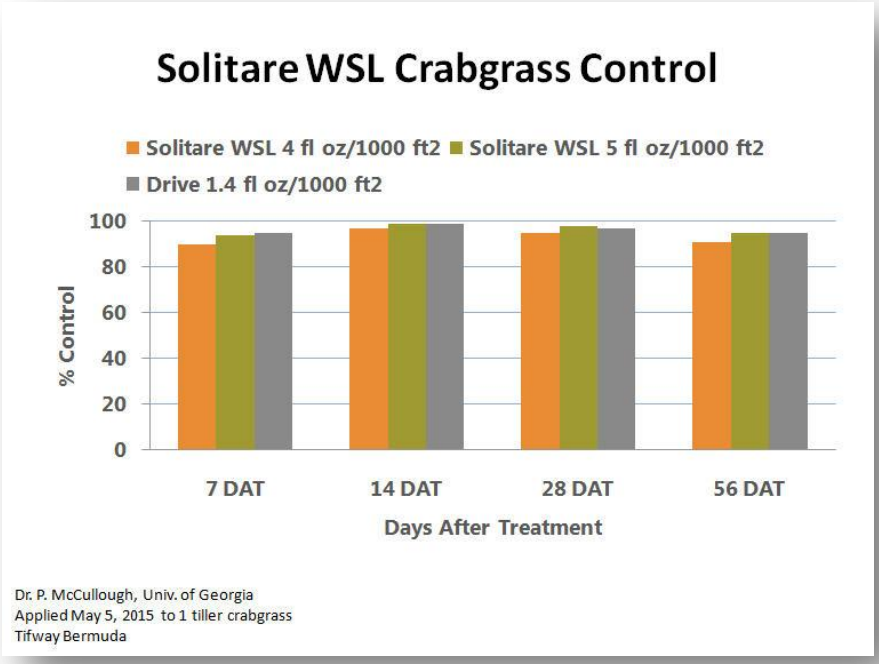
Crabgrass plants have pointed leaf tips with round stems and leaf blades typically longer than two inches. Both smooth and large crabgrass have tall, membranous ligules at the base of the leaf blade. Smooth crabgrass plants do not have hairs on the leaf sheath and will typically see a red to maroon color at the base. Large crabgrass plants have hairs on the leaf and sheath. Both species produce seed heads with “finger-like” spiked branches. Large crabgrass produces two to nine finger-like branches and smooth crabgrass produces two to six. Both crabgrass species produce seed from mid-summer until frost.

Management

Cultural:

Like all weeds, crabgrass seed requires light to germinate. A dense, healthy turf can reduce crabgrass populations. Factors such as disease, insects, improper mowing, low fertility, and drought can weaken or thin turf. Thinned or weakened turf stands will allow more light to reach the soil surface where seeds are waiting to germinate below the canopy. Crabgrass will take this opportunity to germinate and quickly spread. Proper cultural practices such as mowing, fertilization, and watering can help turf resist invasion by crabgrass.

Chemical:



There may be times when turf managers are unable to make timely preemergence herbicide applications, such as inclement weather during the optimum application window. Inevitably some break-through may occur, which will warrant postemergence herbicide applications. Postemergence crabgrass control can be effectively achieved with FMC's Solitare WSL Herbicide. Solitare WSL is a water soluble liquid formulation containing two active ingredients – sulfentrazone and quinclorac – in a ratio specifically designed to provide postemergence crabgrass control in most growth stages. Solitare WSL applied at 4 fl oz/1000 ft^2offers control of a much broader weed spectrum than the individual active ingredients alone plus providing unsurpassed speed of control with long lasting residual.

References
Photo Courtesy: Aaron Patton, Ph.D., Purdue University; University of Missouri Extension.
Color Atlas of Turfgrass Weeds: A Guide to Weed Identification and Control Strategies. L.B. McCarty et al. 2nd ed. 2008 John Wiley and Sons, Inc.