



Late July's Weed of the Month: Large Crabgrass

Prepared by John Condzella and Leslie A. Weston, Landscape Weed Management Team

Large crabgrass (*Digitaria sanguinalis*) is a common weed that is familiar to many people across many continents. Crabgrass was introduced from Eurasia and is now widespread throughout the United States. There are a few different types of crabgrass; large crabgrass is most prevalent in New York State, along with smooth crabgrass. Large crabgrass can primarily be spotted in landscape settings as well as orchards, vineyards, roadsides and other agricultural areas. Large crabgrass is also known as hairy crabgrass, summer grass, or crowfoot grass.



Photo from *Weeds of the Northeast* by Uva and Neal.

Description: Large crabgrass is a summer annual that germinates in warm soils and when mowed, is prostrate and spreading or ascends to 1 m in height when not mowed. The yellowish-green leaves can grow to about 3 inches long, and are linear with tapered leaf tips. Leaves are rolled in the bud, lack auricles, and have a jagged membranous ligule. You will also notice hairs on the blade and sheath that are at a 90 degree angle to the leaf surface. Another identifying factor is that large crabgrass can root vegetatively along nodes on the shoot.



Photo from Va. Tech. weed i.d. website (<http://ipm.ppws.vt.edu/weedindex.htm>)

Reproduction: Large crabgrass reproduces by seed that germinates from late spring through late summer, once upper soil temperatures consistently exceed 65 degrees. In late May through July, large crabgrass becomes established across New York State and small seedlings are very commonly observed. Vegetative spread can occur by adventitious rooting of stems, but it is not considered an important means of propagation. Large crabgrass will flower in mid to late summer. The seed head generally consists of 3-5 spikes clustered at the top of stems. Spikelets are elliptical and in 2 rows along the spike. Each

spikelet contains a single, shiny, yellow-brown seed that is about 2-3mm long. The spreading growth of crabgrass will eventually crowd out desirable turfgrasses in lawns and managed turf as well as ornamentals in landscape beds.

Habitat/distribution: Large crabgrass is widespread throughout the United States and can survive in many types of environments. It is commonplace to find large crabgrass in droughty soils under poor growing conditions but it also thrives in fertilized and irrigated sites and is found in nearly every soil type and crop. It is also prevalent along roadsides and in waste areas.

Control methods: Large crabgrass tends to germinate in any open space in the landscape or lawn. Do not create openings in the landscape for crabgrass seedlings by limiting soil disturbance in beds or core aeration or verticutting of turf. Perform these functions in the fall if possible, to limit crabgrass establishment. A slightly raised mowing height for turf may encourage the turfgrass by decreasing scalping, which results in stress and reduced growth of turfgrass. A dense turf that is well managed by timely overseeding and fall or spring fertilization will also prevent crabgrass infestation. When crabgrass is going to seed, lower the mowing height and gather clippings to prevent seed establishment. Trim garden borders and fence rows in a timely manner to prevent crabgrass seedlings from setting seed. If effective chemical control of crabgrass is desired, it is easiest to use a pre-emergent herbicide as soon as soil temperatures reach 55- 60 degrees for a period of four days (usually in May across New York State). Many liquid herbicide and granular fertilizer formulations are available for crabgrass control, The pre-emergent herbicide Dimension (dithiopyr) will prevent crabgrass germination but also control small crabgrass seedlings up to the 3 tiller stage. Do not disturb the soil surface after herbicide application. Repeat applications may be needed for season-long control. For crabgrass control after germination, one can use a selective liquid post-emergent grass herbicide for spot treatments. Hand-weeding is often utilized in landscape and ornamental beds, but preemergent granular herbicides can also be applied in mid to late spring, before crabgrass emerges. Read the product label carefully to determine if ornamentals are tolerant to the product, and avoid application over existing ornamental foliage which might trap herbicide granules. Several years are required to eliminate viable crabgrass seed from the typical landscape setting, but it is possible to eventually eradicate this weed by carefully using preventative management practices including timely herbicide treatments before germination, frequent mowing at higher mowing heights, and timely fertilization of turf and landscape beds, supplemented with hand-weeding.