

Weed of Interest: Lesser Celandine

Andy Senesac, Weed Science Specialist, Cornell Cooperative Extension of Suffolk County

In early spring one of the first and showiest spring bloomers to appear in lawns, landscapes, and woods is called lesser celandine or fig buttercup (*Ficaria verna* or *Ranunculus ficaria*). The flowers have eight bright yellow petals, and it is sometimes confused with the similar looking marsh marigold (*Caltha palustris* L.). Marsh marigold is a valued native and does not form the large, almost solid mats that lesser celandine does. On Long Island, lesser celandine leaves and flowers start to appear in late March and early April. Although it is a very short-lived spring bloomer, it can out-compete desirable native ephemeral species by forming a smothering "carpet" of leaves. Since the 1980s, lesser celandine has become highly invasive in lawns, landscape beds, and wooded areas located near houses or disturbed areas. The density and competitive nature of the plant prevents native species from establishing and growing well. Lesser celandine has become so much of an invasive issue that it is included along with 65 other species in New York's state list of prohibited plant species. Refer to this site for more information about these invasive species: <https://www.dec.ny.gov/animals/99141.html>.



Tuberous roots formed below dying foliage. Photo by A. Senesac



Lesser celandine flower. Photo by A. Senesac

Lesser celandine leaves have a distinctive heart shape and are usually marked with a dark splotch in the middle. Although it can spread by seed, it will more commonly move to nearby locations by underground tuber-

ous roots and aboveground bulbils that are prolific and extensive. Any portion of these tubers that is moved to new areas will give rise to a new plant next year. Lesser celandine appears early but also disappears fairly quickly. By late May, the leaves will begin to yellow and die back. Even though it has a short-lived aboveground cycle, the tuberous roots that have formed in such a short time are astoundingly dense. These tubers will begin to initiate roots and new shoots late in the fall and be ready to emerge as soon as temperatures begin to rise in March.

Management considerations

Cultural practices of management consist of regular scouting in late winter followed by early intervention, of digging and removal of small infestations. However, we have few defenses against this weed once it gets well established. A handful of herbicides are currently registered to control or suppress this weed. These include Speedzone EW (EPA Reg. No. 2217-1053), which lists lesser celandine on the primary label; 2(ee) exemption registrations for triclopyr Garlon 4 Ultra (EPA Reg. No. 62719-527), and for four glyphosate products: Roundup

Table 1. Postemergence Control of Lesser Celandine (*Ficaria verna*)

TREATMENT			Rate	Number of plants/plot		Percent Control
Trade Name	Active Ingredient	Form	lb ai/A	Pretreat	41DAT	41DAT
Untreated	~	~	~	32	31	0
Fiesta	ferric HEPTA	26.5%L	1.3 fl. oz./ft ²	24	24	0
Manor	metsulfuron	60WDG	0.0124	22	3	93
Roundup Powermax	glyphosate	5.5 EC	2.0	25	4	85
Chateau	flumioxazin	51WDG	0.38	22	4	93
Speedzone	carfentrazone/2,4-D /MCP/dicamba	3.92EC	1.96	24	18	58
Turflon II	triclopyr+2,4-D	3.85EC	1.6	26	15	55
Fisher's LSD @ 0.05				14	16	32

*Leaves with typical dark splotch. Photo by A. Senesac*

Custom (EPA Reg. No. 524-343), Roundup Pro (EPA Reg. No. 524-475), Rodeo (EPA Reg. No. 62719-324), and Accord XRT II (EPA Reg. No. 62719-556). If one of these products is to be used, follow the directions for use on the primary label and the specific directions on the 2(ee) labels. These labels can be downloaded from the NYS DEC website at <https://www.dec.ny.gov/nyspad/products?1>.

A few years ago, we conducted a field trial at the L.I. Horticultural Research and Extension Center to evaluate several postemergence herbicides for efficacy in controlling lesser celandine in turf and simulated landscape situations (Table 1). A trial area was established in a minimally maintained turf where lesser celandine tubers had been planted the previous year. The treatments were applied in early April when it had emerged and was beginning to flower. The treatments consisted of standard labeled rates of: metsulfuron (Manor), glyphosate (Roundup PowerMax), flumioxazin (Sureguard), carfentrazone/2,4-D/MCP/dicamba (Speedzone), triclopyr+2,4-D (Turflon II) or iron HEDTA (Fiesta). The results indicate that the best control was attained from either metsulfuron, glyphosate, or flumioxazin when visually evaluated 41 days after treatment. Speedzone and Turflon II were partially effective but did not provide acceptable control of this weed. Fiesta was not effective on this weed. ●

zin (Sureguard), carfentrazone/2,4-D/MCP/dicamba (Speedzone), triclopyr+2,4-D (Turflon II) or iron HEDTA (Fiesta). The results indicate that the best control was attained from either metsulfuron, glyphosate, or flumioxazin when visually evaluated 41 days after treatment. Speedzone and Turflon II were partially effective but did not provide acceptable control of this weed. Fiesta was not effective on this weed. ●

*Solid infestation starting to die back in mid-May. Photos by A. Senesac*