

# Integrated Pest & Crop Management

## Weed of the Month: Multiflora rose, a rose by any other other name is probably less invasive

Mandy Bish and Kevin Bradley

Introduced into the United States from eastern Asia in 1866, the multiflora rose (*Rosa multiflora*) was considered a valuable source of rootstock for cultivated roses. In 1930, the U.S. government promoted this vigorous, perennial shrub for use in minimizing soil erosion; this in part contributed to the rapid spread of multiflora rose. Presently the plant is commonly found in large thickets along fencerows, in pastures and hayfields (Figure 1). Multiflora rose has been confirmed in 39 states, and has infested over 45 million acres in the eastern half of the country<sup>1</sup>. It is classified as noxious or banned in 12 states, including Missouri.

Multiflora rose is an erect and branching shrub; the stems can grow from 3 to 10 feet in height and may have curved thorns along them. The leaves are divided into 7 to 9 leaflets (Figure 2), which are elliptical in shape and approximately ½ to 2 ½ inches long and ¼ to 1 ¼ inches wide. The leaves also have coarsely toothed or serrated margins, and usually have hairs on the lower leaflet surface. The leaflets collectively form a leaf, which is attached to the stem by petioles, and the leaves are arranged alternately along the stem. At the base of the petiole, a fringe of stipules can be found; the stipules resemble stiff hairs fused together (Figure 3), and are one of the key distinguishing characteristics of multiflora rose in comparison to other similar rose species.

Continued on page 2 ►

### In This Issue

Weed of the Month: Multiflora Rose .....	1
Weather Data for the Week Ending February 26, 2015 .....	3



Figure 1: Multiflora rose is commonly found in large thickets along fencerows and in pastures.

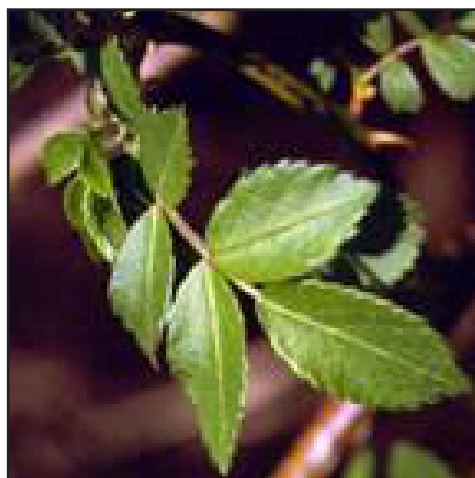
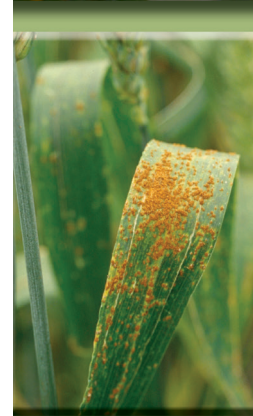


Figure 2: Each leaf is made up of 7 to 9 individual leaflets such as the ones shown here.



Figure 3: The stipules resemble stiff hairs fused together.



The plant is an obligate out-crosser, meaning that it relies on general insects such as bumble bees and syrphid flies for pollination. The flowers are fragrant, white, approximately ½ to 1 inch in diameter, usually have 5 petals, and tend to develop in May and/or June (Figure 4). The fruits, also known as “hips”, are red and densely covered with hair. Each hip can contain 1 to 20 seeds, which are dispersed by birds and can remain viable in the soil for over 20 years<sup>2</sup>. Multiflora rose can also reproduce vegetatively. The root system is fibrous, and the stems are capable of rooting where they come in contact with the soil, resulting in dense thickets of this species.



Figure 4: The white flowers of Multiflora rose are usually visible in May and June.

Mechanical removal of multiflora rose is effective when all roots are completely removed from the soil. Additionally 3 to 6 mowings per season for 2 to 4 years in a row have shown to be effective in reducing infestations. Chemical control is most effective as the plant comes out of dormancy in the spring.

Glyphosate can be an effective foliar spot-spray, but is a non-selective herbicide and will injure any grass forage it contacts. For selective control in grass pastures and hayfields, metsulfuron products (Cimarron, Cimarron Max, Chaparral, etc.), 2,4-D and dicamba combinations (Weedmaster, etc.), or combinations of GrazonNext or Grazon P+D with tripropyr (Remedy, PastureGard, etc.) are effective foliar sprays. Cutting multiflora rose stems and painting a herbicide (such as glyphosate at a 10 to 20% solution) on the stump can kill the root systems and prevent resprouting. If left unchecked, studies have shown that a single multiflora rose plant can rapidly populate an entire site and persist for 30 years or more<sup>2</sup>.

---

To learn more about multiflora rose, visit [weedid.missouri.edu](http://weedid.missouri.edu)

To learn more about weed and brush control in pasture and non-crop settings, purchase a copy of extension publication IPM1031 at: <http://extension.missouri.edu/p/ipm1031>

<sup>1</sup>Jesse LC, Moloney KA, and JJ Obrycki (2006) Insect pollinators of the invasive plant, *Rosa multiflora*, in Iowa, USA. *Weed Biology & Management* 6(4): 235-240.

<sup>2</sup>Banasiak SE and SJ Meiners (2009) Long term dynamics of *Rosa multiflora* in a successional system. *Biol. Invasions* 11:215-224.

Find more information on toothed spurge and POST herbicide control options at:  
<http://ipm.missouri.edu/IPCM/2014/7/Weed-of-the-Month-Toothed-Spurge/>

The MU Extension's WEED ID guide can be found on the Web site:  
<http://weedid.missouri.edu/> And is available as a free app, called ID Weeds, for Apple and Android mobile devices.



## MU IPM Pest Monitoring Network

*Taking an Environmentally Sensitive Approach to Pest Management*



Receive pest alerts by e-mail at  
<http://ipm.missouri.edu/pestmonitoring/subscribe.htm>  
or follow us on **Twitter** ([www.twitter.com/mizzouipm](http://www.twitter.com/mizzouipm))  
or **Facebook** ([www.facebook.com/MUipm](http://www.facebook.com/MUipm))!

<http://ipm.missouri.edu/pestmonitoring>

# Weather Data for the Week Ending February 26, 2015

Station	County	Weekly Temperature (°F)						Monthly Precipitation (in.)		Growing Degree Days‡	
		Avg. Max.	Avg. Min.	Extreme High	Extreme Low	Mean	Departure from long term avg.	February 1-26	Departure from long term avg.	Accumulated Since Apr 1	Departure from long term avg.
Corning	Atchison	35	9	54	-1	22	-12	0.44	-0.46	*	*
St. Joseph	Buchanan	34	11	53	3	23	-12	0.74	-0.28	*	*
Brunswick	Carroll	32	13	49	5	23	-13	0.84	-0.71	*	*
Albany	Gentry	34	10	51	0	21	-13	0.62	-0.56	*	*
Auxvasse	Audrain	32	11	48	2	21	-16	1.07	-0.71	*	*
Vandalia	Audrain	32	8	45	-4	20	-16	1.01	-0.74	*	*
Columbia-Bradford Research and Extension Center	Boone	33	12	49	3	23	-16	0.81	-1.41	*	*
Columbia-Capen Park	Boone	36	12	53	2	23	-16	1.00	-1.19	*	*
Columbia-Jefferson Farm and Gardens	Boone	34	12	50	3	23	-16	0.81	-1.40	*	*
Columbia-Sanborn Field	Boone	34	13	49	4	24	-15	1.01	-1.22	*	*
Columbia-South Farms	Boone	34	12	49	3	23	-16	0.74	-1.50	*	*
Williamsburg	Callaway	34	12	50	3	22	-15	0.90	-1.24	*	*
Novelty	Knox	30	9	40	-3	20	-15	0.78	-0.75	*	*
Linneus	Linn	31	10	44	1	21	-14	0.79	-0.58	*	*
Monroe City	Monroe	30	9	41	0	20	-16	1.01	-0.50	*	*
Versailles	Morgan	36	16	51	7	26	-14	0.66	-1.40	*	*
Green Ridge	Pettis	35	15	51	7	25	-13	0.74	-0.93	*	*
Lamar	Barton	36	19	48	12	27	-14	0.52	-1.52	*	*
Cook Station	Crawford	34	15	46	7	25	-16	1.65	-0.57	*	*
Round Spring	Shannon	35	17	46	12	26	-15	1.35	-0.96	*	*
Mountain Grove	Wright	33	16	46	9	24	-16	0.97	-1.63	*	*
Delta	Cape Girardeau	30	15	37	10	23	-19	0.72	-2.35	*	*
Cardwell	Dunklin	33	23	37	16	28	-17	3.54	+0.09	*	*
Clarkton	Dunklin	32	21	36	13	26	-17	1.19	-1.87	*	*
Glennonville	Dunklin	33	21	37	14	26	-18	1.71	-1.31	*	*
Charleston	Mississippi	32	19	36	13	25	-18	2.32	-1.20	*	*
Portageville-Delta Center	Pemiscot	32	21	36	14	26	-18	3.32	-0.16	*	*
Portageville-Lee Farm	Pemiscot	33	22	36	15	27	-17	3.13	-0.22	*	*
Steele	Pemiscot	32	22	36	15	27	-18	3.35	-0.35	*	*

‡Growing degree days are calculated by subtracting a 50 degree (Fahrenheit) base temperature from the average daily temperature. Thus, if the average temperature for the day is 75 degrees, then 25 growing degree days will have been accumulated.

*Weather Data provided by Pat Guinan  
GuinanP@missouri.edu  
(573) 882-5908*

*Insect Pest & Crop Management* newsletter is published by the MU IPM Program of the Division of Plant Sciences Extension. Current and back issues are available on the Web at <http://ipm.missouri.edu/ipcm/>. Mention of any trademark, proprietary product or vendor is not intended as an endorsement by University of Missouri Extension; other products or vendors may also be suitable.

Editor: Amy Hess (hessa@missouri.edu)