## Invasive Species Profile: Yellow Archangel (Lamiastrum galeobdolon)

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<u>Native Range:</u> Europe and western Asia

U.S. Introduction: exact date is uncertain; brought as an ornamental Life Cycle: perennial vine Means of Spreading: underground root growth (stolons); seeds Commercially Available: yes, though some states ban it Control Method: hand-pull small patches, ensuring to remove all root fragments. Large, established plots may need glyphosate-based herbicidal application for effective eradication.

**Good Alternative Species:** wild strawberry (*Fragaria virginiana*), green-and-golds (*Chrysogonum virginianum*), Virginia waterleaf (*Cornus amomum*), marsh marigold (*Caltha palustris*), golden Alexander (*Zizia aurea*), and native mints (*Pycnanthemum* sp.)



Figure 1. Another common name for *Lamiastrum galeobdolon* is "aluminum plant" since the foliage's variegation casts a metallic sheen (A). Yellow archangel blooms in April (B). The squared stems and opposite leaves help to indicate it is a mint relative.

**<u>Comments</u>**: There was a time when gardeners looking for a plant with attractive foliage and pretty flowers would choose yellow archangel (*Lamiastrum galeobdolon*, previously under the genus *Lamium*). After all, this predominantly European species spreads readily and is easy-to-grow, adapting to many soil conditions and any amount of sun or shade. Therein lies the problem: yellow archangel, a member of the



Figure 2. This yellow archangel patch grows in Kings Park West Park, within the Royal Lake watershed. It is hemmed in by a creek and other aggressive, non-native invasive weeds, such as <u>garlic mustard</u> and English ivy.

mint family, Lamiaceae, grows too easily and spreads uncontrollably! Many folks who planted yellow archangel regretted their decision after realizing that the weed is not so much a groundcover as it is a ground smotherer. It rapidly overtakes an immediate area with subterranean runners called stolons. Seeds, up to 800 per plant per year, expand the plant's coverage even further. Without any natural controls, yellow archangel crowds out most plants except for other non-native invasive species.

As if yellow archangel overrunning flowerbeds is not bad enough, it engulfs forest floors, streambanks, and other natural areas with equal ease. This weed often escapes cultivation and enters natural areas through seed dispersal and/or when its stolens extend past the fence line. Another means of proliferation occurs when gardeners pull and illegally dump the live plants into parks and common spaces; the viable plant takes root or seeds germinate and the yellow archangel begins a new conquest.

One way to get rid of yellow archangel, especially while the plot is still small, is by digging it up. This technique requires removing every single bit of root or a new plant will sprout from the root fragment. Properly dispose of it by placing the debris in an opaque plastic bag and throwing it into the trash destined for incineration or the landfill—do not mix it with recyclable yard waste! Since people often miss some of the roots during the first purge, returning and pulling new shoots is the key to eradication. Due to this species tenacity, glyphosate-based herbicide applications are sometimes needed, especially for large patches. The Fairfax County Park Authority targets yellow archangel, with Invasive Management Area (IMA) volunteers using hand-pull techniques and by hiring licensed contractors to treat plots with herbicides.

Achieving an appearance or function similar to *Lamiastrum* is easily accomplished with native species. The spotted foliage on Virginia waterleaf (*Cornus amomum*) provides interesting leaf colorations. For groundcovers, consider <u>wild strawberry (*Fragaria virginiana*)</u> or green-and-golds (*Chrysogonum virginianum*)—the latter sports yellow flowers, too! Golden Alexander (*Zizia aurea*) is not a true groundcover but spreads; its blossoms emerge in the spring. Canary-colored petals also punctuate the vernal efflorescence of a terrific clumping plant, marsh marigold (*Caltha palustris*). Gardeners desiring Virginia native mints can choose from many species, especially the mountain mints (*Pycnanthemum* sp.) such as the short-toothed mountain mint (*P. muticum*) and hoary mountain mint (*P. incanum*).

To join one of Royal Lake's IMA site leaders on a workday, please contact any or all of us asking to be on our volunteer distribution list(s):

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More information on yellow archangel is at:

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