



Photo: Frank Vincentz, Wikimedia Commons



Photo: Wouter Hagens, Wikimedia Commons



YELLOW ARCHANGEL (*Lamium galeobdolon*)

4-County CWMA Class B
Oregon Class B
Washington Class B



Photo: Rob Routledge, Sault College, Bugwood.org

A Word of Caution

Use herbicide control methods only for large infestations where manual and mechanical removal becomes impractical. For any herbicide applications we urge you to work with a licensed herbicide applicator. To learn more, consult the best management practices provided by the 4-County Cooperative Weed Management Area (www.4countycwma.org/AWeeds/Best-Management-Practices/). If any information provided contradicts the label, the label takes precedence. Always read and follow the label on any herbicide product you are using!

Please contact your local weed program in either Oregon (www.Oregon.gov/ODA/Programs/Weeds/Pages/CountyWeedPrograms.aspx) or Washington (www.NWCB.wa.gov/Find-Your-County-Weed-Boards) for more information about how to control this invasive weed.



The mission of the 4-County Cooperative Weed Management Area, comprising Clackamas, Clark, Multnomah, and Washington Counties, is to create and support collaborative weed management in the greater Portland area. For more details on our collaborative efforts in management, mapping, and outreach, please visit our website:

www.4CountyCWMA.org

Overview

Yellow archangel is an aggressive, low-growing plant originating from both Asia and Europe. In the past it was sold as a popular horticultural plant for flowerbeds and hanging baskets. Unfortunately, it thrives in shade and can quickly choke out native flowers and shrubs and degrade forest habitats. It spreads by stems, roots, and seeds from landscapes and improperly disposed yard waste.

How to Identify

Yellow archangel is a fast growing, dense perennial groundcover that occasionally grows upright. The leaves are oval to heart-shaped and hairy with serrated margins. It has **variegated leaves** with greyish-silver markings. The plant has a mildly unpleasant odor when leaves are crushed. Stems are purplish, hairy, and square-shaped. Flowering stems grow 1 to 2 feet tall and produce **rows of small yellow flowers arranged in whorls about the stem.**

Look-alikes

Yellow archangel is in the mint family and may look similar to other mint groundcovers, but the bright yellow flowers, somewhat unpleasant smell, and usually variegated leaves distinguish it from other groundcovers.

When to Remove

To prevent seeds from spreading, remove plants before flower heads form in June. For the best results, **hand-pull in early spring** when soil is moist and be sure to remove any root fragments left behind.



Photo: City of Portland Bureau of Environmental Services

Manual Control Method

THIS METHOD SHOULD BE USED WHEN:

- Invasion is near surface water
- There are desired plants in or around the invasion
- Infestation is small
- Terrain is flat or gently sloped

TOOLS YOU NEED:

- Gloves
- Loppers, hand pruners
- Hand trowel, dandelion fork, or shovel
- Bag for seeds/flowers

1. If plants have seeds, carefully CLIP all seed heads and place in a plastic bag before removing plants. LABEL the bag "**Invasive Plant Material—Do NOT Compost**" and dispose of it in the trash.
2. DIG out all plants and plant roots carefully. Because yellow archangel can send suckers from roots, it's best to remove all above and below ground plant parts (early spring is an optimal time, while the soil is moist and roots are easy to pull).
3. COMPOST in a composting facility or a curb-side composting bin ONLY if seed heads have been removed. Backyard compost piles won't generate enough heat to destroy the plant or seeds. NEVER dump clippings in parks or natural areas.
4. PLANT native or non-invasive plants in the control area after the bulk of the invasive plants are removed. This will help to repopulate the area with desired species and prevent new and recurring infestations.
5. MONITOR area for re-sprouts. Yellow archangel root fragments will continue to grow and produce new plants. After initial removal, the area needs to be managed at least twice a year to remove new growth.

Herbicide Control Method

Use herbicide control methods in combination with manual control and monitoring. It's crucial to spray plants in spring before they go to seed to prevent new infestations.

THIS METHOD SHOULD BE USED WHEN:

- Invasion is at least 25 feet from surface water
- The infestation is too large for manual removal
- The infestation contains few other desirable plants

TOOLS YOU NEED:

- Herbicide: glyphosate or triclopyr salt (amine) applied at label rate. Contact your local conservation district, weed district, or county extension office for advice
- Herbicide applicator; squirt bottle or garden sprayer
- Any additional personal protective equipment specified on the label

Research has shown that yellow archangel can effectively be controlled using an application of a triclopyr product in the spring, or a glyphosate based product in the early summer just after flowering.

FOLIAR HERBICIDE APPLICATIONS may be effective in controlling yellow archangel.

1. When using glyphosate to control yellow archangel, plants should be sprayed at the recommended label rate. Glyphosate treatments should be carried out in the early summer before seed set. This helps prevent further infestations. Glyphosate will kill grasses, so use this only in areas where grass damage can be tolerated.
2. When controlling yellow archangel using triclopyr, plants should be spot sprayed at the recommended label rate. Since triclopyr will generally not harm grasses, it is recommended where grass cover is desirable. Treatments should be carried out while the plant is actively growing in the spring.
3. One treatment generally does not effectively kill an invasion. MONITOR your site for regrowth of yellow archangel and repeat manual control or herbicide application as needed.
4. Replant native or non-invasive plants in the control area after the bulk of the invasive plants are removed. This will help repopulate the area with desired species and prevent new and recurring infestations.