MANAGEMENT OF

INVASIVE PLANTS IN WISCONSIN

A3924-31

Privet
(*Ligustrum* spp.)

Brendon Panke and Mark Renz

Invasive plants can thrive and aggressively spread beyond their natural range, disrupting ecosystems. The *Management of Invasive Plants in Wisconsin* series explains how to identify invasive plants and provides common management options. Management methods recommend specific timings for treatment, as well as expected effectiveness. For more information, go to: fyi.uwex.edu/weedsci/category/invasive-plants-of-wisconsin.

Privet is a deciduous shrub with spreading branches, growing 10–12′ tall and 8–10′ wide. Trunks usually occur as multiple spreading or arching, lightly hairy stems with many long, leafy branches attached at near-right angles. There are several species that are difficult to distinguish.

Legal classification in Wisconsin:
Border privet (*Ligustrum obtusifolium*): Not regulated
Common privet (*Ligustrum vulgare*): Not regulated

Leaves: Opposite, 1–2″ long, elliptic to ovate, with entire margins, leathery, and tough. Hairs along midrib. Turn red to purple in the fall.

Flowers: Early summer. White, each flower 0.3″ long, with four petals fused into a tube, occurring in dense terminal inflorescences that are 1–2″ long. Very abundant with an unpleasant smell.

Fruits and seeds: Egg-shaped, containing 1–4 seeds. Ripen in late summer to a dark purple-black and persist into winter. Fruits are poisonous to humans, but are food for many birds.

Roots: Shallow, fibrous roots extending from a woody crown.

Similar species: Chinese privet (*L. sinense*) and Japanese privet (*L. japonicum*) are similar in appearance. Both are highly invasive in the southeastern United States but are not common in the Midwest.

Ecological threat:

- Invades grasslands, forests, riparian areas, old fields, roadsides, and disturbed sites.
- Commonly used as an ornamental and readily escapes cultivation.

Non-chemical control

Removal

Effectiveness in season: 70–90%
Season after treatment: 50–70%

Seedlings or small to medium privets can be controlled by pulling or digging plants as long as the root crown is removed. Small bushes can be pulled by hand and larger bushes can be pulled by using a leverage tool. Larger plants may necessitate removal of soil near the plant to facilitate removal. If fruiting, avoid movement off site unless material can be transported without spreading fruit to other locations.

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Mowing

Effectiveness in season: < 50%
Season after treatment: < 50%

Cut the main stem of the plant as close to the ground as possible. This will induce sprouting and should be followed with mowing or herbicide application to resprouts later in the season. Mowing alone is not effective, even on small plants. The number of seasons it will take for control using mowing exclusively is not known.

Prescribed burning

Effectiveness in season: < 50%
Season after treatment: < 50%

Spring burns can kill germinating seedlings and can suppress above-ground growth of established plants, depending on fire intensity. After the fire, established plants will quickly resprout and reinvade areas. Burning annually for many years may control privet in dry locations. A handheld propane torch can be effective for treating seedlings.

Chemical control

Foliar

Apply directly to individual plants or broadcast across an infested area. Broadcasted foliar applications are typically the most cost-effective treatment in dense infestations. Use lower rates on smaller plants and less dense populations and higher rates on larger plants and denser populations. Absorption of herbicide can be limited with this species, resulting in reduced effectiveness. Including a recommended surfactant can alleviate any potential reduction in effectiveness. If infestations are mixed with desirable vegetation, late fall applications of non-selective herbicides after desirable plants go dormant is recommended.

glyphosate*

Effectiveness in season: 70–90%
Season after treatment: 70–90%

Common name: Roundup

Rate:
broadcast: 2.25–3.4 lb a.e./A
spot: For a 3 lb a.e./gal product. 3% (0.1 lb a.e./gal)

Timing: Apply when target species is actively growing and fully leafed out.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since glyphosate is not selective. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

imazapyr*

Effectiveness in season: 90–100%
Season after treatment: 90–100%

Common name: Arsenal

Rate:
broadcast: 64–96 fl oz/A (1.0–1.5 lb a.e./A)
spot: 0.5–2% (0.01–0.04 lb a.e./gal)

Timing: Apply when target species is actively growing and fully leafed out.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since imazapyr is not selective and can remain in the soil for several months to more than a year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

metsulfuron*

Effectiveness in season: 70–90%
Season after treatment: 70–90%

Common name: Escort

Rate:
broadcast: 1–3 oz/A (0.6–1.8 oz a.i./A)
spot: 0.04 oz/gal (0.02 oz a.i./gal)

Timing: Apply when target species is actively growing and fully leafed out.

Caution: Do not apply directly to water or to areas where surface water is present. Remains in the soil for months, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

Cut stump

Cut a stem of a plant near the base and apply herbicide to the cut surface that remains rooted in the ground. Apply as soon as possible after cutting, but no later than one hour after cutting. Do not use this method if there is heavy sap flow or if snow covers the cut surface. Use lower rates on smaller plants and higher rates on larger plants.

glyphosate*

Effectiveness in season: 90–100%
Season after treatment: 70–90%

Common name: Roundup

Rate: For a 3 lb a.e./gal product. 25–50% (0.75–1.5 lb a.e./gal)

Timing: Apply any time of year.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since glyphosate is not selective. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

***Active ingredient (a.i.)**

imazapyr*

Effectiveness in season: 90–100%
Season after treatment: 70–90%

Common name: Stalker

Rate: 6.0–13% in oil (0.12–0.25 lb a.e./gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since imazapyr is not selective and can remain in the soil for several months to more than a year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

triclopyr*

Effectiveness in season: 90–100%
Season after treatment: 70–90%

Common name: Garlon 4

Rate: 20–30% in oil (0.8–1.2 lb a.e./ gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

Basal bark

Apply herbicide in a ring around the entire stem. Applications should be made at least 6″ wide (6–18″) to the base of a woody stem. Ideal for stems ≤ 6″ in diameter. Do not use this method if there is heavy sap flow or if snow covers the application area. Use lower rates on smaller plants and higher rates on larger plants. Oil-based herbicide formulations are recommended for basal bark applications.

imazapyr*

Effectiveness in season: 50–70%
Season after treatment: 70–90%

Common name: Stalker

Rate: 6–8% in oil (0.12–0.16 lb a.e./gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since imazapyr is not selective and can remain in the soil for several months to more than a year, depending on application rate. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

triclopyr*

Effectiveness in season: 50–70%
Season after treatment: 70–90%

Common name: Garlon 4

Rate: 20–30% in oil (0.8–1.2 lb a.e./ gal)

Timing: Apply any time of year.

Remarks: Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

Caution: Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

Herbicide information is based on label rates and reports by researchers and land managers. Products known to provide effective control or in common use are included. Those that do not provide sufficient control or lack information for effectiveness on target species have been omitted.

References to pesticide products in this publication are for your convenience and not an endorsement of one product instead of a similar product. You are responsible for using pesticides in accordance with the label directions. *Read the label before any application.*

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