MANAGEMENT OF

INVASIVE PLANTS IN WISCONSIN

Brendon Panke and Mark Renz

A3924-32

Common tansy
(Tanacetum vulgare)

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.

Common tansy is an herbaceous perennial, 2–5′ tall. Stems are woody, grow in clusters, and are unbranched below the flower head. Stems are purplish, red near base, and occasionally hairy.

Legal classification in Wisconsin: Restricted. Cultivars 'Aureum' and 'Compactum' are not regulated.

Leaves: Alternate, pinnately compound leaves become smaller near the top of the stem. Leaflets are toothed and deeply divided by irregular lobes, resembling ferns. They are 4–10″ long and 1.5–3″ wide and release a strong, bitter scent when crushed.

Flowers: Midsummer to late fall. Numerous, yellow, button-like flower heads (0.25–0.5″ wide) forming flat-topped clusters (umbel).

Fruits and seeds: Yellowish brown seeds have a five-pointed crown with a tuft of hair that facilitates wide dispersal. Also dispersed by water.

Roots: Short rhizomes that can reproduce vegetatively.

Similar species: Lake Huron tansy (*Tanacetum huronense*; native), a Wisconsin endangered species, is shorter (1.5–2′), has fewer and larger flowers, and is found only in Wisconsin in Door County.

Ecological threat:

- Invades sandy and loamy soils of open disturbed areas, roadsides, pastures, fields, prairies, hedgerows, gardens, and naturally disturbed environments, such as flood-scoured river shores.
- Contains alkaloids that can be harmful to livestock or humans if consumed in large quantities.

Non-chemical control

Removal

Effectiveness in season: 90–100%
Season after treatment: 50–70%

Pulling or digging when soil conditions allow for the removal of rhizomes is an effective single plant control technique. This is most appropriate for seedlings and young plants. Rhizomes of older plants are difficult to remove and often break off, leaving part of the rhizome in the soil. If flowers or seeds are present, bag material and dispose of it in a landfill to avoid potential for seed spread. Gloves should be worn to prevent contact with potentially harmful alkaloids in sap.

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NPM

Mowing

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

Mow when plant has produced flower buds. Monitor population and mow again if plants resprout and produce flower buds. Mowing will suppress tansy growth, but is unlikely to control it. Do not mow if flowers or seeds are present since this can facilitate the spread of the species.

Prescribed burning

Effectiveness in season: 50–70%
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; this management method is not recommended unless integrated with other techniques. Fire may benefit other species well-adapted to this management (e.g., prairie grasses), resulting in improved competition with tansy. A handheld propane torch can be effective for treating seedlings.

Grazing

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

Sheep and goats will graze tansy, and are reported to not be poisoned, but they will avoid it because of its bitter taste. Grazing can suppress tansy, but is unlikely to control it. Graze plants once in the spring when tansy is actively growing and then again when flowerbuds have formed. After grazing an infested site, quarantine animals for 14 days to allow for weed seeds to pass through them. When grazing, desirable grass species should be maintained at 60% cover or more to suppress tansy reinvasion.

Manipulation of the environment

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

Interseeding with competitive grasses can suppress tansy if grasses successfully establish. This method has been shown to be most effective when paired with other control measures.

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. In grasslands, spring fertilization of desirable plants present can increase suppression after an herbicide application.

2,4-D*

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

Common name: Many

Rate:
broadcast: 1.0–2.0 lb a.e./A
spot: For a 3.8 lb a.e./gal product. 1.0% (0.04 lb a.e./gal)

Timing: Apply from spring when plant is fully leafed out and actively growing to early bud stage.

Caution: Use aquatically labeled product if potential exists for solution to contact surface water. 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.

chlorsulfuron*

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

Common name: Telar

Rate:
broadcast: 0.5–1.0 oz/A (0.4–0.75 oz a.i./A)
spot: 0.04 oz/gal (0.03 oz a.i./gal)

Timing: Apply from spring when plant is fully leafed out and actively growing to early bud stage.

Caution: Do not apply directly to water or to areas where surface water is present. Can remain 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.

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

dicamba*

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

Common name: Banvel

Rate:
broadcast: 32–64 fl oz/A (1.0–2.0 lb a.e./A)
spot: Equivalent to broadcast rates.

Timing: Apply from spring when plant is fully leafed out and actively growing to early bud stage.

Caution: Do not apply directly to water or to areas where surface water is present. 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. Rates > 16oz/A (0.5 lb a.e./A) may cause stunting and discoloration of sensitive grasses, such as smooth brome.

glyphosate*

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

Common name: Roundup

Rate:
broadcast: 2.0–2.5 lb a.e./A
spot: For a 3 lb a.e./gal product. 1.0–2.0% (0.03–0.06 lb a.e./gal)

Timing: Apply from spring when plant is fully leafed out and actively growing to early bud stage.

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: 70–90%

Common name: Arsenal

Rate:
broadcast: 32 fl oz/A (0.5 lb a.e./A)
spot: 0.5–1.5% (0.01–0.03 lb a.e./gal)

Timing: Apply from spring when plant is fully leafed out and actively growing to early bud stage.

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: 90–100%
Season after treatment: 70–90%

Common name: Escort

Rate:
broadcast: 0.3–0.5 oz/A (0.2–0.3 oz a.i./A)
spot: 0.04 oz/gal (0.03 oz a.i./gal)

Timing: Apply from spring when plant is fully leafed out and actively growing to early bud stage.

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.

picloram*

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

Common name: Tordon K

Some products containing picloram are restricted-use in Wisconsin.

Rate:
broadcast: 32–64 fl oz/A (0.5–1.0 lb a.e./A)
spot: Equivalent to broadcast rates.

Timing: Apply from spring when plant is fully leafed out and actively growing to early bud stage.

Caution: Do not apply directly to water or to areas where surface water is present. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Remains in the soil for more than one year, depending on application rate, and has the potential to contaminate surface runoff water during this timeframe. Maintenance of a vegetative buffer strip is recommended between the areas picloram is applied and surface water features. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants. Do not compost treated plants since herbicide can persist through composting process.

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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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