

Keep a Lookout for New Invasive Plants in Minnesota

Eradicate List

These species could be spreading in your area. Early detection and eradication can prevent an invasion.

• Positive Report

Photos credit: Ron Vanderhoff



Not documented in Minnesota at this time

Russian Knapweed

This block features a main photograph of a dense thicket of Russian Knapweed with numerous purple flower heads. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of a single purple flower head.



Not documented in Minnesota at this time

Oriental Bittersweet

This block shows a large, bushy Oriental Bittersweet plant with green leaves and clusters of bright orange-red berries. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of the orange berries.

Photo credit: Wikimedia Commons



Not documented in Minnesota at this time

Brown Knapweed

This block displays a Brown Knapweed plant with several purple flower heads. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of a purple flower head.



Not documented in Minnesota at this time

Yellow Starthistle

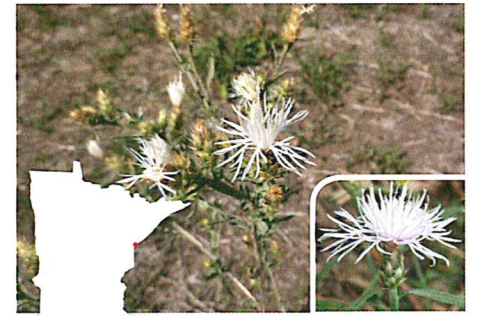
This block shows a Yellow Starthistle plant with a prominent, bright yellow flower head. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of the yellow flower head.



Not documented in Minnesota at this time

Meadow Knapweed

This block features a Meadow Knapweed plant with several purple flower heads. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of a purple flower head.



Not documented in Minnesota at this time

Diffuse Knapweed

This block shows a Diffuse Knapweed plant with several white flower heads. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of a white flower head.



Not documented in Minnesota at this time

Black Swallow-Wort


This block displays a Black Swallow-Wort plant with large, dark green leaves and clusters of small purple flowers. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of the purple flowers.



Not documented in Minnesota at this time

Grecian Foxglove

This block shows a Grecian Foxglove plant with a tall, upright stem and a cluster of white flowers. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of the white flowers.



Not documented in Minnesota at this time

Teasels

This block features a Teasel plant with a long, green stem and a large, spiky flower head. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of the spiky flower head.

Photo credit: Fraser Valley Regional District



Not documented in Minnesota at this time

Giant Hogweed

This block shows a Giant Hogweed plant with large, deeply lobed leaves and a tall, white flower stalk. A person in a pink shirt is visible in the background, reaching up towards the plant. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of the white flower stalk.



Not documented in Minnesota at this time

Japanese Hops

This block displays a Japanese Hops plant with large, green, deeply lobed leaves and clusters of small yellow flowers. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of the yellow flowers.



Not documented in Minnesota at this time

Dalmatian Toadflax

This block shows a Dalmatian Toadflax plant with several bright yellow flowers. A white outline of Minnesota is overlaid on the bottom left, with a red dot indicating a positive report. An inset image shows a close-up of a yellow flower.

To report an infestation, contact Arrest.The.Pest@state.mn.us or 1-888-545-6684

Updated April 2016

Invasive Plants in Minnesota

RUSSIAN KNAPWEED (*Acroptilon repens*)

Perennial herb. Plant forms a basal rosette then bolts. **Stems** are erect, stiff, thin and openly branched; 2–3 feet tall. **Leaves** are alternate, oblong to lance shaped; lower leaves are deeply lobed; upper leaves attached directly to stem with smooth to toothed margins. **Flowers** thistle-like pink to lavender. **Seeds** are oval, flattened, grey to ivory in color, and 1/8 inch long. **Threatens** grasslands, pastures, degraded croplands, alfalfa fields, and rangeland.

ORIENTAL BITTERSWEET (*Celastrus orbiculatus*)

Woody, perennial vine grows over 60 feet long. **Leaves** alternate, toothed, shape variable; teardrop-shaped to round with a pointed tip. **Flowers** small and greenish-yellow; male and female flowers on separate plants. Blooms in early summer, fruits in fall. **Fruit** greenish to yellow, grows in clusters of 3–7 along stem at leaf axils. Fruit splits open to reveal a bright red inner-fruit. **Threatens** woodlands, forests, savannas and floodplains.

BROWN KNAPWEED (*Centaurea jacea*)

Perennial herb. Plant forms a basal rosette then bolts. **Stems** are 1–4 feet tall. **Leaves** are alternate, lance shaped and hairy, occasionally with wavy leaf edges or lobed. Small, single **flowers** are clustered together to form composite flower heads; mostly pink/purple, sometimes having white centers; bracts below the flowers are rounded and wide at the tip, often having brown tips that do not have fringe. **Threatens** meadows, hayfields, pastures, riparian areas, and forest openings.

YELLOW STARHISTLE (*Centaurea solstitialis*)

Annual or biennial herb. Plant forms a basal rosette then bolts. **Stems** are winged, branched and covered with wooly hair. Plant height averages from 1–3 feet. Basal **leaves** are deeply lobed; stem leaves are alternate, narrow, have few to no lobes. **Flower** heads are golden yellow with sharp yellowish spines forming a circle of spines around each flower head. **Seeds** at center of seedhead have fluffy hairs. **Threatens** prairies, fields, woodlands and pastures.

MEADOW KNAPWEED (*Centaurea x moncktonii*)

Perennial herb. Plant forms a basal rosette then bolts. Multiple **stems** grow upright, openly branched near mid-stem, and grow 2–3 feet tall. **Leaves** are simple, alternate, lance-shaped and hairy, occasionally with wavy edges or lobed. Small, single **flowers** are clustered together to form composite flower heads; mostly pink/purple, sometimes having white centers; bracts below the flowers are rounded and wide at the tip and have fringe. **Seeds** are 1/8 inch long and light brown. **Threatens** meadows, hayfields, pastures, riparian areas, and forest openings.

DIFFUSE KNAPWEED (*Centaurea diffusa*)

Biennial or perennial herb. Plant forms a basal rosette then bolts. **Stem** is single and upright with numerous branches, growing up to 3.5 feet tall. **Leaves** are alternate and finely divided; basal leaves are hairy, grayish green, and highly divided. Small, single **flowers** are clustered together to form composite flower heads; mostly white, sometimes pink; bracts have rigid, sharp spines. **Seeds** are light brown to black and 1/8 inch long. **Threatens** prairies, pastures, hayfields and forest openings.

BLACK SWALLOW-WORT (*Cynanchum louiseae*)

Herbaceous, perennial vine twines 3–8 feet high. **Leaves** opposite, toothless, narrowly to broadly oval, pointed tips, dark green and shiny. **Flowers** tiny, dark purple with 5 pointed, downy, triangular petals that are as long as wide. **Seedpods** milkweed-like, slender and tapered. **Threatens** woodlands, forests, grasslands and savannas.

GRECIAN FOXGLOVE (*Digitalis lanata*)

Perennial herb. Forms rosette during first year of growth. Flowering **stems** are mostly unbranched and grow 2–5 feet tall; covered with woolly hairs. **Leaves** are simple, alternate, and oblong-shaped with pointed tip. **Flowers** are tubular, arranged in elongated color; creamy white to pale yellow with brownish-purple venation inside. **Fruit** is a pod covered with hooks that attach easily to fur and clothes. **Threatens** prairie and savannah communities, grasslands, river bluffs and forest margins. **Caution! Poisonous – avoid handling with bare skin.**

TEASELS – common and cutleaf

(*Dipsacus fullonum* and *Dipsacus laciniatus*)

Herbaceous monocarpic perennial herb, flowers once then dies. Form basal rosettes for at least one year until enough resources are acquired to produce flowering stalk. At maturity, flowering **stalks** may grow 2–7 feet. **Leaves** are opposite, large and prickly; wrap around the stalk to form cups that can hold water; cutleaf teasel has deeply-lobed leaves while common teasel leaves are unlobed. **Flower** distinctive for bristly egg shape and is white to lavender/purple. Cutleaf teasel stiff flower bracts are not taller than the flower cluster, while the bracts of common teasel are may be taller than the flower. **Seed** slightly hairy, grayish brown, inside capsule. **Threatens** pastures, sedge meadows, prairies, and seeps.

GIANT HOGWEED (*Heracleum mantegazzianum*)

Herbaceous monocarpic perennial herb, flowers once then dies. Grows a larger rosette each year eventually producing a 7–15 foot flower stalk. **Leaves** 3-part compound, 1–4 feet wide, deeply incised and pointed. **Flowers** white in multiple broad domed umbels. **Flower stalk** hollow with coarse hairs and reddish purple splotching. **Threatens** river corridors and woodland edges. **Caution! Plant sap on skin causes severe burns if exposed to sunlight.**

JAPANESE HOPS (*Humulus japonicus*)

Herbaceous annual vine, grows up to 35 feet in one season. **Leaves** opposite, toothed, palmately divided with at least 5 lobes. Leaf **stem** as long or longer than leaf length. Leaves and stem with hooked climbing hairs. **Flowers** mid to late summer, male and female flowers on separate plants. Female flowers develop into cone shaped hops fruit with overlapping scales. **Threatens** floodplains, wet forests, stream banks and lakeshores in sun or shade.

DALMATIAN TOADFLAX (*Linaria dalmatica*)

Perennial herb. First year plant develops a rosette of leaves. **Stems** of adult plant are upright, waxy and grow up to 4 feet tall; base may be woody and is often branched. **Leaves** are heart-shaped, waxy, bluish-green and clasp the stem. Multiple **flowers** are arranged in spikes on the stems. They are bright yellow and sometimes have an orange center, have spurs and resemble snapdragon flowers. **Seed** pods are 1/2 inch long and contain 140–250 small winged seeds. **Threatens** grasslands in pastures, rangelands, and natural areas in the west.



In accordance with the Americans with Disabilities Act, this information is available in alternative forms of communication upon request by calling 651-201-6000. TTY users can call the Minnesota Relay Service at 711. The MDA is an equal opportunity employer and provider.

Palmer amaranth In Minnesota

In September 2016, Palmer amaranth, *Amaranthus palmeri*, was initially found in Minnesota. The Minnesota Department of Agriculture (MDA), University of Minnesota Extension, USDA, landowners, and other partners are working to eradicate these infestations before they can spread to new areas.



Plant Protection Division

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Why the concern?

Palmer amaranth is a fast growing weed native to the southwestern United States and northwestern Mexico, and has spread east and north. It has developed resistance to multiple classes of herbicides and their different modes of action, making it very difficult and expensive to control. Palmer amaranth is a prolific seed producer. Up to 250,000 seeds can come from one plant. It is also highly competitive.

It has a fast growth rate of 2–3 inches per day and commonly reaches heights of 6–8 feet, greatly inhibiting crop growth. Yield losses have been up to 91% in corn and 79% in soybean. The weed can also increase costs to corn, soybean, and other agricultural production.

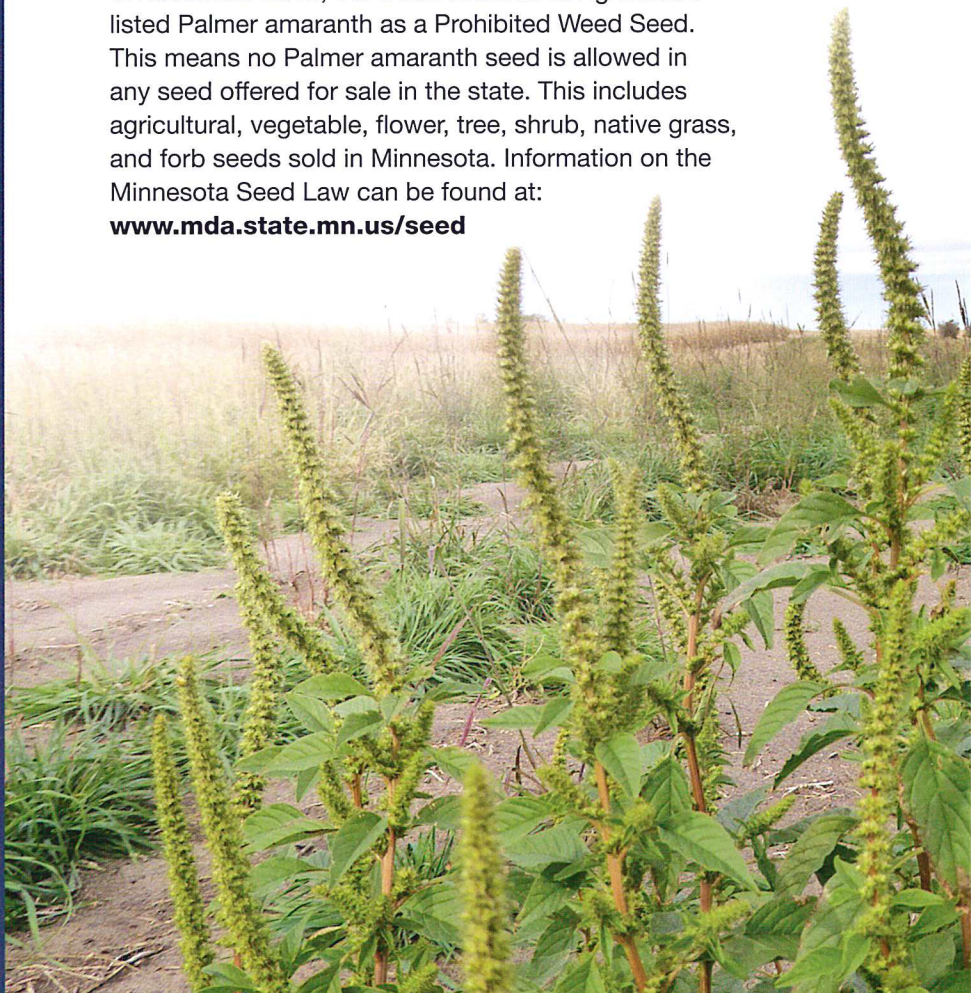
What is the weed's legal status in Minnesota?

Since 2014, Palmer amaranth has been listed on Minnesota's Prohibited Noxious Weed Eradicate list. All above and below ground parts of the plant must be destroyed. Additionally, no transportation, propagation, or sale of these plants is allowed. Failure to comply may result in enforcement action by the county or local municipality. More information on noxious weeds can be found on the MDA website:

www.mda.state.mn.us/weedcontrol

In November 2016, the Commissioner of Agriculture listed Palmer amaranth as a Prohibited Weed Seed. This means no Palmer amaranth seed is allowed in any seed offered for sale in the state. This includes agricultural, vegetable, flower, tree, shrub, native grass, and forb seeds sold in Minnesota. Information on the Minnesota Seed Law can be found at:

www.mda.state.mn.us/seed



What can you do?

Be proactive and prevent Palmer amaranth establishment. Familiarize yourself with Palmer amaranth identification and actively look for it in crop fields, borders, ditches, conservation lands and around dairies. (See *identification information below.*)

If you suspect Palmer amaranth on your property, immediately call your local U of M Extension Educator or IPM Specialist, crop consultant and/or the MDA's Arrest the Pest (888-545-6684) to report locations.

AVOID entering areas where Palmer is suspected or confirmed. If you must enter an infested area, always clean vehicles, equipment, and clothing prior to exiting.

If planting grasses and other flower mixes for conservation plantings, use local sources to ensure plants are compatible with Minnesota's climate and that they come from a reputable source.

How can you identify Palmer amaranth?

- Palmer amaranth is a summer annual that commonly reaches heights of 6-8 feet, but can reach 10 feet or more.
- The green leaves are smooth and arranged in an alternate pattern that grows symmetrically around the stem. The leaves are oval to diamond-shaped. There is a small, sharp spine at the leaf tip.
- The leaves of some Palmer amaranth plants have a whitish V-shaped mark on them. Not all plants display this characteristic.
- There are separate male and female plants.
- Palmer amaranth looks similar to our native pigweeds such as common waterhemp (*A. rudis*), and redroot and smooth pigweeds (*A. retroflexus* and *A. hybridus* respectively). Here are some distinguishing characteristics:
 - Redroot and smooth pigweeds have fine hairs on their stems and leaves. Palmer amaranth and waterhemp do not have these hairs.
 - The petiole (stalk connecting a leaf to the stem) of Palmer is longer than the length of the leaf. For common waterhemp, the petiole will be only half the length of the leaf.
 - Seedhead spikes on female Palmer amaranth plants are much taller (up to 3 feet long) and more prickly than waterhemp or redroot and smooth pigweed spikes.



For more information:

Visit the MDA's website at www.mda.state.mn.us and U of M Extension's website at www.extension.umn.edu/ for information on the weed, identification tips, and management techniques.

Use the search function on the websites and type in: Palmer amaranth or *Amaranthus palmeri*.