PURDUE UNIVERSITY

PURDUE EXTENSION WEED SCIENCE

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EXPERT REVIEWED

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The Infamous Giant Hogweed

I sent out a "heads up" message not too long ago about the reported sighting of giant hogweed (*Heracleum mantegazzianum*) near Warsaw, Indiana. Although I had heard about this weed, I had not given it much attention before. Giant hogweed has some fame in some parts of the world. The British rock group Genesis even wrote a song about it.

Identification:

As its name suggests, the first thing you may notice about giant hogweed is its stature. When it flowers, the plant can reach a height of 10 to 15 ft (3 to 5 m; Figure 1.). The stems are hollow, 2 to 4 inches (5 to 10 cm) in diameter, with dark reddish-purple spots and bristles (Figure 2). The compound leaves are deeply incised and in some cases can grow to a scary width of 5 ft (1.5 m; Figures 3 and 4). Being in the carrot family, giant hogweed has a characteristic umbel floral arrangement. This umbel can be as large as 2.5 ft (76 cm) wide (Figure 5).

Figure 1. Giant hogweed

Giant hogweed resembles the native cow parsnip (*Heracleum maximum*); however, cow parsnip is smaller (Table 1). Also, cow parsnip appears very hairy under the leaf, whereas the undersides of giant hogweed leaves have fine, short hairs (1). Giant hogweed stems have reddish-purple spots on them, whereas cow parsnip stems generally do not.

Giant hogweed can live in a variety of areas. It might be found in areas of uncultivated waste land and vacant lots, or along railroads, roads, creeks, and streams. It often grows in wet areas.

Invasive Nature and Toxicity:

Giant hogweed is a perennial and a member of the carrot family, *Apiaceae*. Giant hogweed is on the Federal Noxious Weed List, partially due to its aggressive, invasive nature. It spreads through tuberous root stalks and forms a solid canopy that chokes out many native plants. More important is the possible impact on human health. This plant should be avoided like you would avoid poison ivy. Giant hogweed produces a clear, watery sap that can cause "photo-dermatitis," which is sensitivity to sunlight (ultraviolet radiation). Photo-dermititis can result in swelling, severe blistering, and painful dermatitis, so avoid contact with exposed skin.

One case of giant hogweed poisoning occurred in the 1970s in Great Britain, where children contracted photo-dermatitis by playing with giant hogweed stems (2). If you come in contact with giant hogweed, wash with soap and water immediately. If you should happen to see this plant, contact your local county educator or Cloyce Hedge (chedge@dnr.IN.gov) at the Department of Natural Resources.

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Control:

Non-chemical

Digging up the plants appears to be the most effective non-chemical control method. Wear protective clothing when working around giant hogweed so the sap does not touch your skin. Cut plants below ground level. Try to remove the tap roots, for these can sprout new shoots. Digging up giant hogweed requires repeated efforts and monitoring for regrowth. It will be difficult to remove all the tuberous root stocks. Mowing, however, may result in increased growth of giant hogweed. Repeated mowing could wear plants down by starving the roots, but vigilance and determination would be required. Grazing and trampling by animals tolerant to giant hogweed toxins, such as cattle and sheep, can also wear the plants down; however, one brochure on this plant states that this would not control the plants (3).

Chemical

Glyphosate or triclopyr appear to be the best way to control giant hogweed chemically. Repeated applications may be necessary. Several home-use glyphosate products can be purchased in local garden centers. Commercial glyphosate products can also be used, but if you don't have the proper equipment or training to apply such products, seek help from an experienced applicator. If glyphosate spray comes in contact with desirable plants, they can be injured. So apply glyphosate carefully. Control is most effective when plants are less than five feet tall and before they flower. If the plant has flowered, removing the flowers prevents it from producing seed.

Figure 2. Giant hogweed stem, look for the reddish-purple spots.

Background:

Originally from Asia, giant hogweed can now be found around the world, including Australia, several European countries, the U.S. and Canada (2, 4). Researchers suspect giant hogweed made its way into these countries as an ornamental. Its size makes it somewhat of an oddity and probably was imported by gardeners who wanted something unique. As reported on the USDA plant database (http://plants.usda.gov) giant hogweed is in Maine, Michigan, New York, Pennsylvania, and Washington.

Fruit from this group of plants is often used as a spice in Iranian cooking and is mentioned in the Federal Noxious Weed Inspection Guide (2). Occasionally inspectors have found lots of seed from Heracleum species imported for ethnic food stores (2).

Figure 3. Giant hogweed leaf.

Figure 4. Giant hogweed growing in a parking lot.

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Table 1. Comparison of giant hogweed and cow parsnip.

	Giant Hogweed	Cow Parsnip
Height	10 to 15 feet	4 to 8 feet
Stem	Hollow, 2 to 4 inches in diameter, dark reddish purple spots	Hollow, often 2 inches in diameter at base, no spots
Leaves	Compound leaves deeply incised, up to 5 feet wide, short hairs beneath leaf	Compound leaves deeply incised, up to almost 1 foot wide, very pubescent beneath
Flower	Umbel up to 2.5 feet wide	Unbel 6 to 12 inches wide

Sources:

1) N. Britton and A. Brown. 1913 (reprinted 1970). An illustrated Flora of the Northern United States and Canada Vol 2 p 635.

2) Westbrooks, R.G. (Accessed 6/30/04) HERACLEUM MANTEGAZZIANUM Sommier & Levier. FEDERAL NOXIOUS WEED INSPECTION GUIDE. Whiteville Plant Methods Center, Whiteville, NC. (http://www.ceris.purdue.edu/napis/pests/ghw/facts.txt)

3) Anonymous. (Accessed 7/1/04) Homeowners Guide to Managing Giant Hogweed. Vermont agency of Agriculture and Food Markets. (http://www.uvm.edu/mastergardener/pdf%20files/giant_hogweed_homeowners_brochure__Read-Only_.pdf)

4) Anonymous. (Accessed 6/30/04) Non-Native Fresh Water Plants Giant Hogweed. Washington Department of Ecology. (http://www.ecy.wa.gov/programs/wq/plants/weeds/aqua012.html)

5) Anonymous. (Accessed 6/30/04) Giant Hogweed. King County, Natural Resources and Parks. (http://dnr.metrokc.gov/wlr/LANDS/weeds/hogweed.htm)

Figure 5. Giant hogweed inflorescence

Picture Source: Surry and Berks, 1977 and 2001, respectively. As seen on the BioImage: The Virtual Field-Guide (UK) web site; (http://www.bioimages.org.uk/HTML/T10402.HTM)