

HERACLEUM SPHONDYLIIUM L.

Hogweed

Scientific name: *Heracleum sphondylium* L.

English name: Hogweed

French name: Berce commune,

Grande berce, Berce sphondyle

German name: Wiesen-Bärenklau

Spanish name: Branca ursina

Italian name: Panace comune,

Panace di Ercole

Danish name: Almindelig bjørneklo

Dutch name: Gewone bereklauw

Slovene name: Navadni dežen

A "NEW OLD" WEED

Hogweed was a weed well-known to farmers of the late 19th and early 20th centuries. Thanks to its very strong competitive power, this plant was able to take over grasslands. It used to be controlled by early grazing or repeated mowing in order to limit growth and reduce seed production.

Prior to the use of hormone-type herbicides after World War II, the only effective means of controlling hogweed was by uprooting it, or by clearing the grasslands and growing row crops on them for at least two years.

BOTANY - ECOLOGY

Family: *Apiaceae* (Umbelliferae, carrot family)

Life cycle: root-type **perennial** (hemicryptophyte), capable of flowering over a period of many years. It spreads to fields essentially by seed dispersal.

Germination period: spring.

Environment: environments slightly disturbed by human activity (roadways, ditches, borders, urban zones) such as field edges and grasslands and neglected orchards.

- it thrives on nutrient-rich as well as moist soils.

- **heliophile** (full sun) or partial shade.

Botanical characteristics: may exceed 2 m,

- stem hollow, fluted, covered with hairs,

- leaves large, very velvety, divided into 3 to 5 denticulate segments,

- roots deep (up to 1 m). New leafy stems regrow from root buds.

Inflorescence: inflorescences in large (up to 20 cm) umbels with 15 to 25 rays.

- flowers small, white to pink, June to September, attract numerous insects.

Seeds: large (ca. 7 mm), flat, oval, with bands of color,

- average production of 850 seeds per plant per year,

- short period of survival in the soil (60% germination in the 1st year).



Figure 1 - Common hogweed (Boitel, 1889)

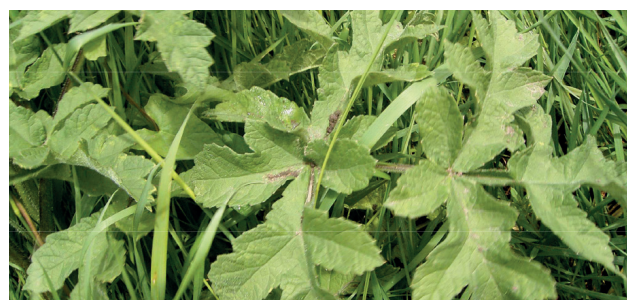


Figure 2 - Hogweed leaf



Figure 3 - Hogweed seeds

HERACLEUM SPHONDYLIIUM L.

Common hogweed

WHAT ACCOUNTS FOR ITS PRESENCE IN NO-TILL?

Based on its biological characteristics, the presence of hogweed in no-till is attributable to the lack of major disturbance of the soil surface (survival of the roots) and by its ability to grow during the intercropping period.

- **probable mode of entry:** seeds dispersed by wind over several meters, from the edges to the interiors of fields.

- **propagation:** production of seeds dispersed by combines. Roots remain viable (capable of producing new stems) for at least five years.

CONTROL

As with all of the Apiaceae, chemical weed control is difficult (metsulfuron-methyl in wheat and mesotrione in soybeans, etc.), but efficacy is often reduced if the plants are mature.

Localized action necessary: mowing, spot treatment with herbicides or pulling the annual stems, which helps deplete the roots and reduce seed stocks.

BEWARE OF CONTACT!

Contact of the stems and leaves with the skin is potentially hazardous. Toxins (furocoumarins) contained in the plant sensitize the skin to sunlight (phototoxicity). Depending on the plant species and the sensitivity of the individual affected, this can cause painful burns.

RISK OF CONFUSION

The plant (leaf) is highly variable morphologically, which sometimes makes identification complicated.

- Wild parsnip (*Pastinaca sativa* L.): confusion is possible in the vegetative stages. Wild parsnip is a more delicate, less hairy plant with yellow flowers.
- Giant hogweed (*Heracleum mantegazzianum* Sommier & Levier) is a very large plant (nearly 4 m in height) and is classified as invasive. It is known for its very high phototoxicity.

BIBLIOGRAPHY

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Figure 4 - Hogweed seedling



Figure 5 - Hogweed in a barley field