Identification of Giant Hogweed

Giant hogweed is an introduced plant species in New Brunswick. Currently, there are very few confirmed locations where this plant is growing in the province. The majority are associated with a gardener who planted giant hogweed, which subsequently spread by unmanaged seed production. Giant hogweed is highly competitive due to its vigorous early-season growth, tolerance of full shade, and its ability to withstand flooding. Because of its large size and rapid growth, it can quickly dominate invaded areas and substantially reduce the amount of suitable habitat available for native plants and wildlife. In addition, this plant can cause potential human health issues. Giant hogweed sap contains toxins that, after exposure to sunlight, can cause significant dermatitis on sensitive individuals. Temporary blindness can also be caused by exposure of the eyes to the sap. Many plants within New Brunswick are similar in appearance to giant hogweed, most belonging to the Apiaceae or carrot family. Proper identification is essential to manage any plant species. Some of the most commonly occurring species with similar appearance are listed below, with information to aid in proper identification.

**Giant Hogweed**

Giant hogweed (*Heracleum mantegazzianum*, Berce du Caucase) is a member of the Apiaceae family. It typically grows very tall, from 1.5 to 5 metres in height. Its leaves are shiny and large, with very coarse and serrated leaf edges, like a jagged saw edge. The stems are very hairy, bristly and covered with purple spots or blotches. When mature, the plant produces flowers that form a large umbrella shape, up to 1.5 metres in diameter. These are made up of a large number of smaller umbrella-like clusters, each composed of over 50 stalked flower clusters. Giant hogweed is currently only found in a few localized areas in New Brunswick associated with a garden escape.
**Cow Parsnip**

Cow parsnip (*Heracleum maximum*, Berce laineuse) is another member of the Apiaceae family and is a native species in New Brunswick. It is typically shorter than giant hogweed, and is about 1-3 metres tall. The leaves of cow parsnip are typically smaller, longer stalked, less shiny and less toothed as compared to giant hogweed. The stems of cow parsnip are more wooly hairy and are usually more plain green. The flat-topped or umbrella shaped flowers are typically much smaller than giant hogweed (up to 1 m wide) and are made up of far fewer stalked flower clusters (typically 15-30). Cow parsnip is common in moist to wet soils in a wide variety of habitats throughout the province. Slight dermatitis can result from contact with this plant, but it typically causes much less severe symptoms than giant hogweed.

**Hogweed**

Hogweed (*Heracleum sphondylium*, Berce commun) is a much less common member of the Apiaceae family, but this introduced species it also found in New Brunswick. It is shorter than giant hogweed, usually about 1-2 metres tall (rarely over 3 metres), and this difference in height is often the easiest way to differentiate the two hogweed species. This character is more reliable when large patches provide a good indication of average height. The leaves of hogweed are typically smaller, less toothed and are more regularly divided (pinnate) as compared to giant hogweed. The stems are typically hairy. The flowers are typically much smaller than giant hogweed (rarely more than 20 cm wide) and are made up of far fewer stalked flower clusters (typically 15-45). Although hogweed is rare in New Brunswick, it can form dense colonies of plants when it becomes established in an area. Slight dermatitis can result from contact with this plant, but it typically causes much less severe symptoms than giant hogweed.
**Angelica**

Angelica (Angelica sylvestris, A. atropurpurea, A. lucida, Angélique) are similar members of the Apiaceae family. These plants are typically 1-2.5 metres tall with large, compound leaves made of smaller leaflets that are relatively finely toothed, often rounded or elliptical in outline. The stems are usually smooth and can be purplish in colour. The flower heads are round in appearance and much smaller than giant hogweed flower heads. Woodland angelica (A. sylvestris) is an introduced and invasive species more common throughout the Saint John River valley in wet, weedy habitats. Seacoast angelica (A. lucida) and purple Alexanders (A. atropurpurea) are native species which more commonly occur in coastal areas and in the northern interior, respectively. Angelica may cause slight dermatitis.

**Wild Parsnip**

Wild parsnip (Pastinaca sativa, Panais sauvage) is another member of the Apiaceae family. This plant is typically much shorter, only growing to 0.5 to 1.5 metres in height. The leaves are pinnately compound, with sharp teeth that can typically be misshapen. This plant is more branched than the other members of this family and has very distinctive yellow flowers. Wild parsnip is an introduced species and is common along roadsides throughout New Brunswick. The sap of this plant can cause a poison ivy-like reaction in sensitive individuals, most commonly noticed following whipper-snipping plants while not wearing proper protection.
**Valerian**

Valerian (*Valeriana officinalis*, Valériane officinale) is a member of a different plant family, the Valerianaceae. Valerian typically grows to a height of 1 to 2 metres. Its leaves are pinnately divided much like wild parsnip, but the individual leaf segments are much longer than parsnip. The mature flowers are much more clustered than the Apiaceae and can be white to purple in colour when mature. The seeds of valerian are similar to dandelion seed and seed can be the easiest way to correctly identify this plant. Valerian is a highly invasive species occurring most commonly through the southern region of New Brunswick.

**Conclusion**

Giant hogweed can present ecological and human health concerns, but luckily is not widespread in New Brunswick. There are many plants which are similar in appearance to giant hogweed, most of which do not cause the same level of concern. Proper identification of the plant in question is key to proper management of any weed issue. For more information on giant hogweed, please refer to the following websites of the [Office of the Chief Medical Officer of Health](http://www.medicalofficer.nb.ca), [WeedInfo.ca](http://www.weedinfo.ca) or the [IPM Image database](http://www.ipmimage.org). You may also send a message to the [New Brunswick Invasive Species Council](http://www.invasivespecies.nb.ca).