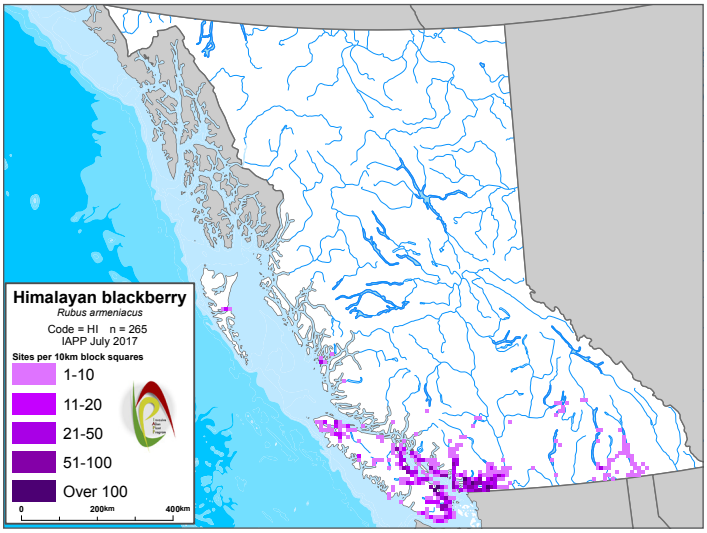
Invasive Species Council of BC

FACTSHEET
MARCH 2019

Himalayan Blackberry *Rubus armeniacus*

Legal Status

Community Charter



Distribution

Currently in BC in the Lower Mainland, Sunshine Coast, Fraser Valley, Gulf Islands, Central to Southern Vancouver Island.

Identification

Flowers: Small (2.5 cm diameter), white to pinkish, stalked, 5-petalled, arranged in clusters of 5-20; flower stalks are wooly and prickly.

Stems: Robust, stiff, 5-angled stems (canes) that support large, flattened, and hooked or straight prickles. Canes grow to 3 m in height and up to 12 m in length. First year canes produce leaves only and can root at the tips, producing daughter plants. Second year canes grow from the axils of first year canes and produce flowers and fruits.

Leaves: Evergreen, predominantly large, rounded or oblong, toothed leaflets radiate from the end of the leaf stem. Leaves are generally grouped in fives on first-year canes and threes on flowering (second-year) canes.

Fruits: Fruits (drupelets) are up to 2 cm in diameter, oblong to spherical, black and shiny, and hairless. They form on second year canes and ripen from mid-summer to fall. Each berry produces numerous seeds that have a hard, impermeable coat.

Similar Native Species: (i) Trailing blackberry (*Rubus ursinus*) is a smaller and less robust trailing plant with a smaller stem size (0.5 cm), white waxy stem coating, deciduous leaves found in groups of three, and a tendency to lie on the ground; (ii) salmonberry (*Rubus spectabilis*) has smaller zigzagged stems, red-pink flowers, and reddish or yellowish edible berries.

Similar Non-Native Species: Cut-leaf or evergreen blackberry (*Rubus laciniatus*) has deeply incised leaflets. Note: Himalayan blackberry is a variable species with several cultivars, thus making identification difficult.

Ecological Characteristics

Habitat: Found on disturbed sites, along roadsides and right-of-ways, in pastures, along river and stream banks, freshwater wetlands, riparian areas, forest edges, and wooded ravines. Prefers rich, well-drained soils, but can grow well on a variety of barren, infertile soil types, a wide range of soil pH and textures, and is tolerant of periodic flooding by brackish or fresh water. Prefers full sunlight, but can survive in varied light conditions.

Reproduction: Reproduces by seed and vegetatively by rooting at stem tips to form daughter plants, and sprouts from root buds. Plants begin flowering in spring with fruit ripening in midsummer to late August. Thickets can produce 7,000-13,000 seeds per square meter, and seeds can remain viable in the soil for several years. Fruiting stems generally die back at the end of the season, but non-fruiting stems may persist for several years before producing fruit.

Dispersal: Primarily dispersed by root and stem fragments. Birds and omnivorous mammals, such as foxes, bears, and coyotes can consume berries and disperse seeds. Humans also contribute to blackberry spread by purposefully planting canes.

Impacts

Ecological: Outcompetes low growing native vegetation through shading and build-up of leaf litter and dead stems. Can prevent the establishment of shade intolerant trees such as Garry oak and ponderosa pine. Himalayan blackberry forms large, dense, impenetrable thickets that limit the movement of large animals, takes over stream channels and stream banks, and reduces sight lines along right-of-ways. Thickets increase flooding and erosion potential by preventing the establishment of deep-rooted native shrubs that would otherwise provide bank stability.

Integrated Pest Management

IPM is a decision-making process that includes identification and inventory of invasive plant populations, assessment of the risks that they pose, development of well-informed control options that may include a number of methods, site treatment, and monitoring.

Prevention

- Monitor for Himalayan blackberry on both disturbed and undisturbed areas.
- Do not purchase, trade, or grow Himalayan blackberry. Instead, grow regional native plants as they are naturally adapted to the local environment and are non-invasive.
- Ensure soil, gravel, and other fill material are not contaminated.
- Avoid unloading, parking, or storing equipment and vehicles in infested areas.
- Remove plants, plant parts, and seeds from personal gear, clothing, pets, vehicles, and equipment. Wash vehicles, including tires and undercarriage, and equipment at designated cleaning sites before leaving infested areas.
- Bag or tarp plants, plant parts, and seeds before transporting to a designated disposal site (e.g. landfill).
- Take special care when controlling Himalayan blackberry near streams or ditch lines, to prevent the movement of plant parts downstream.
- Maintain or establish healthy plant communities that are resistant to invasion by invasive plants.

Mechanical Control

- Mowing, including the use of riding mowers and tractor-mounted mowers, can be very effective, but can also harm desirable species. If roots are not manually removed, mowing several times per year over several years is necessary to exhaust root reserves. If mowing or cutting is only done once per year, it should be done when the plants begin to flower. Do not mow where soil is highly susceptible to compaction or erosion, or where soil is very wet.
- Persistent cultivation (tillage) or cutting in combination with mowing can be very effective. Because mechanical control can stimulate strong regrowth, follow-up with either spot applications of herbicide or hand digging to remove the entire root system.
- Grazing by goats has proven effective.
- Monitor controlled infestations during growing season.
- Disposal: If plants are cut, all plant material must be collected in bags or tarps and incinerated or bagged and deeply buried at a landfill. Care should be taken to ensure that plant parts are not distributed during transport.

Biocontrol

- There are no biocontrol agents for Himalayan blackberry. The release of herbivorous insects has not been undertaken due to the risk these insects may pose to closely related, commercially important Rubus species.

Chemical Control

Herbicide recommendations and use must consider site characteristics and be prescribed based on site goals and objectives. Herbicide labels and other sources of information must be reviewed before selecting and applying herbicides.

- Ensure that chemical treatments do not injure or kill susceptible, non-target vegetation.
- The following herbicides provide effective control for Himalayan blackberry: dicamba, glyphosate, triclpyr or metsulfuron methyl alone. Triclopyr + aminopyralid is alo effective.
- Application of pesticides on Crown land must be carried out following a confirmed Pest Management Plan (Integrated Pest Management Act) and under the supervision of a certified pesticide applicator. https://www2.gov.bc.ca/gov/content/environment/pesticides-pest-management/managing-pests

References/Links

- BC Ministry of Forests, Lands, and Natural Resource Operations, Invasive Alien Plant Program (IAPP). www.for.gov.bc.ca/hra/Plants/application.htm
- Controlling Himalayan Blackberry in the Pacific Northwest. The Nature Conservancy. www.invasive.org/gist/moredocs/rubarm01.pdf
- E-Flora BC, an Electronic Atlas of the Plants of BC. www.eflora.bc.ca/
- King County Noxious Weed Control Program: Best Management Practices for Himalayan blackberry. King County, Washington. http://your.kingcounty.gov/dnrp/library/water-and-land/weeds/BMPs/blackberry-control.pdf
- Garry Oak Ecosystem Recovery Team: Best Practices for Himalayan Blackberry Management. www.goert.ca/publications_resources/invasive_species.php
- DiTomas J, M., G.B. Kyser et al. 2013. Weed Control in Natural Areas in Western United States. Weed Research and Information Centre, University of California. 544 pp https://wric.ucdavis.edu/information/natural%20areas/wr_R/Rubus.pdf

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