

Myrtle Spurge

Euphorbia myrsinites

Cypress Spurge

Euphorbia cyparissias

About

Myrtle Spurge (*Euphorbia myrsinites*) and Cypress Spurge (*E. cyparissias*) are herbaceous perennial plants belonging to the family *Euphorbiaceae*. These species are renowned for their distinctive growth habits and vibrant yellow-green flowers. While they may have ornamental value in certain contexts, they are also considered invasive plants in many regions, including parts of North America and Europe.

The milky sap or latex of *Euphorbias* is highly toxic.



Distribution

Myrtle spurge is native to the Mediterranean region and has successfully invaded various regions, including parts of North America, New Zealand, and Australia. It can be found in BC, concentrated in the Lower Mainland, Thompson Nicola, Okanagan, and southern Vancouver Island regions.

Cypress spurge is native to Europe but has also become invasive in several parts of North America. In BC, Cypress spurge has a similar distribution as Myrtle spurge, although it does extend to rural and remote areas in the Thompson-Nicola region.

Legal Status

Cypress spurge is designated as a Management species and Myrtle spurge is a Regional Containment/Control species by the BC Inter-Ministry Invasive Species Working Group.

Identification

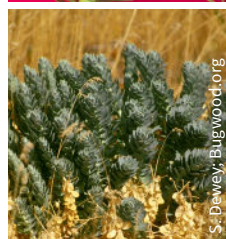
Myrtle spurge

Flowers: Conspicuous yellow-green heart-shaped bracts that resemble petals surrounding small, inconspicuous flowers. Flowering occurs in March and April.

Stems: Grow from a woody base and are low spreading, trailing and fleshy. Typically used as ground cover in ornamental gardens, Myrtle spurge grows between 10-15 cm in height.



S. Dewey; Bugwood.org



S. Dewey; Bugwood.org

Leaves: Blue-green, fleshy, and alternate along the stems, resembling sharp succulent-like leaves that spiral tightly around the stems.

Fruits: Bluish-green dehiscent seed pods contain three seeds (~3 mm in length).

Cypress spurge

Flowers: Both male and female bowl-like yellow flower clusters with yellow-green bracts emanate from a common centre with equal-length stems. Flowers mature from April through to June and turn red.



K. Casey; Bugwood.org

Stems: In contrast, Cypress spurge grows smooth, erect stems that can reach up to 60 cm in height, but typically they grow between 15-30 cm. Branching can occur closer to the flower structures, although they are usually branchless.

Leaves: Firm, smooth, narrow, and linear, measuring only 2.5-3 cm in length. Attached directly to the stem, these bright green leaves are arranged in dense whorls.

Fruits: Dehiscent seed pods contain three seeds (~2.5-3 mm in length).

Similar Species: Leafy spurge (*Euphorbia esula*) is more of an agricultural species, likely arrived in contaminated seed stocks. It is distinguished from Cypress spurge by its taller height and more robust foliage.



R. Casagrande; Bugwood.org

Ecological Characteristics

Habitat: Myrtle spurge is a drought-tolerant plant that thrives in dry, well-drained soils and is often found in disturbed areas. It competes aggressively with native species, especially in arid environments. Cypress spurge prefers sunny locations with well-drained soil. It is highly adaptable and can thrive in a variety of environments, often forming dense colonies.

Dispersal: Myrtle and Cypress spurge produce seed pods that explode to eject their tiny seeds up to 5 m from the parent plant. Both species can spread through vegetative reproduction by their root system as well.

Impacts

Ecological: Myrtle and Cypress spurge form dense colonies as they spread, can aggressively outcompete native plants for resources, suppress the growth of other vegetation and lead to reduced biodiversity. As a result, both species can increase soil erosion, especially in dry, rocky environments where it thrives, and both can affect pollinators by reducing populations of native flowering species. These species release phytotoxins from their roots which aid their spread by inhibiting native plant growth. This is one of the reasons that these plants are such aggressive invasive species and should be carefully considered when used as ornamental plants.

Social: Leaves, stems, and roots all exude a milky, caustic sap containing toxic alkaloids that can cause nausea, vomiting, and diarrhea. Even skin contact may produce blisters, swelling, redness, and even blindness if their sap comes in contact with the eyes. This affects both livestock and humans.

Economic: Due to the dense mats and colonies that these two spurge species produce, municipalities may incur significant costs to remove plants previously planted in city parks or plants that have escaped from residential gardens. If these two species were to be found in BC's sensitive grassland environments, grazing territories for livestock could be reduced causing economic pressures for livestock producers.

Integrated Pest Management

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

Prevention:

Practice xeriscaping in your landscaping.

Follow PlantWise instructions when selecting plants for your garden. <https://bcinvasives.ca/play-your-part/plantwise/>

- » Do not purchase Myrtle or Cypress spurge, it is often sold in garden centers. See the Grow Me Instead Guide and plant non-invasive alternatives. <https://bcinvasives.ca/play-your-part/plantwise/grow-me-instead/>
- » Patrol your property for any Myrtle or Cypress spurge plants
- » Immediately revegetate disturbed, bare soils, ideally with a native plants or seed mixtures
- » Do not move contaminated soils to a new area
- » Check clothing, gear, and vehicles for any plant parts that may be transferred to new areas after visiting an infested area

Mechanical Control: It is recommended to wear gloves, long sleeves, and safety glasses when hand pulling or using power equipment around Myrtle or Cypress spurge due to both plants' levels of toxicity. Remove as much of the root systems as possible for both species and carefully monitor the site for regrowth. This form of mechanical control is suitable for small infestations,

however larger areas may require an integrated approach. Mowing spurges can further spread their seeds and should only be done after the first bloom to avoid further contamination.

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.

Herbicides may be used for both Cypress and Myrtle spurge, keeping in mind that fall treatments are generally more successful than spring treatments. Depending on local regulations, residual herbicides may be an option. There are herbicides that effectively control these spurges, therefore contact your local invasive plants specialist for recommendations. Pay special attention to local restrictions and labelled instructions when using any herbicide.

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>.

Disposal: Note: Disposal of invasive plants varies by region. Contact your local government for specific information on how to dispose of your invasive plants.

For both Myrtle and Cypress spurge, it is recommended to bag or tarp all plants, plant parts, and seeds when transporting them for disposal in the garbage or landfill. Due to their aggressive nature, these plants can begin new incursions if any plant parts were to escape during transportation or composting. Burning is not recommended.

Reporting

Report by using the mobile Report-Invasives-BC app for Apple and Android platforms, <https://bcinvasives.ca/take-action/report/>

Report online to the ISCBC, at info@bcinvasives.ca or 1-888-933-3722.

References/Links

https://www.nwcb.wa.gov/images/weeds/myrtlespurge_Lincoln.pdf

<https://www.tnrd.ca/wp-content/uploads/2020/12/Cypress-Spurge-Factsheet-2019-CSISS.pdf>.

<https://www.oiso.ca/species/myrtle-spurge/>.

<https://www.weld.gov/files/sharedassets/public/v1/departments/public-works/documents/myrtle-cypress-spurgebest.pdf>.

<http://pnwplants.wsu.edu/PlantDisplay.aspx?PlantID=601>.

