

***Sambucus cerulea* Raf.**

Downriver Hą́nq'əmińəm name(s): th'ikwukw (fruit), th'ikwukwulhp (shrub)

Upriver Halkomelem name: th'ikwekw

English name: Blue elderberry

Family: Adoxaceae (Honeysuckle family)

Identifying characteristics:

Blue elderberry is a deciduous woody plant that exists both in shrub and small tree forms, typically reaching a height between 1-5 metres (but specimens up to ten metres tall have been reported). Its bark is a rough, unevenly textured, grey-brown colour, and young twigs are soft and pithy. *S. cerulea* has oppositely arranged, pinnately divided leaves are divided into 5 to 9 leaflets (eflora BC 2018). The 5-15 cm long sharply-pointed lanceolate leaflets have serrate margins. Flowers are clusters of showy white umbels between 4 and 20 cm wide with a strong characteristic odour. The fruit are clusters of deep-blue drupes washed in a whitish bloom that cause them to appear a pale, powdery blue.



Distribution: Turtle Island – Southwest. From BC in the North to Montana in the East, and throughout the southernmost states of Arizona, New Mexico, and Texas (USDA-NRCS 2018).

Natural and Cultural History

Habitat: *Sambucus cerulea* is found on stream banks, swampy thickets, wet meadows, and open forests from low to middle elevations.

Reproduction: Berries are a food source of many different bird species, and the seeds are readily dispersed this way. Seeds have been reported to lay dormant for up to 26 years, but more commonly sprout between 2-5 years (Crane 1989). Plants also spread by root suckers to form extensive colonies.

Interactions and Human interest: Blue elderberry is an excellent habitat shrub for birds and small mammals as well as being a prolific food source for human and non-human species. They are often

used for making jams, syrups, sauces, wine, and fabric dye. Its flowers are very attractive to local pollinators such as butterflies and hummingbird species, and foliage is valuable browsing material for larger mammals like deer and elk.



Ethnobotany

The Coast Salish indigenous peoples cooked the berries before eating and would occasionally mix with other berries into a sauce for drying (Turner and Bell 1971). The berries and twigs were also used to make dyes for basketry. The pithy wood was easily hollowed out, and fashioned into arrows, and drinking straws, whistles, pipe stems and blow guns after being thoroughly dried as all parts of the plant, except for the berries, are poisonous (Turner 2014, Weinert 2014). The bark was applied topically as a poultice for boils and carbuncles.

Elderberry fruit is high in vitamin A, B, and C and complex sugar compounds which stimulate the immune system and help counter the effects of cold and flu viruses (Zakay-Rones et al 1995). Israeli researchers found that elderberry stops the enzyme cold/flu viruses use to penetrate healthy cells in the lining of the nose and throat (Zakay-Rones et al 2004). Taken before infection, it prevents infection; when taken after infection, *Sambucus* prevents the spread of the virus through the respiratory tract. Elderberries are used to make a variety of commercially available products. Having *S. cerulea* in the home garden provides the opportunity to make your own syrup (recipe below).

Cultivation

Elderberries must be planted in pairs to allow for cross-pollination. They prefer consistently moist, well-drained, slight acidic, sandy-loam soil – but, as they are found in a large range of ecosystems in the wild, they are adaptable to many soil types. Blue elderberries have shallow roots and benefit from mulch to protect them against climate extremes and to conserve moisture. Elderberries produce suckers vigorously and old wood (>3 years) can be pruned annually to increase fruit production on new wood.

Harvesting: Elderberries ripen between mid-August and mid-September. Harvested berries should be stored in the refrigerator and used as soon as possible. Raw wild elderberries should not be consumed as they are mildly toxic unless cooked or dried and made into a syrup or tincture.

Recipe for Blue Elderberry Syrup

½ litre (2 cups) fresh blue elderberries
1 litre water
juice of a lemon
2 tablespoon freshly grated ginger root
1 tsp cinnamon powder
½ tsp whole cloves
1 cup raw honey

If you have picked the berries, sort and remove any leaf or petiole bits, or less-than-perfect looking fruit. Place water into a saucepan and add elderberries, lemon juice, ginger, cinnamon, and cloves. Bring to a boil and then cover and reduce to a simmer for about 45 minutes to an hour until the liquid has reduced by almost half. Add more water if it thickens too much. Remove from heat and let cool to touch. Mash the berries carefully using a spoon or other flat utensil. Then pour through a sieve lined with cheesecloth into a bowl. Squeeze the cheesecloth to get the last juice from the mash. Discard the elderberries and let the liquid cool to lukewarm, then add the honey and stir well. Pour into glass jars and store in the fridge.

Standard preventative dose is ½ tsp - 1 tsp for children and ½ - 1 tablespoon for adults. If the flu does attack, take the normal dose every 2-3 hours instead of once a day until symptoms disappear.

References:

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Images:

Berries and Leaves Image: Blackfoot Native Plants [online]: URL: <http://blackfootnativeplants.com/BlackfootNativePlants/wp-content/uploads/2012/01/Blue-Elderberry.jpg>

Bark Image: Reimer, J. (Photographer) (1995-2018) *Sambucus cerulea* Tree Record. [online]: URL: <https://selectree.calpoly.edu/tree-detail/sambucus-cerulea>

Flowering Shrub Image: McDonald, S. (Photographer) (2018) Blue Elderberry - *Sambucus nigra* ssp. *Cerulea* [online]: URL: <http://northamericantrees.com/sambucus-nigra-ssp-cerulea.html>

Syrup Image: McCabe, K. (Blogger) (2016) Foraging for Elderberries + Elderberry Syrup [online] URL: <https://www.thekitchenmccabe.com/2016/10/27/foraging-elderberries-elderberry-syrup/>

Elderberry dye and fabric photo: Pinterest (reverse image search yielded no original poster).