

# *Sambucus canadensis*

## Elderberry

Elder Family – Adoxaceae

### Description & Habitat:

Elder is a deciduous shrub or small tree that grows at the edges of forests, fields, and in open areas near water, forming a large crown with its spreading branches. Flat-topped clusters of small, white flowers appear in late spring with 5 petals that are about one-fourth inch wide and mildly fragrant. Following the flowers are the purple-black berries, which ripen during the summer months. Leaves are pinnately compound with 3-7 toothed leaflets growing in pairs.



### Botanical Uses

Flowers: tea, tincture, champagne  
Fruit: juice, jelly, syrup, shrubs, wine

### Wildlife Uses

Flowers are a nectar source for pollinators while the berries are an important source of food for songbirds, including robins and catbirds.

### Traditional Uses

American Indians used the inner bark as a diuretic and laxative. A tea from the inner bark and leaves was used on cuts and sores and as a wash for eczema and skin conditions (Foster & Duke, 2000). The flowers were traditionally used for their antiviral, diaphoretic, and diuretic activities. The berries were traditionally made into a syrup and used for coughs and colds as well as arthritis and fevers (Kuhn & Winston, 2008).

### Pharmacology

Elder is most commonly used commercially for treating symptoms associated with coughs, colds, flus, and sinusitis. It is sold as a juice as well as an extract. Elder flowers, in the form of a tincture, infusion, or liquid extract, have been approved by the German Commission E for treating fevers and cold symptoms (Engels & Brinckmann, 2013).

### Key Constituents

#### Flowers:

Flavonoids – kaempferol, quercetin, rutin  
Chlorogenic acid  
Cycloartenol (as cited in Kuhn & Winston, 2008)

#### Fruits:

Anthocyanins, vitamin C, malic acid (as cited in Kuhn & Winston, 2008).



### Actions

Flowers: Anti-inflammatory, anti-viral (as cited in Kuhn & Winston, 2008); anti-catarhal, diaphoretic (Hoffman, 2003).

Fruits: Anti-viral, anti-inflammatory, antioxidant (as cited in Kuhn & Winston, 2008).

### References

- Engels, G. & Brinckmann, J. (2013). European elder. *Herbalgram*, 97, 1-7.
- Foster, S. & Duke, J. A. (2000). *Eastern/central medicinal plants & herbs*. Boston, MA: Houghton Mifflin Company.
- Gardner, Z. & McGuffin, M (Editors). (2013). *American herbal products association's botanical safety handbook*, 2nd Edition. Boca Raton, FL: CRC Press.
- Hoffman, D. (2003). *Medical herbalism: The science and practice of herbal medicine*. Rochester, VT: Healing Arts Press.
- Kuhn, M. A. & Winston, D. (2008). *Herbal therapy & supplements*. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins.

## *Elderflower Syrup*

2 cups elderflowers      1 lemon, sliced  
35 oz. sugar              5 cups water

Place flowers and sliced lemon in a large bowl.

Bring sugar and water to a boil and continue to cook for 5 minutes. Pour over flowers and lemon slices and blend together. Store in a cool, dark place for several days. Strain. Use to sweeten lemonade or add sparkling water for a cooling summertime drink.

## *Elderberry Syrup*

2 cups dried elderberries      4 cups water  
1 cup honey

Bring water and elderberries to a gentle boil. Reduce heat and simmer to half the water content. Strain and add honey. To preserve, add 1 cup brandy (blackberry, cherry).