

**Scientific Name:** *Lonicera involucrata* (Richards.) Banks

**Family:** *Caprifoliaceae*

**Common Names:** bracted honeysuckle, black twinberry, swamp honeysuckle



#### Plant Description

Erect or ascending shrub 1 to 3 m high; leaves opposite, short petioled, ovate to obovate, 5 to 15 cm long, acute or acuminate at apex, more or less pubescent; flowers in pairs, bracts green to deep purple, ascending, finally reflexed, 1 to 2 cm, corolla yellow 10 to 13 mm long (Moss 1983).

**Fruit:** Berries are purple-black about 8 to 10 mm in diameter, unpleasant flavour (Droppo 1987, Moss 1983, Wilkinson 1990).

**Seed:** Flat oval seed 1 to 2 mm long.

#### Habitat and Distribution

Moist woods (Moss 1983). Moderately shade intolerant prefers the sun (E-Flora BC 2013).

**Soil:** Occurs only on very moist to wet nitrogen-rich soils (E-Flora BC 2013).

Soil pH 5.5 to 8 and no salinity tolerance (USDA 2013).

**Distribution:** British Columbia to Quebec south to California, New Mexico, Wisconsin, Michigan (Moss 1983).

#### Phenology

*Lonicera involucrata* flowers from June to July and berries appear July to August (Bonner and Karrfalt 2008). Fruit is indeterminate; fruit does not all ripen at the same time (Terpstra pers. comm.).



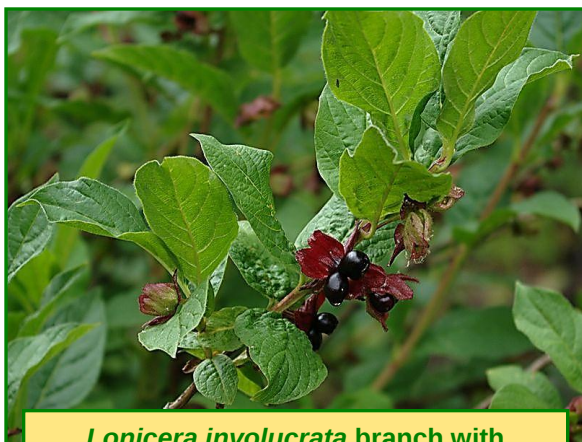
***Lonicera involucrata* in flower**

### Pollination

Insect pollinated (Plants for a Future n.d.).

### Seed Dispersal

Mostly by birds but can be carried by other browsers (McLaughlin 2013).



*Lonicera involucrata* branch with berries

### Genetics

$2n=18$  (Moss 1983).

### Seed Processing

**Collection:** *Lonicera* spp. should be hand picked or stripped from the branches as soon after ripening as possible to reduce losses to birds. Most *Lonicera* spp. hybridise easily so it is better to collect seed from isolated populations (Young and Young 1992).

**Seed Weight:** 720 seeds/g or 1.39 g/1,000 seeds (Young and Young 1992).

1.33 g/1,000 seeds (Royal Botanic Gardens Kew 2008).

**Harvest Dates:** July to August (Bonner and Karrfalt 2008).

**Cleaning:** Maceration and flotation can be used to extract the seeds from the fruit (Young and Young 1992).

**Storage Behaviour:** Not proven but thought to be orthodox; seeds can be dried, without damage, to low moisture contents, their longevity increases with

reductions in both moisture content and temperature, in a quantifiable and predictable way (Royal Botanic Gardens Kew 2008).

**Storage:** Dried seed can be stored in sealed containers at low temperatures (Young and Young 1992).

**Longevity:** Heit (1967) stored seed up to 15 years with little loss in viability. Can be stored for several years in dry storage at room temperatures (Royal Botanic Gardens Kew 2008).

### Propagation

**Germination:** Germination takes 40 to 60 days and 15% of seeds sown will produce seedlings (Young and Young 1992).

Royal Botanic Gardens Kew (2008) achieved 90% germination on a 1% agar media at 15°C, 8 hours day and 16 hours night.

**Pre-treatment:** Seeds of most species of *Lonicera* show some dormancy, due to seed coat or a dormant embryo (Young and Young 1992); stratification is necessary (Lady Bird Johnson Wildflower Center 2011). Royal Botanic Gardens Kew (2008) sterilized their seed in 10% domestos solution for 5 minutes, then stratified the seed for eight weeks at 5°C.

Cold stratification is required for all species (Young and Young 1992). Seeds must be cold stratified for 30 to 90 days (Bonner and Karrfalt 2008).

**Direct Seeding:** Seed can be either broadcast or a seed drill can be used in the fall with pre-treated seeds sown in the spring (Young and Young 1992). Seeds should be covered with 3 to 6 mm of soil and covered with 5 to 7.5 cm of straw mulch to prevent excessive drying (Bonner and Karrfalt 2008).

**Vegetative Propagation:** Most *Lonicera* spp. can be propagated from cuttings (Lady Bird Johnson Wildflower Center 2011, Young and Young 1992). Do very well planted as live stakes (Polster 2011).

### Aboriginal/Food Uses

**Food:** They are possibly poisonous (Lady Bird Johnson Wildflower Center 2011, Mackinnon et al. 2009, Turner 1997, Wilkinson 1990), however Plants for a Future (n.d.) indicate fruit is edible.

**Medicinal:** *Lonicera involucrata* bark was taken for coughs and its leaves were chewed and applied

externally to itchy skin, boils and gonorrhoeal sores (Mackinnon et al. 2009). Berry tea was used to purify the body and cleanse the chest, decoctions where used to cleanse sore eyes. Boiled leaves and twigs where applied to swellings sores, scabs and broken bones (Mackinnon et al. 2009). Boiled bark was applied to burns, infection and wounds (Mackinnon et al. 2009).

**Other:** The stems were used to make fibres for mats, baskets, bags, blankets and toys (Mackinnon et al. 2009). The hollow stems were used by children as straws (Mackinnon et al. 2009).

Black or purple dye was made from crushed berries (Mackinnon et al. 2009, Wilkinson 1990). The plant was also used as an ornamental (Mackinnon et al. 2009).

Berries were rubbed into the scalp to prevent hair from turning grey (Wilkinson 1990).



### Wildlife/Forage Usage

**Wildlife:** Birds eat the berries and hummingbirds and butterflies consume nectar from flowers (Always 2007, Lady Bird Johnson Wildflower Center 2011). Generally unpalatable for wildlife browsing (Sampson and Jespersen 1963) though said to be a favourite of bears (Turner 1997, Wilkinson 1990).

**Livestock:** Generally unpalatable to livestock (Sampson and Jespersen 1963).

### Reclamation Potential

As a pioneering species, dormant branches are useful as live stakes, wattle fences and other soil bioengineering practices for stabilizing mesic to moist areas (Polster 2011).

### Commercial Resources

**Availability:** Plants available at one nursery in Alberta (Alberta Native Plant Council 2010). Seeds have been collected by the Oil Sands Vegetation Cooperative for use in the Athabasca oil sands region.

### Notes

*L. involucrata* is listed as 79% intact (less occurrences than expected) in the Alberta oil sands region (Alberta Biodiversity Monitoring Institute 2014).

### Photo Credits

**Photo 1:** Walter Siegmund. 2009. @ Wikipedia Commons.

**Photo 2:** Steve Hurst @ USDA-NRCS PLANTS Database.

**Photo 3:** Jerry Friedman 2008 @ Wikipedia Commons.

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