

Scientific Name: *Vaccinium oxycoccos*

Family: Ericaceae

Common Names: small bog cranberry

Plant Description

Tiny vine-like, evergreen shrub; stem thread-like, slender, 10 to 50 cm long, creeping and rooting; leaves widely spaced, leathery elliptic to egg-shaped, 2 to 6 mm long, 1.5 to 2 mm wide, sharp-pointed, dark green above, grey-waxy below with edges rolled under; flowers deep pink and drooping, 1 to 3 on slender hairless stalks, 4 petals sharply bent backwards (Moss 1983).

Fruit: Pale pink to dark red, occasionally spotted, 5 to 10 mm.

Seed: Minute brown seed.



Vaccinium oxycoccos in flower

Habitat and Distribution

Grows on poorly drained subhygric to hygric peat sites. Most often found in Sphagnum moss bog. Shade intolerant (Mathews 1992).

Seral Stage: Generally mid-seral in primary succession, it is also an early colonizer in secondary successions (i.e., burned bogs) (Mathews 1992).

Soil: Rich organic soils, poorly drained. Prefers very acidic soils (Mathews 1992).

Distribution: Alaska, Yukon, western District of Mackenzie to Hudson Bay, southern Labrador south to British Columbia, Alberta, central Saskatchewan, southern Manitoba, James Bay (Moss 1983).

Phenology

Flowers appear from late May and can last into July.

Pollination

Self-pollinating but insect cross pollination increases fruit set (Froberg 1996).

Seed Dispersal

Animal dispersed (Mathews 1992).

Genetics

$2n=24$ (Moss 1983).

Symbiosis

Associated with *Hymenoscyphus ericae* (Jacquemart 1997).

Seed Processing

Collection: Harvest by hand in late August and September. Berries are widespread between stems and very time consuming to collect.

Seed Weight: 0.6 g/1,000 seeds (Royal Botanic Gardens Kew 2008).

0.982 g/1,000 seeds (Jacquemart 1997).

Average Seed/Fruit: 8 seeds (Vander Kloet and Hill 1994).

Harvest Dates: Late August up until snowfall.

Cleaning: Macerate fruit in a blender, decant chaff to retain clean seed.

Storage: Orthodox. Store dry at very low (freezing) temperatures (Royal Botanic Gardens Kew 2008).

Longevity: One-year-old seed exhibited 78% germination (Royal Botanic Gardens Kew 2008).

Propagation

Natural Regeneration: Spread by seed but primarily vegetative by rhizomes or layering (Rook 2002).

Germination: Sped up by after ripening of seeds for 6 to 7 months (Matthews 1992).

Pre-treatment: Cold stratify seeds for thirty days prior to germination (Jacquemart 1997).

Direct Seeding: No literature found.

Seed Rate: No literature found.

Vegetative Propagation: Reproduces by rhizome, but resistant to transplantations (Matthews 1992).

Micro-propagation: No literature found.

Aboriginal/Food Uses

Food: High pectin content makes small bog cranberry ideal for making jams and jellies. Fresh fruit is best after a frost, but may also be eaten cooked (Marles et al. 2000).

Medicinal: Berries twigs and bark used for various purposes (Mathews 1992).

Wildlife/Forage Usage

Wildlife: Small mammals and some birds feed on the berries (Matthews 1992), specifically, foxes, bears, songbirds and grouse (Jacquemart 1997).

Vaccinium oxycoccus is a larval host and/or nectar source for the Bog Fritillary (*Boloria eunomia*) (Lady Bird Johnson Wildflower Center 2007).

Livestock: Not used for livestock forage. Sometimes called *fool-hen berries* because grouse like to eat them (Turner 1997).

Reclamation Potential

Grows well in acidic peat substrates and has been established on disturbed saline bog (Mathews 1992).

Commercial Resources

Availability: Limited commercial availability.

Seeds have been collected by the Oil Sands Vegetation Cooperative for use in the Athabasca oil sands region.

Cultivars: No literature found.

Uses: Berries used in cooking.

Notes

Synonyms *Oxycoccus microcarpus*, *Vaccinium microcarpus* (Turcz. ex Rupr.) Schmalh (ITIS n.d., Lady Bird Johnson Wildflower Center 2007, Moss 1983).

Vaccinium oxycoccus is listed as 94% intact (less occurrences than expected) in the Alberta oil sands region (Alberta Biodiversity Monitoring Institute 2014).

Photo Credits

Photo 1: Wild Rose Consulting, Inc.

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