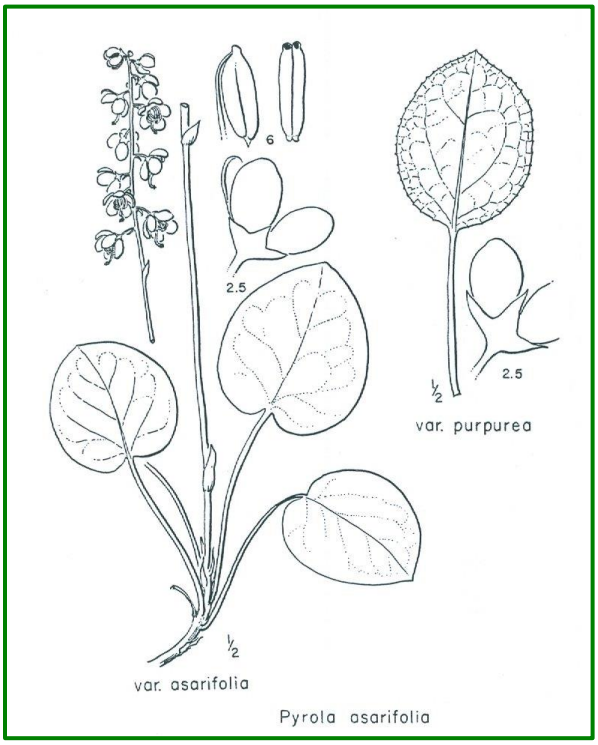
Scientific Name: *Pyrola asarifolia* Michx. **Family:** *Ericaceae*

Common Names: common pink wintergreen, liverleaf wintergreen, shinleaf wintergreen, pink pyrola



Plant Description

Herbaceous perennial evergreen, rhizomatous spread (Haber 1983). Leaf-blades usually shorter than the petioles, 3 to 6 cm long broadly elliptic or round-reniform, commonly cordate at base, with rounded teeth, leathery and shiny above in rosette; leafless flowering stock 15 to 25 cm tall, usually with 1 to 3 scale leaves below the flower; raceme flower, sepals 2 to 3 mm long; petals pale to deep pink, 5 to 7 mm long; anther ends at a sharp stiff point at the lower end, abruptly narrowed above into very short tubes (Moss 1983). Anthers crimson to pale pink – all other Pyrolas have yellow anthers (CYSIP: Botany n.d.).

Fruit: Spherical capsules, 5 chambered, with arching, 5 to 10 mm long style (Johnson et al. 1995).

Seed: Pale or whitish microsperma.

Habitat and Distribution

Moist woods and thickets (Johnson et al. 1995).

Seral Stage: Early (Gucker 2007).

Soil: Prefer moist and acidic soils with a deep LFH layer (Gucker 2007).

Distribution: Alaska, Yukon, southwestern District of Mackenzie to James Bay, Newfoundland south to Oregon, New Mexico, South Dakota, Manitoba, the Great Lakes (Moss 1983).

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Phenology
Flowering June through September (Gucker 2007). Retains leaves spring through October (Landhausser et al. 1997).

Pollination
Pyrolaceae are self-compatible and most often pollinated by insects (Knudsen and Olessen 1993).

Genetics
2n=46 (Moss 1983).

Symbiosis
Pyrolaceae form arbutoid associations with basidiomycetes (Robertson and Roberson 1985). Mycorrhizae are required for germination (Hashimoto et al. 2012).

Seed Processing
Collection: Pluck or snip dried capsules and bag.
Seed Weight: 0.007g/1,000 seeds (Royal Botanic Gardens Kew 2008).
Harvest Dates: August.
Cleaning: Due to size of seed, cleaning should occur in the absence of air flow. For best results, break seed capsules at location desired.
Storage Behaviour: Likely Orthodox, seeds should be dried to low relative humidity prior to storage.
Storage: Store cold after drying.
Longevity: No literature found.

Propagation
Natural Regeneration: By seed and rhizome (Plants for a Future n.d.).
Germination: Infrequent (Plants for a Future n.d.). Mycoheterotrophic – requiring fungus *B. sebacinales* for germination (Hashimoto et al. 2012).
Pre-treatment: Seed burial packet of 53 µm nylon net.
Direct Seeding: No literature found.
Planting Density: No literature found.
Seed Rate: No literature found.
Vegetative Propagation: Rhizomatous (Gucker 2007).
Micro-propagation: No literature found.
Greenhouse: Dust-like seed is difficult to germinate but may produce plants if sown on sphagnum moss (Lady Bird Johnson Wildflower Center 2007).

Aboriginal/Food Uses
Food: No literature found.
Medicinal: All Pyrolas contain a drug related to aspirin (CYSIP: Botany n.d.).
Leaves can be mashed with lard to stop bleeding and promote healing or chewed to relieve toothaches; boiled with water and mint leaves, it can treat kidney and urinary blockages (CYSIP: Botany n.d.); leaf infusion washes sore eyes; decoction drunk to treat coughing up blood (Marles et al. 2000).
Used as a poultice to mitigate swelling and sores (Gucker 2007).
Used in a decoction to aid in treating sore eyes, coughing up of blood, and liver irritation (Plants for a Future n.d.).

Wildlife/Forage Usage
Wildlife: No literature found.
Livestock: No literature found.
Grazing Response: Decreaser (Gucker 2007).

Reclamation Potential
No literature found.

Commercial Resources
Availability: No literature found.
Cultivars: No literature found.
Uses: No literature found.

Notes
Hybridizes with snowline wintergreen (*P. minor*) in Alberta (Gucker 2007).
Pyrola asarifolia is listed as 79% intact (less occurrences than expected) in the Alberta oil sands region (Alberta Biodiversity Monitoring Institute 2014).
Host to spruce cone rust (Gucker 2007).
Polymorphic, with variation according to geographic position – east vs. west and north vs. south (Haber 1983).

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