

Rhododendron groenlandicum

NAME NOTE: Current name is *Rhododendron groenlandicum*, previously accepted name was *Ledum groenlandicum*.

COMMON NAMES: Labrador tea, Common Labrador Tea, Bog Labrador Tea, Greenland Labrador Tea

FAMILY: *Ericaceae*

SPECIES IDENTIFICATION

GENERAL ID

Labrador tea is a fragrant evergreen shrub that is typically 50-150 cm tall (2). New shoots come from the base of the flower (7). Bark is hairy, and orange, red, or light brown.

LEAVES

Leaves are alternate (7). Narrowly linear to oval and typically 1-5 cm long (8). The leathery thick leaves are dark green with flat veins on the top side of the leaf and a rusty, reddish-brown underside with woolly hairs. Margins of the leaves are rolled under (2).



Figure 2. Top side of the leaves with flat veins.



Figure 1. The leaves with a rusty woolly underside.

HABITAT

Moist areas such as bogs, swamps, muskegs, and moist parts of the woods. Also found in nutrient poor upland soils, common in the understory of pine stands. (3). Labrador tea is an indicator species of acidic, nutrient poor soils and is widespread across the boreal. (5)



Figure 3. *Rhododendron groenlandicum* in its natural habitat.

FLOWERING

White flowers that bloom in clusters at the tip of the branch (3). *Rhododendron groenlandicum* flowers have 5 petals that are about 0.5 cm in diameter and have 5-7 stamens (5). Flowers in late May to early June. Self-pollinated, cross pollinated or wind pollinated (8).



Figure 4. *Rhododendron groenlandicum* white flower with 5 petals.

FRUIT

The fruit is 5-7 mm long, brownish green to pink, covered in fine hairs, shaped like an elongated oval at the end of the branches in clusters (8).



Figure 5. *Rhododendron groenlandicum* fruit.

LOOKS LIKE

1. *Rhododendron tomentosum* which was previously named *Ledum palustre* (Marsh Labrador Tea) (5). *Rhododendron tomentosum* is shorter (30-60 cm), with narrower and more tightly curled leaves (4). Usually, 10 stamens per flower as opposed to 5-7 stamens per flower for *Rhododendron groenlandicum*. (5)
2. *Andromeda polifolia* (Bog Rosemary) and *Kalmia polifolia* (Northern Bog Laurel) are both species that may look like *Rhododendron groenlandicum* before flowering. *Andromeda polifolia* and *Kalmia polifolia* have a white underside (3). *Rhododendron groenlandicum* and *Rhododendron tomentosum* are distinguished by a reddish woolly underside. The young leaves at the top of *Rhododendron groenlandicum* may have whitish hairs until mature, check the lower leaves for identification.
3. *Rhododendron neoglandulosum* (Western Labrador Tea, Glandular Labrador Tea) - which is differentiated by its leaves having stalks, and the small shining resin granules below rather than the rusty woolly underside.

SEED

The mature seed is 2-3 mm long, golden yellow to light brown and needle-shaped.



Figure 6. *Rhododendron groenlandicum* seed.

SEED COLLECTION

Scout for seeds in August. Harvest seeds from the end of August to October. Seed capsules can be harvested by hand picking or clipping and collected into a bucket or directly into a paper bag. Store seed capsules in paper bags and keep cool in the field. If capsules are very ripe and fully open, capsules/branches can be shaken into buckets or paper bags to collect just the seeds.



Figure 7. A visual guide to ripeness of the seed and when it is ready for collection.

Good to know: When very ripe, seed falls readily from pods. Harvest carefully by placing tarps/bags under the plant, or by shaking seed pods directly in bags.

SEED EXTRACTION

Seed can be extracted from fully open capsules immediately using soil sieves. Partially open capsules should be laid out on a tray at room temperature to allow them to fully open prior to seed extraction. The capsules can also be gently rubbed to remove the seeds.



Figure 8. Sieving capsules to extract seed.

SEED STORAGE

According to the Alberta Tree Improvement and Seed Centre, seeds should be placed into cold storage when they are sufficiently dry, 4-8% moisture content or 15-25% Equilibrium Relative Humidity @ 20-30°C (1). For the greatest longevity store seed in a -20°C freezer, if seeds are to be used right away a 4°C fridge will suffice.

REFERENCES

1. Gray, B. and A. Wiebe. 2020. Seed Collection Guide for Six Boreal Plants Important to Indigenous Peoples. A Beginner's Field Guide for Identifying, Collecting, Transporting, and Storing Seeds. Natural Resources Canada. Northern Forestry Centre. <https://cfs.nrcan.gc.ca/publications?id=40124>
2. In Klinkenberg, Brian. (Editor) 2020. E-Flora BC: Electronic Atlas of the Plants of British Columbia [eflora.bc.ca]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver. [Accessed: 2022-12-07 10:51:25 AM]
3. Johnson et al. 1995. Plants of the Western Forest Alberta, Saskatchewan, and Manitoba Boreal and Aspen Parkland.
4. Karlin, E.F. and L.C. Bliss. 1983. Germination Ecology of *Ledum Groenlandicum* and *Ledum Palastre* Ssp. *Decumbens*. Arctic and Alpine Research. Vol, 15, No 3. P. 397-404. <https://www.jstor.org/stable/1550834>.
5. Kershaw, Linda and Lorna, Allen. 2020. Vascular Flora of Alberta: An Illustrated Guide. Self-published. Kindle Direct Publishing.
6. MacKinnon et al. 1992. Plants of Northern British Columbia. B.C. Ministry of Forests and Lone Pine Publishing.
7. Moss, E.H. Reprinted 1992. Flora of Alberta Second Edition Revised by John G. Packer. P. 444
8. Smreciu, A., S. Wood, and K. Gould. 2013. *Rhododendron groenlandicum*: Labrador tea, bog Labrador tea, rusty Labrador-tea, St James' tea, marsh tea, swamp tea, Hudson's Bay tea. <https://doi.org/10.7939/R3KZ0S>

VISIT OUR WEBSITE

nait.ca/borealresearch

ISSN 2371-462X

CONTACT US

boreal@nait.ca

780.618.2600

AUTHORS

Emily Kyle, Ryan O'Neill

Photo credits: Centre for Boreal Research, NAIT

