



Forest Research Branch

SOME ADDITIONS TO THE FLORA OF ALBERTA

by

R. T. Ogilvie

Calgary, Alberta

May, 1963

SOME ADDITIONS TO THE FLORA OF ALBERTA¹

by

R. T. Ogilvie²

Since the publication in 1959 of Moss's "Flora of Alberta" a useful manual has been available for identification of Alberta plants. Moreover, it has brought together published and unpublished information on collections from Alberta, providing a "check-list" of the species that are known to occur in the province.

The writer has made some plant collections in the mountains and foothills of the province among which are a few species that, in the "Flora of Alberta" are not included or the occurrence was uncertain. These species are listed below, with their collection data and their gross distribution outside the province. The specimens are deposited in the Forestry Branch Herbarium, Calgary (FBH). Material referred to from other herbaria are: National Museum of Canada (CAN), and University of Alberta, Edmonton (UAE).

I should like to thank Dr. J.A. Calder, Plant Research Institute, Canada, Department of Agriculture, for information on Heuchera glabra, and Dr. C. Leo Hitchcock, Department of Botany, University of Washington, for examining the Lupinus material.

Conimitella williamsii (D.C. Eaton) Rydb.

Heuchera williamsii D.C. Eat.; Tellima nudicaulis Greene;

Tellima pentandra Canby; Lithophragma williamsii Greene.

1 Department of Forestry, Forest Research Branch, Contribution No. _____

2 Research Officer, Department of Forestry, Forest Research Branch,
Calgary, Alberta.

Crowsnest Area: Lynx Creek Ranger Station, open grassland on terrace above creek, 4500 feet elevation; No. 12660. A specimen, No. 41, in FBH, lacking the collector's name, is labelled: Crowsnest Forest, Spring Creek, open hillsides, July 10, 1920.

Distribution - Cordilleran: Rocky Mts., e. Mont. to n.w. Wyo. and e. Ida.

Lupinus lepidus Dougl. var. aridus (Dougl.) Jeps.

Lupinus aridus Dougl.; L. minimus Dougl.; L. caespitosus Nutt.;
L. lyallii Gray.

Crowsnest Area: Adanac Rd., south side of "summit", Maverick Hill, exposed ridge-top, bare mineral soil, ca. 6000 feet elevation, No. 21660. Ironstone Lookout, summit, on coarse gravelly soil, 6800 feet elevation, No. 5762. Sugarloaf Mt., summit, among stones and coarse material, 8250 feet elevation, No. 98162. Breitung (1957) lists a collection from Waterton Lakes National Park, by Macoun, July 31, 1895, Vimy Ridge (Sheep Mt.), Macoun 10413 (CAN).

Distribution - Cordilleran: B.C. s. to Calif., on both sides of the Cascades, and in the Rocky Mts., e. to Mont., Wyo., and Colo.

Hypopitys monotropa Crantz (= H. fimbriata (Gray) Howell, for North American plants).

Monotropa hypopitys L.; H. hypopitys Small; M. lanuginosa Michx.;
H. lanuginosa Nutt.; H. europaea Nutt.; H. multiflora DC.; H. americana
Small; M. fimbriata Gray; H. fimbriata Howell; H. lutea Howell;
H. latisquama Rydb.; M. latisquama Hult.; H. brevis Small.

Crowsnest Area: North Lost Creek, 2 miles west of fork, south-facing valley slope, 5450 feet elevation, Pinus contorta stand, No. 16760.

South Lost Creek, 3 miles west of fork, southwest-facing valley slope, 5200 feet elevation, Pinus contorta stand, No. 20761. South Lost Creek, 5 miles west of fork, south-facing valley slope, 5400 feet elevation, Pinus contorta stand, No. 25761. There is an unlabelled specimen in FBH, dating from ca. 1920, for which there is no collection data.

Distribution - B.C. to Calif., e. to Atlantic Coast, Mexico, Eurasia. Known from Cypress Hills, Saskatchewan (Breitung, 1954).

Lupinus nootkatensis Donn.

Jasper National Park: Tonquin Valley, near east end of Amethyst Lake, moist meadow with Carex, Salix, and Abies; extending into Picea-Abies forest; 6500 feet elevation; No. 4961. Northeast of Jasper N.P., Berland-Smoky River Area, summit between Rock Creek and Sulphur River; J.Baranyay.

Distribution - Southeastern Yukon and adjacent B.C., Alaska southward along the coast to Queen Charlotte Island and Vancouver Island.

Potentilla villosa Pall.

P. fragiformis var. villosa Regel & Tiling; P. grandiflora var. villosa Kurtz.

Jasper National Park: Signal Mt. lookout cabin, exposed mineral soil, 7300 feet elevation, No. 31860.

Distribution - Alaska and Yukon southward to Wash., in Rocky Mts., s. B.C.; Aleutian Is., n.e. Asia.

Heuchera glabra Willd.

Tiarella colorans Grah.; Heuchera divaricata Fisch.

Jasper National Park: Whirlpool River, valley slope above Moab Lake, rock cliff, 6000 feet elevation, No. 3859. Whirlpool River, ca. 6 miles west of Moab Lake, Picea-Abies/Equisetum habitat, coarse alluvium, 3900 feet elevation, No. 29860. J.A. Calder records it from Jasper N.P. and adjacent B.C. (personal communication).

Distribution - Cordilleran: Alaska, Yukon, s. to Ore., B.C., in the Coast, Cascade, Cariboo, Monashee, Selkirk, and Rocky Mts..

Thelypteris phegopteris (L.) Slosson

Phegopteris phegopteris (L.) Underw.; Dryopteris phegopteris (L.)

Christens; Phegopteris polypodioides Fee.

Jasper National Park: Whirlpool River, ca. 5 miles west of Moab Lake, fine alluvium, Picea-Abies/Equisetum habitat type, 3900 feet elevation, No. 30860. Mt. Edith Cavell, moraine below Angel Glacier, crevices among moraine boulders, 6200 feet elevation, No. 13861.

Lesser Slave Lake Area: Slave Lake Forest Reserve, near Assineau River, damp forest, July 24, 1929, A.H. Brinkman, No. 4440, (FBH).

Whitecourt Area: 35 miles west of Whitecourt, near Windfall Creek, fir-spruce woods, E.H. Moss, (UAE).

Distribution - Circumpolar: Alaska, Yukon and B.C., s. to Ore.; n. Sask., Ont., Lab. and Nfld., s. to Iowa, Mich., Ohio, Ind., Tenn., and N.C.; Greenland, Iceland; Eurasia.

Five of the species are of cordilleran distribution: Conimitella williamsii, Lupinus lepidus var. aridus, Lupinus nootkatensis, Potentilla villosa, and Heuchera glabra. The other two species, Thelypteris phegopteris and Hypopitys monotropa, have a circumpolar distribution. Three of the species, Conimitella williamsii, Lupinus lepidus var. aridus, and Hypopitys monotropa, belong to the distinctive Crowsnest-Waterton flora whose occurrence in Alberta is restricted to the southern part of the Rocky Mountains (Ogilvie, 1962).

References

- Breitung, August J. 1954. A botanical survey of the Cypress Hills.
Can. Field-Nat. 68(2), 55-92.
- Breitung, August J. 1957. Plants of Waterton Lakes National Park, Alberta.
Can. Field-Nat. 71(2), 39-71.
- Hitchcock, C. Leo. Arthur Cronquist, Marion Ownbey, and J.W. Thompson.
1955 - 61. Vascular Plants of the Pacific Northwest. Pts. 3-5.
University of Washington Press, Seattle.
- Moss, E.H. 1959. Flora of Alberta.
University of Toronto Press, Toronto. 546 pp.
- Ogilvie, R.T. 1962. Notes on plant distribution in the Rocky Mountains
of Alberta.
Can. J. Botany, 40, 1091-1094.