

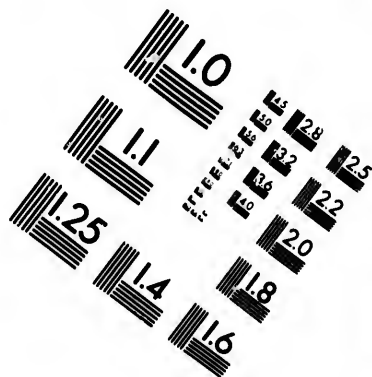
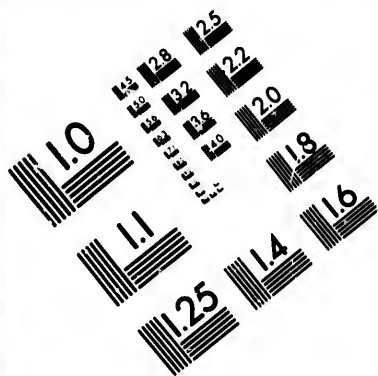
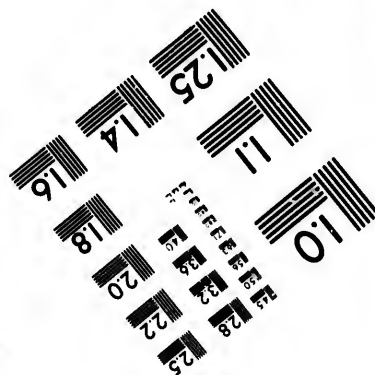
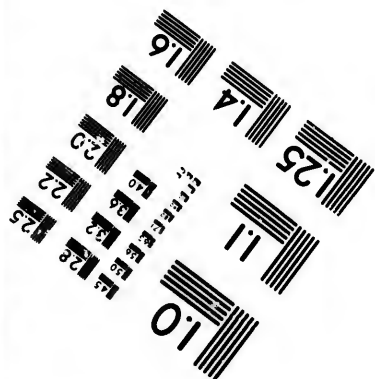
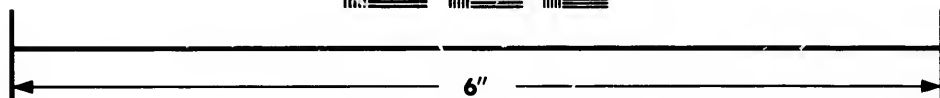
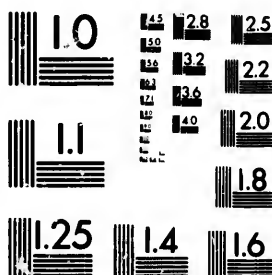


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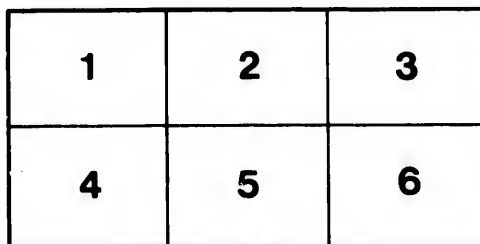
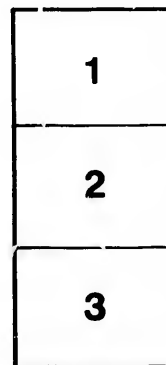
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**CONTRIBUTIONS TO CANADIAN BOTANY,
XVIII.**

BY

JAMES M. MACOUN, Assistant Naturalist, Geological Survey of Canada.

**[Reprinted from THE OTTAWA NATURALIST, Vol. XX, No. 8, November,
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CONTRIBUTIONS TO CANADIAN BOTANY.*

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XVIII.

MITELLA DIVERSIFOLIA, Greene.

Near Trail, Columbia River, B.C., May 19th, 1902. No. 64,574.† (*W. Spreadborough*.) New to Canada.

HEUCHERA FLABELLIFOLIA, Rydb., N. A. Fl. XXII : 115.

H. parvifolia, Cat. Can. Plants 1 : 158 & 526.

All the Canadian specimens referred to *H. parvifolia* in our herbarium prove to be *H. flabellifolia*. They are from Milk River Ridge, Alta. No. 10,560; Cypress Hills, Alta. No. 8,514, and Crow Nest Pass, Rocky Mts. No. 20,167. (*John Macoun*.) Milk River Ridge, Alta. No. 8,515. (*Dr. G. M. Dawson*)

HEUCHERA COLUMBIANA, Rydb., N. A. Fl. XXII : 116.

H. cylindrica, var. *alpina*, Cat. Can. Plants, 1 : 526 in part.

H. cylindrica, var. *ovalifolia*, Contr. Can. Bot. No. 6, p. 5, in part.

Crow Nest Pass, Rocky Mts. No. 8,500. (*Dr. G. M. Dawson*.) Waterton Lake, Rocky Mts. No. 10,561; Eagle Pass, C. P. Ry., B.C. No. 8,503. (*John Macoun*.) Trail, Columbia River, B.C. No. 64,571. (*J. M. Macoun*.) Referred to *H. glabella* by Rosendahl, but apparently a good species.

SAXIFRAGA RUFIDULA, (Small).

S. occidentalis, Cat. Can. Pl. 11 : 321 in part.

Micranthes rufidula, Small, N. A. Fl., XXII : 140.

Well characterized by the red-tomentose under-surface of the leaves. Described from specimens collected by Prof. John Macoun on Mount Finlayson, Vancouver Island, May

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†Specimens have been distributed from the herbarium of the Geological Survey under these numbers.

17th, 1887. Collected July 17th, 1887, on Mount Arrow-smith, V.I., and May 19th, 1893, on Parson's Mountain near Victoria, V.I., by Prof. Macoun. The specimens collected in 1887 formed part of the material upon which Watson based his *S. occidentalis*.

SAXIFRAGA LATA, (Small.)

S. occidentalis, Cat. Can. Pl., II : 321 in part.

Micranthes lata, Small, N. A. Fl., XXII : 145.

Described from specimens collected by Prof. John Macoun at Lytton, B.C., April 16th, 1890. Not rare west of the coast range. ‡

RIBES OXYCANTHOIDES, L. var. *CALCIOLA*, Fernald, *Rhodora*, VII : 155.

This variety resembles the species "but young branches, petioles and lower leaf surfaces permanently and densely white-tomentose." Collected or noted growing in calcareous soils in Bonaventure and Gaspé counties, Quebec, by Messrs. Collins, Fernald and Pease at the following places : Carlisle, Tracadigash Mt., mouth of Bonaventure River, New Richmond, Grand River, Percé, Little Cascapedia River and Dartmouth River. This variety was collected on "the island" Baddeck, Cape Breton Island, N.S., by Prof. Macoun in 1898, Herb. No. 19,102. An intermediate form was collected on Cape Breton Island, the same year at Grand Narrows, No. 19,100, and Big Intervale, Margaree, No. 19,101.

CRATAEGUS BRUNETIANA, Sargent.

A common species about Quebec. Our specimens were collected in fruit near Quebec in 1902 by Dr. Robt. Bell.

SPIRÆA SORRIFOLIA, L.

Escaped from cultivation and well naturalized on the bank of the Gatineau River at the railway station, Wakefield, Que., 1903. (*John Macoun*)

GEUM PULCHRUM, Fernald, *Rhodora*, VIII : 11.

Known in Canada only from specimens collected by Williams, Collins and Fernald, in boggy meadows by the St.

‡The Geographical limits given in these papers refer to Canada only.

Lawrence River at Bic, Quebec, but will probably be found elsewhere. Characterized by its "large, wide-spreading crimson calyx, deep claret-colored styles and the strongly contrasting broadly obcordate bright yellow petals"; suggesting *Geum macrophyllum* in the outline of the leaf only.

MEDICAGO DENTICULATA, Willd.

Toronto, Ont. (*W. Scott.*) Not recorded from Ontario.

VICIA VILLOSA, L.

Camlachie, Ont., June 18th, 1901, No. 34,280. (*John Macoun.*) New to Canada, rare in North America. Introduced.

GERANIUM PRATENSE, L.

Roadsides and pasture fields, Wakefield, Que., 1903. (*John Macoun*)

LINUM CATHARTICUM, L.

On the left side of the entrance road, Beechwood Cemetery, Ottawa, Ont., 1903 (*John Macoun.*) Not before recorded from Ontario.

EMPETRUM NIGRUM, L., var. ANDINUM, DC.

Distinguished from *E. nigrum* by its red fruit and tomentose or lanate young leaves. This plant was sent us from Newfoundland many years ago and was named *E. rubrum*. Mr. L. Fernald has shown (*Rhodora*, vol. IV : 147-151) that it is apparently identical with the Andes plant described by De Candolle.

RHUS VERNIX, L.

R. venenata, Macoun, Cat. Can. Plants, 1 : 100 and 505.

Abundant by the little lake west of East Templeman, Que., 1903. (*John Macoun.*) Not recorded east of S. W. Ontario.

IMPATIENS NOLI-ME-TANGERE, L.

On Kent street, Ottawa, Ont. Noticed there for several years previous to 1901, when flowering specimens were collected in September.

MALVA ALCEA, L.

Common by roadsides in Masham township near Wakefield, Que., 1903. (*John Macoun.*)

ANTHRISCUS CEREFOLIUM, Hoffm.

Roadsides at Cap à L'Aigle, Que. No. 67,994. (*John Macoun.*) New to Canada.

CICUTA DOUGLASII, (DC.) C. & R.

In marshes, Chilliwack Lake, B.C. No. 44,480. (*J. M Macoun.*) New to Canada.

SANICULA NEVADENSIS, Wats.

Revelstoke, B.C., 1902. (*W. Spreadborough.*) Eastern limit in Canada.

MONOTROPA FIMBRIATA, Gray.

In woods near Trout Lake, B.C. (*E. Wilson.*)

GAULTHERIA HUMIFUSA, (Graham) Rydberg.

C. Myrsinites, Hook.

Mountains at Lake Agnes, No. 66,473, and at Pipestone Creek, No. 66,474, Rocky Mountains, 1904. (*John Macoun.*) Not recorded from Rocky Mountains since Drummond's time.

GLAUX MARITIMA, L. var. OBTUSIFOLIA, Fernald, Rhodora, IV: 215.
G. maritima, Cat. Can. Pl. 1: 315 in part.

With the exception of a single specimen from Assinaboine Rapids, Man., (*John Macoun*), our herbarium specimens of this variety are from either the Pacific or Atlantic coasts. In the east it is represented in our herbarium by specimens from Brackley Point, Prince Edward Island, No. 15,982; Grand Narrows, Cape Breton Island, N.S., No. 19,849; Salmon River, Que., No. 68,641, and Murray River, Que., No. 68,642 (*John Macoun*); Oak Island, Mahone Bay, N.S., No. 23,060 (*Dr. C. A. Hamilton*); Campbellton, N.B., No. 15,986 (*Dr. R. Chalmers*); Bathurst, N.B., No. 60,463 (*Williams and Fernald*); Cacouna, Temiscouata Co., Que., No. 67,057 (*Collins and Fernald*). From the Pacific coast,

Chase River, Vancouver Island, No. 15,981; Comox, Vancouver Island, No. 635; Burrard Inlet, B.C., No. 15,979 (*John Macoun*); Lacombe Island, Portland Canal, B.C., No. 14,978 (*J. McEvoy*); Renfrew District, Vancouver Island, No. 41,413 (*Rosendahl and Brand*).

DODECATHEON PUBERULUM, (Nutt.) Piper.

Grassy slopes, Penticton, Lake Okanagan, B.C. No. 61,247. (*W. Spreadborough*.) Damp spots at Trail, Columbia River, B.C. No. 66,531; west of Sophie Mt., B.C. No. 66,532. (*J. M. Macoun*.)

CYNANCHUM VINCITOXICUM, R. Br.

Escaped from cultivation at Niagara Falls, Ont., 1904. (*W. Scott*.)

NEMOPHILA BREVIFLORA, Gray.

Very abundant on damp grassy slopes at an altitude of 5,000 feet, Sophie Mt., S.W. of Rossland, B.C. No. 60,614. (*J. M. Macoun*.) New to Canada.

POLEMONIUM ELEGANS, Greene, Pittonia. III: 305.

P. confertum, Cat. Can. Pl., II: 330.

Summit of South Kootenay Pass, Rocky Mountains. No. 16,221. (*Dr. G. M. Dawson*.) Summit of Sheep Mountain, Waterton Lake, Rocky Mountains. No. 11,807. (*John Macoun*.) Second summit west of Skagit River, near the International Boundary. Alt. 7,000 ft. No. 68,716. (*J. M. Macoun*.)

CYNOGLOSSUM BOREALE, Fernald, Rhodora, VII: 249.

C. Virginicum, Cat. Can. Pl. I: 335 and 567.

C. occidentale, Cat. Can. Pl. I: 567, and II: 344.

This species is not uncommon in Ontario and eastward throughout the Maritime Provinces, but west of Lake Superior it is very rare. In our herbarium we have no specimens from the wooded country north of the prairie region, where it was collected by Drummond, nor have we any specimens from the Rocky Mountains. Our herbarium material from British Columbia is represented by specimens from Donald in the Columbia valley and from Vernon near Lake Okanagan.

ASPERUGO PROCUMBENS, L.

Waste places at Banff, Alta., 1903. (*N. B. Sanson.*)
Not recorded west of Ontario.

VERBENA BRACTEOSA X STRICTA.

A *Verbena*, evidently a hybrid between *V. bracteosa* and *V. stricta* was found growing very abundantly on dry sandy ground near Pt. Edward, Ont., Aug. 20, 1903. (*C. K. Dodge.*)

MERTENSIA OBLONGIFOLIA, Don.

Common on hillsides around Trail, Columbia River, B.C. Nos. 66,567 and 66,568. (*J. M. Macoun.*) New to Canada.

MERTENSIA CILIATA, Don.

South fork of Salmon River, near Idaho boundary. No. 66,566. 1902. (*W. Spreadborough.*) New to Canada.

TEUCRIUM LITTORALE, Bicknell.

Along the shore below Mahone Bay, N.S. (*Dr. C. A. Hamilton.*) New to Canada.

SCUTELLARIA NERVOSA, Pursh.

Dry open woods, Cedar Creek, Arner, near Kingsville, Ont. No. 54,679. (*John Macoun.*) New to Canada.

MENTHA ARVENSIS, L. var. LANATA, Piper, Bull. Torr. Bot. Club, XXIX: 223.

Size and habit of var. *Canadensis*, Briquet (*M. Canadensis*, L.) but the calyx, stem, petioles and often the whole underside of the leaf-blade densely lanate-pubescent.

Dry bed of torrent, Middle Creek, Chilliwack River, B.C. No. 54,657; bank of Chilliwack River, B.C. No. 54,656. (*J. M. Macoun.*) New to Canada.

SOLANUM CAROLINENSE, L.

Very abundant at Point Edward, Lake Huron. No. 54,531. (*John Macoun.*)

PHYSALIS PRUINOSA, L.

Streets of Southampton, Ont. No. 54,524. (*John Macoun.*) New to Canada.

VERBASCUM LYCHNITIS, L.

Roadsides at Sandwich, Ont. No. 54,510. (*John Macoun.*)

CHÆNORRHINUM MINUS, (L.) Lange.

Linaria minor, Desf.; Macoun, Cat. Can. Plants, 1: 353.
Contr. to Can. Bot. Pt. XII.

Kincardine, Ont. (*W. Scott.*) Point Edward. No. 54,467, and Sarnia, Ont. No. 54,466; along the railway at East Templeman, Que., 1903. (*John Macoun.*)

PENSTEMON FULCHELLUS, Greene.

Rocky summits, alt. 6,000 ft., Tami Hy Mountain, Chilliwack Valley, B. C. 1901. (*Jas. M. Macoun.*) New to Canada. Probably not a good species but only a form of *P. procerus*.

PENSTEMON DIGITALIS, (Sweet) Nutt.

Another locality for this species is Farr Point, four miles from Cascade, Que. It is not easy to account for the occurrence of this plant as though generally treated as a garden escape it is found where there is no record of its having been cultivated.

CASTALLEJA SUKSDORFII, Gray.

Abundant on sub-alpine slopes between the Chilliwack River and Mount Cheam, B.C., alt. 4,000 ft. Nos 54,442 and 54,443. (*J. M. Macoun.*) Not recorded from Canada.

PLANTAGO ARISTATA, Michx.

Galt, Ont. (*W. Herriot.*) Roadsides near Windsor, Ont. No. 54,701. (*John Macoun.*) Introduced from the west; now well established.

PLANTAGO MEDIA, L.

Roadsides under the shade of the maples along the Whortley Road, near London, Ont. (*J. Dearness.*) Of very rare occurrence in Canada.

GALIUM BIFOLIUM, Wats.

Abundant on clay banks along the Dewdney Trail, west of Sophie Mt., B.C. Alt. 5,000 ft. No. 64,890. (*J. M. Macoun*) New to Canada.

ANAPHALIS MARGARITACEA, B. & H. var. *occidentalis*, Greene.

Characterized by its bright green leaves, glabrous above. Confined in Canada, apparently, to the vicinity of the Atlantic and Pacific coasts where it is rare. We have no specimens from the interior.

XANTHIUM GLABRATUM, (DC.) Britton.

In ditches by roadsides and along streams near Sarnia, Ont. (*C. K. Dodge*.) New to Canada. Mr. Dodge has also collected *X. Pennsylvanicum* at Port Huron, Mich., just opposite Sarnia.

XANTHIUM CANADENSE, Mill.

Typical specimens of *X. Canadense* were collected by Prof. Macoun by the mill at Blue-berry Point, near Aylmer, Que., in 1903. During the same summer he collected *X. echinatum*, Murr., at Wakefield, and *X. Pennsylvanicum*, Wall. near St. Patrick's Bridge, Ottawa.

GALINSOGA PARVIFLORA, Cav.

Toronto, Ont., 1904. (*W. Scott*.) First collected in Canada by J. Dearness in north London, Ont. in 1901 and more recently in the southern part of that city.

CHRYSANTHEMUM LEUCANTHEMUM, L.

Typical *C. Leucanthemum* as represented in our herbarium seems to be confined to the Atlantic and Pacific coasts our only specimens being from Newfoundland, No. 10,955, (*Robinson and Schrenk*); Boylston, N.S., No. 22,830, (*Dr. C. A. Hamilton*); Big Intervale, Margaree, Cape Breton Island, N.S., No. 19,672, (*John Macoun*); New Carlisle, Bonaventure Co., Que., No. 69,071, (*Williams and Fernald*); Montmorency Falls, Que., No. 68,327, (*John Macoun*); Cedar Hill, Vancouver Island, B.C., No. 14,503, (*John Macoun*.) The var.

subpinnatifidum, Fernald, Rhodora, v : is abundantly represented in the herbarium of the Geological Survey by specimens from Labrador to British Columbia.

ARTEMISIA BIENNIS, Willd.

Near the mouth of Albany River, James Bay, 1904.
(*W. Spreadborough.*) Probably introduced.

ARNICA GASPENSIS, Fernald, Rhodora, vii : 148.

Described from specimens collected on ledges of a hill near Ste. Anne des Monts, Gaspé, in 1831, by Mr. J. A. Allen.

ARNICA PLANTAGINEA, Pursh.

Described from specimens collected in Labrador and recorded from several stations there. Re-described by Mr. Fernald, Rhodora, vii : 247.

ARNICA SORNBORGERI, Fernald, Rhodora, vii : 147.

Bank of a mountain brook at Rama, Labrador. (*J. D. Sornborger.*)

CARDUS NUTANS, L.

In the pasture on the Pêche River above the schoolhouse at Wakefield, Que., 1903. (*John Macoun.*) Not recorded west of the Maritime Provinces.

CIRSIIUM ARVENSE, Hoffm. var. SETOSUM Ledeb.

In a second-growth woods about 200 yards from the Grand Trunk Railway at Lachine, Que., 1905. No. 67.797.
(*Dr. Robt. Campbell.*)

CENTAUREA JACEA, L.

Waste places at Owen Sound, Ont., 1901. Herb. No. 26,445. (*John Macoun*) New to Eastern Canada.

LEONTODON HISPIDUS, L.

Moist meadows, Galt, Ont., 1902 (*W. Herriot.*) New to Canada.

SONCHUS ARVENSIS, L.

Albany, James Bay. 1904. (*W. Spreadborough.*)

LACTUCA PULCHELLA, DC.

Mouth of Albany River, James Bay, 1904. (*W. Spreadborough.*) Not recorded from that region.

PRENATHES RACEMOSA, Mx.

The Beacon, mouth of Moose River, James Bay, 1904. (*W. Spreadborough*) Not recorded from that region.

AGOSERIS ALTISSIMA, Rydb.

Prairies near Old Wives' Lake, north of Peace River, Atha., 1903. No. 61,242. (*J. M. Macoun.*) Known before only from type locality in Montana.

