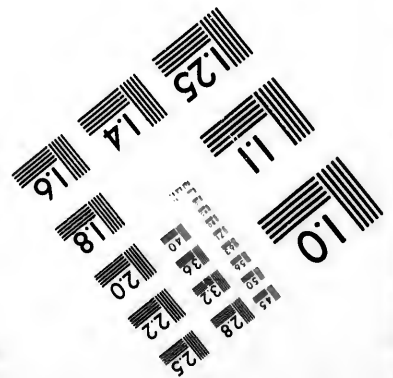
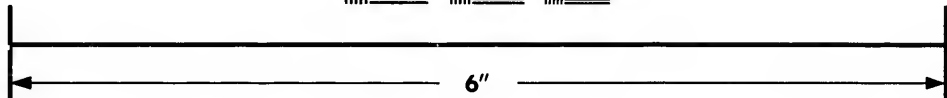
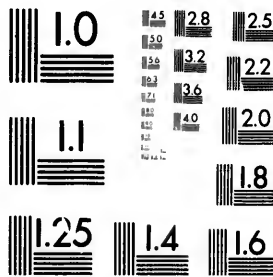


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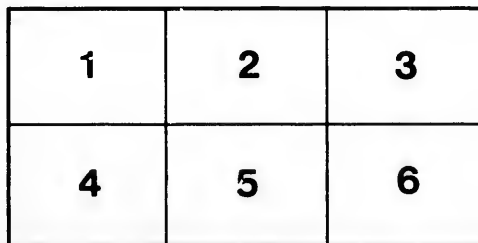
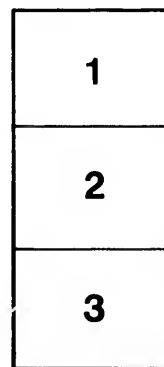
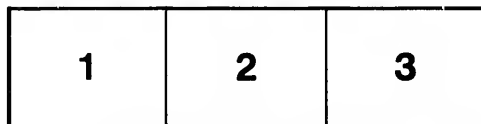
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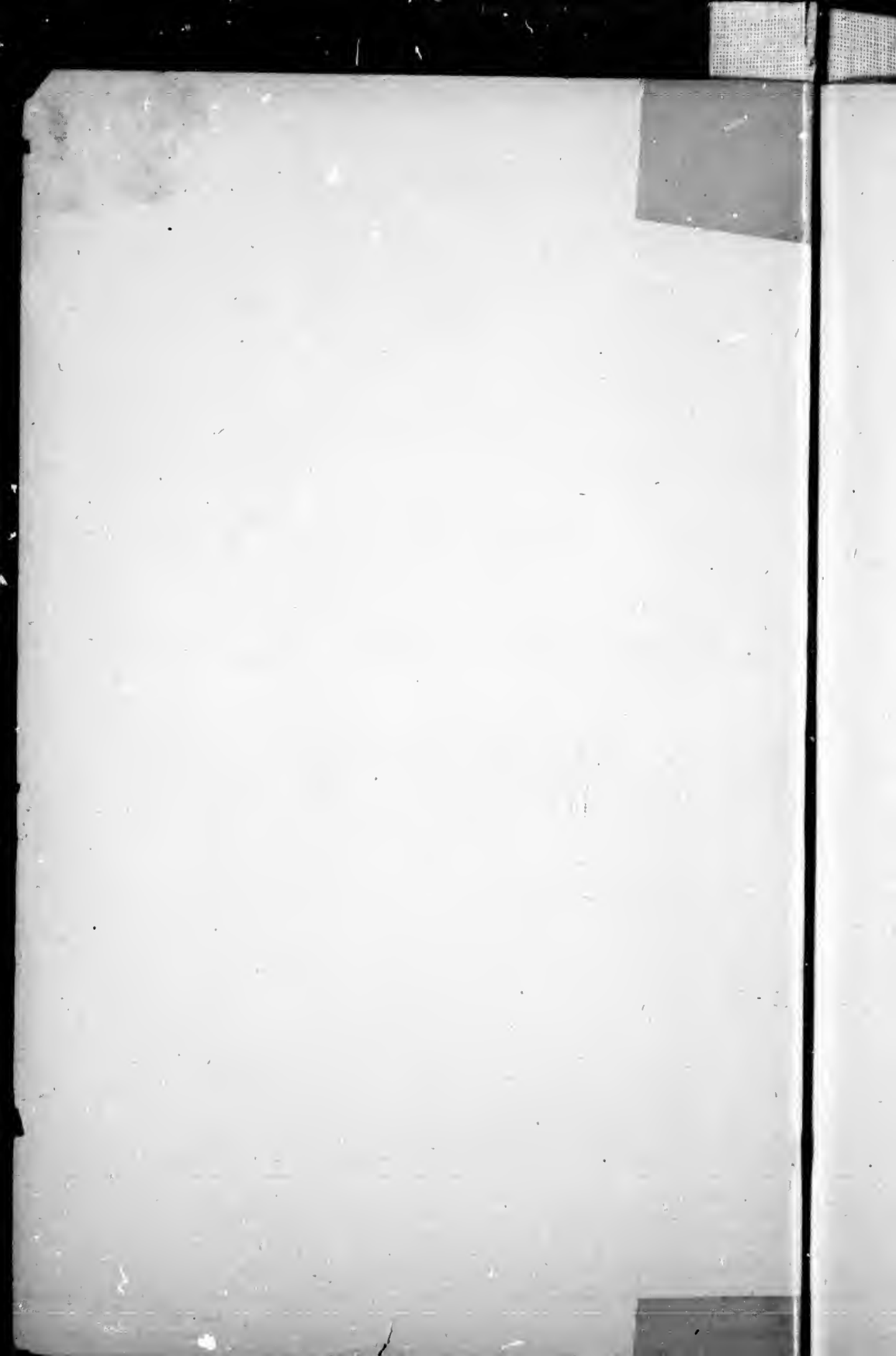
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THE FLORA OF THE ROCKY MOUNTAINS.

By REV. ROBERT CAMPBELL, M.A., D.D.

The Rocky Mountain region is the botanist's paradise. The route through the Rocky, Selkirk and Coast ranges, taken by the Canadian Pacific Railway, is a very wonderland even to the ordinary tourist. He is carried through scenery awful in its impressiveness. Even one who has climbed Goatfell and Ben Lawers in "bonnie Scotland," or looked forth from the top of the Righi in the light of the full moon and stood on that celebrated eminence watching for the glorious sunrise, finds a series of surprises and new sensations awaiting him, from the moment the shadowy outlines of the mountains begin to loom out from the surrounding clouds, after he has left Calgary, until he has gone through Kicking Horse Pass and over the Fraser River. The Himalayas of India may surpass our western mountains in grandeur, but certainly

the Alps do not, while the highest of the British mountains are but babies in comparison. The vastness of their number and the greatness of the territory over which they extend, as beheld from one of the higher peaks, well earned for the scene the description of one of our eloquent statesmen as a "sea of mountains." What with the admirably conducted hotels established by the Railway Company at Banff, Field, Glacier, North Bend, and at other points of interest, a stay at any or all of these places affords an incomparable holiday, even for the ordinary tourist. When to the attractions of the superb scenery of the route there is added the element of scientific interest, a visit to the Rockies and Selkirks becomes an unforgettable, a perpetual joy. It may be taken for granted that the botanist is not insensible to the general beauties of nature, although he has an eye for detail. But while he drinks in as much as others of the delight which fine scenery yields, he alone is sensible of the enchantment proceeding from the rich flora which decks the mountain slopes and valleys bordering on the railway track during the summer months. Roaming among those blooming treasures affords a delight, of which the uninitiated have no conception.

From a scientific point of view, the flora found on mountains everywhere is of special interest. Geologists tell us that the lofty portions of the world were the first to emerge from under the primeval waters; and it follows that the earliest vegetation that took root on the earth was on the mountain tops and sides. The ambition of every collector of plants, in consequence, is to visit mountain ranges and possess himself of the species to be found thereon; and the favorite excursions of botanical societies are always to hills. The mountain flora has characteristics of its own, and long before there was any thought that a railway would skim over the western prairies and penetrate the passes of the Rockies and

Selkirks, those regions were a land of enchantment to men of science, who, in spite of the difficulties encountered in reaching it, attained the object of their desire and have recorded the delight they experienced when they at last set foot upon it. It was a serious holiday to make out the distant prairies and western mountains in the days when David Douglas, Thomas Nuttall, Robert Brown, Sir John Richardson and Thomas Drummond visited them. Only fifty years ago it took the late Professor Agassiz several weeks to travel from Boston to the shores of Lake Superior and back again, when, in pursuit of knowledge, he made a summer excursion to that then little known region, scientifically considered.

There are many species met with in Manitoba, the Territories and the valleys of the mountains that are common to the east, and of these no account is taken in the subjoined list. But there is a tendency to specific differences in the genera which becomes gradually apparent as one travels westward. This is especially true of the flora of the plains. As to the plant life of the Rocky Mountains, it closely resembles that of other mountains of similar height, where corresponding climatic conditions obtain.

As we travel westward over the Territories, unfamiliar species multiply with bewildering rapidity, so that it tasks one's resources to cure properly at night the specimens collected in the day time. But such embarrassment is delightful to one bent on making new acquisitions. His is a constant joy in having to determine what the new species are which he happens on day by day. His task is, indeed, rendered comparatively difficult by the fact that eastern classification proves of little service to him. Even Scribner's recently issued volumes carry him only as far as the 102nd Meridian. Coulter's flora of California is helpful, and Professor Macoun's Catalogue may afford hints as to what the species are, although it does

not describe them. But in the main the botanist has to fall back upon the descriptions of Nuttall, Douglas, Robert Brown, Richardson and Drummond, and as these authorities are not easy of access, many specimens have to be set aside when one is on the field for further study. Thus there is accumulated material for delightful future investigation, in prosecuting which months afterwards, it may be, the joys of the excursion are gone over again.

It was in the month of June, 1897. that the plants classified below were mainly collected. Some of them were obtained earlier and later, and sent by friends—a few from California, although they also belong to the mountain and coast ranges within Canadian territory. Altogether this western collection, now deposited in the Cabinet of the Natural History Museum, embraces about 300 species, any of which are seldom met with in the neighborhood of Montreal.

GRAMINEÆ.

ANDROPOGON L. SP.

ANDROPOGON SCOPARIUS MICHX.—*Broom Beardgrass*.—Broadview. June.

ANTHOXANTHUM L. SP.

ANTHOXANTHUM ODORATUM L.—*Sweet Vernal Grass*.—Laggan. June.

SAVASTANA SCHRANK.

SAVASTANA ALPINA (S.W.) SCRIBNER.—*Alpine Holygrass*.—Banff. June.

STIPA L. SP.

STIPA COMATA TRIN. AND RUPR.—*Western Stipa*.—Kamloops. June.

STIPA SPARTEA TRIN.—*Porcupine Grass*.—Wolseley. June.

PHLEUM L. SP.

PHLEUM ALPINUM L.—*Mountain Phleum*.—Banff. June.

SPOROBOLUS R. BR.

SPOROBOLUS CUSPIDATUS (TORR.) WOOD.—*Prairie Rush-grass*.—Broadview. June.

BECKMANNIA HOST.

BECKMANNIA ERUCÆFORMIS (L.) HOST.—*Beckmannia*.—*Medicine Hat*. June.

DISTICHLIS RAF.

DISTICHLIS SPICATA (L.) GREENE.—*Marsh Spike-grass*.—*Kananaskis*. June.

BROMUS L. SP.

BROMUS ERECTUS HUDS.—*Upright Brome-grass*.—*Calgary*. June.

BROMUS RACEMOSUS L.—*Brome-grass*.—Banff. June.

AGROPYRON J. GÆRTN.

AGROPYRON DASYSTACHYUM (HOOK) VASEY.—*Northern Wheat-grass*.—*Canmore*. June.

AGROPYRON DIVERGENS NEES.—*Spreading Wheat-grass*.—Banff. June.

CYPERACEÆ J. ST. HIL.

CAREX L. SP.

CAREX GOODENOVI J. GAY.—*Goodenough's Sedge*.—*Lake Louise*. June.

JUNCACEÆ VENT.

JUNCOIDES ADANS.

JUNCOIDES NIVALE (LÆST.) COVILLE.—*Arctic Wood-rush*.—*Lake Louise*. June.

MFLANTHACEÆ R. BR.

TOFIELDIA HUDS.

TOFIELDIA PALUSTRIS HUDS.—*Scottish Asphodel*.—Lake Louise. June.

ZYGADENUS MICHX.

ZYGADENUS NUTTALLII (A. GRAY) S. WATS.—*Nuttall's Zygadenus*.—Banff. June.

LILIACEÆ ADANS.

ALLIUM L. SP.

ALLIUM CERNUUM ROTH.—*Nodding Wild Onion*.—Manitoba. June.

ALLIUM STELLATUM KER.—*Prairie Wild Onion*.—Qu'Appelle. June.

ALLIUM CANADENSE L.—*Meadow Garlic*.—Wolseley. July.

LILIUM L. SP.

LILIUM UMBELLATUM PURSH.—*Western Red Lily*.—Kanasaskis. June.

UNIFOLIUM ADANS.

UNIFOLIUM LILIACEUM GREENE.—*Star-flowered Solomon's Seal*.—Revelstoke. June.

SALIX L. SP.

SALIX PETIOLARIS J. E. SMITH.—*Slender Willow*.—Broadview. June.

SALIX ARGYROCARPA ANDERS.—*Silver Willow*.—Calgary. June.

SALIX DESERTORUM RICHARDS.—*Desert Willow*.—Winnipeg. June.

SALIX GLAUCA L.—*Northern Willow*.—Broadview. June.

SALIX CANDIDA FLUEGGE.—*Hoary Willow*.—June.

SALIX UVA-URSI PURSH.—*Bearberry Willow*.—June.

BETULACEÆ AGARDH.

BETULA L. SP.

BETULA GLANDULOSA MICHX.—*Glandular Birch*.—Lagan.
gan. June.

SANTALACEÆ R. BR.

COMANDRA NUTT.

COMANDRA UMBELLATA (L.) NUTT.—*Bastard Toad-flax*.—
Broadview. June.

POLYGONACEÆ LINDL.

RUMEX L. SP.

RUMEX VENOSUS PURSH.—*Veined Dock*.—Calgary. June.

RUMEX PAUCIFLORUS NUTT.—*Few-flowered Dock*.—Don-
ald. June.

OXYRIA HILL.

OXYRIA DIGYNA (L.) CAMPTDEBA.—*Mountain Sorrel*.—
Donald. June.

POLYGONUM L. SP.

POLYGONUM EMERSUM (MICHX.) BRITTON.—*Swamp Persi-
caria*.—Manitoba. July.

CHENOPODIACEÆ DUMORT.

CHENOPODIUM L. SP.

CHENOPODIUM BERLANDIERI. MOQ.—*Berlandier's Goose-
foot*.—Calgary. June.

ATRIPLEX L. SP.

ATRIPLEX ARGENTEA NUTT.—*Silvery Orache*.—Swift Cur-
rent. June.

SARCOBATUS NEES.

SARCOBATUS VERMICULATUS (HOOK.) TORR.—*Grease-wood*.
—Gleichen. June.

DONDIA ADANS.

DONDIA DEPRESSA (PURSH.) BRITTON.—*Western Blite*.—
Swift Current. June.

CARYOPHYLLACEÆ REICHENB.

SILENE L. SP.

SILENE ACAULIS L.—*Moss Champion*.—Wolseley. June.

SILENE DOUGLASHII HOOK.—*Douglas Catchfly*.—Revel-
stoke. June.

VACCARIA MEDIC.

VACCARIA VACCARIA (L.) BRITTON.—*Cow-herb*.—Can-
more. June, 1897.

ALSINE L. SP.

ALSINE UMBELLATA TUREZ.—*Umbelled Stitchwort*.—Banff.
June.

SAGINA L. SP.

SAGINA DECUMBENS (ELL.) T. AND G.—*Decumbent Pearl-*
wort.—Wolseley. June.

SAGINA SAGINOIDES (L.) BRITTON.—*Arctic Pearlwort*.—
Laggan. June.

ARENARIA L. SP.

ARENARIA BIFLORA (L.) S. WATS.—*Arctic Sandwort*.—
Glacier. June.

RANUNCULACEÆ JUSS.

AQUILEGIA L. SP.

AQUILEGIA FORMOSA FISCH.—*Wild Columbine*.—Donald.
June.

AQUILEGIA BREVIPTYLA HOOK.—*Small-flowered Columbine*.—Winnipeg. June.

ANEMONE L. SP.

ANEMONE PARVIFLORA MICHX.—*Northern Anemone*.—Laggan. June.

ANEMONE MULTIFIDA POIR.—*Cutleaved Anemone*.—Banff. June.

ANEMONE CYLINDRICA A. GRAY.—*Longfruited Anemone*.—Canmore. June.

ANEMONE OCCIDENTALIS WATSON.—*Western Anemone*.—North Bend. June.

ANEMONE NARCISSIFLORA L.—*Alpine Windflower*.—Bow River. April.

PULSATILLA ADANS.

PULSATILLA HIRSUTISSIMA (PURSH.) BRITTON.—*Nuttall's Pasqueflower*.—Wolseley. April.

RANUNCULUS L. SP.

RANUNCULUS PEDATIFIDUS J. E. SMITH.—*Northern Buttercup*.—Wolseley. June.

BATRACHIUM S. F. GRAY.

BATRACHIUM DIVARICATUM (SCHRANK) WIMM.—*Stiff White Water Crowfoot*.—Gleichen. June.

THALICTRUM L. SP.

THALICTRUM VENULOSUM TRELEASE.—*Veiny Meadow Rue*.—Winnipeg. June.

PAPAVERACEÆ B. JUSS.

PAPAVER L. SP.

PAPAVER NUDICAULE L.—*Alpine Poppy*.—Western slope. April.

PAPAVER ALPINUM L.—*Arctic Poppy*.—Glacier. June

CAPNOIDES ADANS.

CAPNOIDES AUREUM OCCIDENTALIS GRAY.—*Golden Corydalis*.—Banff. June.

CRUCIFERÆ B. JUSS.

CORONOPUS GAERTN.

CORONOPUS DIDYMUS (L.) J. E. SMITH.—*Lesser Wart-cress*.—Banff. June.

SISYMBRIUM L. SP.

SISYMBRIUM ALTISSIMUM L.—*Tall Sisymbrium*.—Qu'Appelle Hill. June.

BRASSICA L. SP.

BRASSICA ARVENSIS (L.) B. S. P.—*Charlock*.—Near Winnipeg. June.

RORIPA SCOP.

RORIPA TRACHYCARPUM GRAY.—*Shortfruited Cress*.—Manitoba. July.

CARDAMINE L. SP.

CARDAMINE HIRSUTA L.—*Hairy Bitter-cress*.—Banff. June.

CARDAMINE PENNSYLVANICA MUHL.—*Pennsylvania Bitter-cress*. June.

NESLIA DESV.

NESLIA PANICULATA (L.) DESV.—*Neslia*.—Railway track near Winnipeg. June.

DRABA L. SP.

DRABA CUNEIFOLIA NUTT.—*Wedgeleaved Whitlow-grass*.—Calgary. June.

DRABA FLADNIZENSIS WULF.—*White Arctic Whitlow-grass*.—Banff. June.

DRABA NIVALIS LILJ.—*Yellow Arctic Whitlow-grass*—Wolseley. June.

DRABA INCANA L.—*Hoary Whitlow-grass*—Banff. June

SOPHIA ADANS.

SOPHIA INCISA (ENGELM) GREENE.—*Western Tansy-Mustard*.—Canmore. June.

SOPHIA HARTWEGIANA (FOURN.) GREENE.—*Hartweg's Tansy-Mustard*.—Canmore. June.

ARABIS L. SP.

ARABIS VIRGINICA (L.) TRELEASE.—*Virginia Rock-cress*.—Qu'Appelle Valley. June.

ARABIS HUMIFUSA (J. VAHL.) S. WATS.—*Arctic Rock-ress*.—Laggan. June.

ARABIS PATENS SULLIV.—*Spreading Rock-cress*.—Winnipeg. June.

ARABIS HIRSUTA (L.) SCOP.—*Hairy Rock-cress*.—Calgary. June.

ARABIS BRACHYCARPA (T. & G.) BRITTON.—*Purple Rock-cress*.—Qu'Appelle Valley. June.

ARABIS HOLBELLII HORNEM.—*Holbæll's Rock-cress*.—Banff. June.

ERYSIMUM L. SP.

ERYSIMUM INCONSPICUUM (S. WATS.) MACM.—*Small Erysimum*.—Wolseley. June.

ERYSIMUM SYRTICOLUM SHELDON.—*Sand Erysimum*.—Canmore. June.

ERYSIMUM ASPERUM D.C.—*Western Wallflower*.—Calgary. June.

CAPPARIDACEÆ LINDL.

CLEOME L. SP.

CLEOME SERRULATA PURSH.—*Pink Cleome*.—Broadview. June.

CRASSULACEÆ D. C.

SEDUM L. SP.

SEDUM STENOPETALUM PURSH.—*Narrow-petaled Stonecrop.*—Banff. June.

SAXIFRAGACEÆ DUMORT.

SAXIFRAGA AIZOON JACQ.—*Livelong Saxifrage.*—Schreiber. June.

SAXIFRAGA NIVALIS L.—*Clustered Alpine Saxifrage.*—Lake Louise. June.

SAXIFRAGA STELLARIS L.—*Starry Saxifrage.*—Revelstoke. June.

HEUCHERA L. SP.

HEUCHERA PARVIFOLIA NUTT.—*Small-leaved Heuchera.*—Canmore. June.

HEUCHERA HISPIDA HIRSUTICAULIS WHEELOCK.—*Hairy Heuchera.*—Calgary. June.

HEUCHERA CYLINDRIACA DOUGL.—*Smooth Heuchera.*—North Bend. June.

PHILADELPHUS L. SP.

PHILADELPHUS LEWISII PURSH.—*Lewis' Mock Orange.*—North Bend. June.

PHILADELPHUS GORDONIANUS LINDL.—*Gordon's Mock Orange.*—North Bend. June.

GROSSULARIACEÆ DUMORT.

RIBES L. SP.

RIBES LACUSTRE (PERS.) POIR.—*Swamp Gooseberry.*—Calgary. June.

ROSACEÆ B. JUSS.

SPIRÆA L. Sp.

SPIRÆA CORYMBOSA RAF.—*Corymbed Spiræa*.—Laggan. June.

ARUNCUS ADANS.

ARUNCUS ARUNCUS (L.) KARST.—*Goat's-beard*.—North Bend. June.

RUBUS L. Sp.

RUBUS PARVIFLORUS NUTT.—*Salmon-berry*.—Revelstoke. June.

RUBUS ARCTICUS L.—*Arctic Bramble*.—Banff. June.

POTENTILLA L. Sp.

POTENTILLA HIPPIANA LEHM.—*Woolly Cinquefoil*.—Canmore. June.

POTENTILLA PENNSYLVANICA BIPINNITAFIDA (DOUGL.) T. and G.—*Prairie Cinquefoil*.—Broadview. June.

POTENTILLA PENNSYLVANICA STRIGOSA PURSH.—*Prairie Cinquefoil*.—Wolseley. July.

POTENTILLA MULTIFIDA L.—*Cutleaved Cinquefoil*.—Manitoba. July.

SIBBALDIA L. Sp.

SIBBALDIA PROCUMBENS L.—*Sibbaldia*.—Wolseley. June.

GEUM L. Sp.

GEUM CILIATUM PURSH.—*Longplumed Purple Avens*.—Burnside. June.

ROSA L. Sp.

ROSA SETIGERA MICHX.—*Prairie Rose*.—Calgary. June.

ROSA ACICULARIS LINDL.—*Prickly Rose*.—Medicine Hat. June.

ROSA ARKANSANA PORTER.—*Arkansas Rose*.—adview. June.

ROSA WOODSII LINDL.—*Woods' Rose*.—Calgary. June.

POMACEÆ L.

SORBUS L. SP.

SORBUS SAMBUCIFOLIA (C. AND S.) ROEM.—*Western Mountain Ash*.—Calgary. June.

MIMOSACEÆ REICHENB.

ACACIA ADANS.

ACACIA FILICULOIDES (CAV.) TRELEASE.—*Prairie Acacia*.—Pacific slope. May.

PAPILIONACEÆ L.

THERMOPSIS R. BR.

THERMOPSIS RHOMBIFOLIA (NUTT.) RICHARDS.—*Prairie Thermopsis*.—Calgary. June.

LUPINUS L. SP.

LUPINUS ARGENTEUS PURSH.—*Silvery Lupine*.—Pacific slope. May.

PSORALEA L. SP.

PSORALEA ARGOPHYLLA PURSH.—*Silver-leaf Psoralea*.—Canmore. June.

PSORALEA HYPOGÆA NUTT.—*Small Indian Bread-root*.—Broadview. June.

AMORPHA L. SP.

AMORPHA NANA NUTT.—*Fragrant False Indigo*.—Manitoba. May.

KUHNISTERA LAM.

KUHNISTERA PURPUREA (VENT.) MACM.—*Violet Prairie Clover*.—Wolseley. July.

ASTRAGALUS L. SP.

ASTRAGALUS CRASSICARPUS NUTT.—*Ground Plum.*—
Broadview. June.

ASTRAGALUS PLATTENSIS NUTT.—*Platte Milk Vetch.*—
Canmore. June.

ASTRAGALUS MOLLISSIMUS TORR.—*Woolly Crazy Weed.*—
Canmore. June.

ASTRAGALUS CAROLINIANUS L.—*Carolina Milk Vetch.*—
Canmore. June.

ASTRAGALUS ADSURGENS PALL.—*Ascending Milk Vetch.*—
Broadview. June.

ASTRAGALUS HYPOGLOTTIS L.—*Purple Milk Vetch.*—
Wolseley. June.

ASTRAGALUS RACEMOSUS PURSH.—*Racemose Milk Vetch.*—
Kananaskis. June.

ASTRAGALUS BISULCATUS (HOOK) A. GRAY.—*Two-grooved
Milk Vetch.*—Canmore. June.

ASTRAGALUS PECTINATUS (HOOK) DOUGL.—*Narrow-leaved
Milk Vetch.*—Wolseley. June.

ASTRAGALUS GRACILIS NUTT.—*Slender Milk Vetch.*—
Broadview. June.

ASTRAGALUS FLEXUOSUS (HOOK) DOUGL.—*Flexile Milk
Vetch.*—Kananaskis. June.

ASTRAGALUS ELEGANS (HOOK) BRITTON.—*Pretty Milk
Vetch.*—Canmore. June.

ASTRAGALUS ABORIGINORUM RICHARDS.—*Indian Milk
Vetch.*—Calgary. June.

OROPHOCA BRITTON.

OROPHOCA CÆSPITOSA (NUTT.) BRITTON.—*Sessile-flowered
Milk Vetch.*—Broadview. June.

SPIESIA NECK.

SPIESIA MULTICEPS (NUTT.) KUNTZE.—*Tufted Oxytrope.*—
Kananaskis. June.

SPIESIA CAMPESTRIS (L.) KUNTZE.—*Yellow Oxytrope*.—
Canmore. June.

SPIESIA LÁMBERTI (PURSH.) KUNTZE.—*Stemless Locoweed*.—
—Canmore. June.

SPIESIA SPLENDENS (DOUGL.) KUNTZE.—*Showy Oxytrope*.—
—Broadview. June.

HEDYSARUM L. SP.

HEDYSARUM AMERICANUM (MICHX.) BRITTON.—*Hedysarum*.—
Laggan. June.

HEDYSARUM MACKENZII RICHARDS.—*Mackenzie's Hedysarum*.—
Field. June.

LESPEDEZA MICHX.

LESPEDEZA HIRTA (L.) ELL.—*Hairy Bush-clover*.—Mani-
toba. August.

VICIA L. SP.

VICIA AMERICANA MUHL.—*American Vetch*.—North
Bend. June.

VICIA LINEARIS (NUTT.) GREENE.—*Narrow-leaved Pea
Vine*.—Broadview. July.

LATHYRUS L. SP.

LATHYRUS VENOSUS MUHL.—*Veiny Pea*.—Calgary.
June.

LATHYRUS DECAPHYLLUS PURSH.—*Prairie Vetchling*.—
Broadview. June.

LATHYRUS ORNATUS NUTT.—*Showy Vetchling*.—Calgary.
June.

GERANIACEÆ J. ST. HIL.

GERANIUM L. SP.

GERANIUM FREMONTII PARRYI INGELM.—*Crane'sbill*.—
Pacific slope. May.

GERANIUM RICHARDSONI FISCH. AND MEY.—*Richardson's
Geranium*.—Donald. June.

GERANIUM INCISUM NUTT.—*Cut-leaved Geranium*.—Pacific slope. May.

ERODIUM L'HER.

ERODIUM CICUTARIUM (L.) L'HER.—*Hemlock Stork's-bill*.—Pacific slope. May.

MALVACEÆ NECK.

MALVASTRUM A. GRAY.

MALVASTRUM COCCINEUM (PURSH.) A. GRAY.—*Red False Mallow*.—Wolseley. June.

VIOLACEÆ D.C.

VIOLA L. SP.

VIOLA ROTUNDIFOLIA MICHX.—*Round-leaved Violet*.—Wolseley. May.

VIOLA PALUSTRIS L.—*Marsh Violet*.—Lake Louise. June.

VIOLA SELKIRKII PURSH.—*Selkirk's Violet*.—Lake Louise. June.

VIOLA CANINA ADUNCA GRAY.—*Curved Dog Violet*.—Banff. June.

VIOLA CANINA LONGIPES WATSON.—*Longstalked Dog Violet*.—Banff. June.

VIOLA ARENARIA D.C.—*Sand Violet*.—Wolseley. June.

LOASACEÆ REICHENB.

MENTZELIA L. SP.

MENTZELIA DECAPETALA (PURSH.) URBAN AND GILG.—*Night Flower*.—Medicine Hat. August.

CACTACEÆ LINDL.

OPUNTIA MILL.

OPUNTIA FRAGILIS (NUTT.) HAW.—*Brittle Opuntia*.—
Gleichen. June.

ELEAGNACEÆ LINDL.

ELEAGNUS ARGENTEA PURSH.—*Silver-berry*.—Broadview.
June.

LEPARGYRÆA RAF.

LEPARGYRÆA CANADENSIS (L.) GREENE.—*Canadian Buffalo-berry*.—Winnipeg. June.

ONAGRACEÆ DUMORT.

EPILOBIUM L. SP.

EPILOBIUM ALPINUM L.—*Alpine Willow-herb*.—Banff.
June.

EPILOBIUM ANAGALLIDIFOLIUM LAM.—*Pimpernel Willow-herb*.—Laggan. June.

EPILOBIUM PANICULATUM NUTT.—*Panicled Willow-herb*.—
Kanaraskis. June.

EPILOBIUM TETRAGONUM L.—*Square Willow-herb*.—Gla-
cier. June.

ANOGRA SPACH.

ANOGRA ALBICAULIS (PURSH.) BRITTON.—*Prairie Evening Primrose*.—Wolseley. June.

ANOGRA PALLIDA (LINDL.) BRITTON.—*White-stemmed Evening Primrose*.—Wolseley. June.

GAURA L. SP.

GAURA COCCINEA PURSH.—*Scarlet Gaura*.—Wolseley.
June.

UMBELLIFERÆ B. JUSS.

PEUCEDANUM L. SP.

PEUCEDANUM VILLOSUM NUTT.—*Hairy Parsley*.—Pilot Mound. May.

THASPIUM NUTT.

THASPIUM TRIFOLIATUM AUREUM (NUTT.) BRITTON.—*Golden Alexanders*.—Portage La Prairie. June.

PYROLACEÆ AGARDH.

PYROLA L. SP.

PYROLA ROTUNDIFOLIA PUMILA HORNEM.—*Small round-leaved Wintergreen*.—Banff. June.

PYROLA ULIGINOSA TORR.—*Dog Wintergreen*.—Lake Louise. June.

PYROLA MINOR L.—*Lesser Wintergreen*.—Laggan. June.

ERICACEÆ D.C.

MENZIESIA J. E. SMITH.

MENZIESIA GLABELLA A. GRAY.—*Smooth Menziesia*.—Donald. June.

CHAMÆCISTUS ÆDER.

CHAMÆCISTUS PROCUMBENS (L.) KUNTZE.—*Alpine Azalea*.—Tunnel Mountain, Banff. June.

KALMIA L. SP.

KALMIA GLAUCA AIT.—*Swamp Laurel*.—Lake Louise. June.

PHYLLODICE SALISB.

PHYLLODICE CÆRULEA (L.) GREN. AND GOD.—*Mountain Heath*.—Tunnel Mountain, Banff. June.

BRYANTHUS STELLER.

BRYANTHUS EMPETRIFORMIS GRAY.—*Rose Mountain Heath*.—Near Lake Louise. June.

CASSIOPE D. DON.

CASSIOPE TETRAGONA (L.) D. DON.—*Four-angled Moss-plant*.—Tunnel Mountain, Banff. June.

VACCINIACEÆ LINDL.

VACCINIUM L. SP.

VACCINIUM ULIGINOSUM L.—*Great Bilberry*.—Nepigon. June.

VACCINIUM CÆSPITOSUM MICHX.—*Dwarf Bilberry*.—Near Lake Louise. June.

VACCINIUM PENNSYLVANICUM LANE.—*Lowbush Blueberry*.—Calgary. June.

PRIMULACEÆ VENT.

PRIMULA L. SP.

PRIMULA MISTASSINICA MICHX.—*Dwarf Canadian Primrose*.—Banff. June.

PRIMULA PARRYI GRAY.—*Parry's Primrose*.—Pacific Slope. April.

DODECATHEON L. SP.

DODECATHEON MEADIA L.—*Shooting Star*.—Banff. June.

GENTIANACEÆ DUMORT.

GENTIANA L. SP.

GENTIANA PROPINQUA RICHARDS.—*Four-parted Gentian*.—Field. June.

GENTIANA QUINQUEFOLIA L.—*Stiff Gentian.*—Banff. June.

GENTIANA FORWOODII GRAY.—*Oblong-leaved Gentian.*—Kananaskis. June.

CUSCUTACEÆ DUMORT.

CUSCUTA L. SP.

CUSCUTA COMPACTA JUSS.—*Compact Dodder.*—Manitoba. July.

BORRAGINACEÆ LINDL.

LAPPULA MENCH.

LAPPULA TEXANA (SCHEELE) BRITTON.—*Hairy Stickseed.*—Broadview. August.

LAPPULA FLORIBUNDA (LEHM.) GREENE.—*Large-flowered Stickseed.*—Calgary. June.

OREOCARYA GREENE.

OREOCARYA GLOMERATA (PURSH.) GREENE.—*Clustered Oreocarya.*—Canmore. June.

OREOCARYA SERICEA (A. GRAY) GREENE.—*Low Oreocarya.*—Gleichen. June.

MERTENSIA ROTH.

MERTENSIA PANICULATA (AIT.) DON.—*Tall Lungwort.*—Canmore. June.

MERTENSIA LANCEOLATA (PURSH.) D. C.—*Lance-leaved Lungwort.*—Canmore. June.

LITHOSPERMUM L. SP.

LITHOSPERMUM CANESCENS (MICHX.) LEHM.—*Hoary Puccoon.*—Medicine Hat. June.

LABIATÆ B. JUSS.

AGASTACHE CLAYT.

AGASTACHE ANETHIODORA (NUTT.) BRITTON.—*Fragrant Giant Hyssop*.—Wolseley. August.

DRACHOCEPHALUM L. SP.

DRACHOCEPHALUM PARVIFLORUM NUTT.—*American Dragon-head*.—Winnipeg. June.

PHYSOSTEGIA BENTH.

PHYSOSTEGIA PARVIFLORA NUTT.—*Purple Lion's-heart*.—Wolseley. July.

MONARDA L. SP.

MONARDA FISTULOSA MOLLIS BENTH.—*Horse Mint*.—Manitoba. August.

MONARDA SCABRA BECK.—*Pale Wild Bergamot*.—Broadview. July.

MENTHA L. SP.

MENTHA AQUATICA L.—*Water Mint*.—Manitoba. July.

SOLANACEÆ PERS.

PHYSALIS L. SP.

PHYSALIS PUMILA NUTT.—*Low Ground Cherry*.—Near Lake Louise. June.

SCROPHULARIACEÆ LINDL.

PENTSTEMON SOLAND.

PENTSTEMON MENZIESII NUTT.—*Menzies' Beard-tongue*.—Wolseley. June.

PENTSTEMON ALBIDUS NUTT.—*White-flowered Beard-tongue*.—Manitoba. July.

PENTSTEMON CONFERTUS DOUGL.—*Douglass' Beard-tongue.*
Banff. June.

PENTSTEMON CONFERTUS CÆRULEO-PURPUREUS GRAY.—
Trundle Mountain, Banff. June.

PENTSTEMON GRACILIS NUTT.—*Slender Beard-tongue*—
Broadview. August.

PENTSTEMON ANGUSTIFOLIUS PURSH.—*Pale-blue Beard-tongue.*—Stephen. June.

MIMULUS L. Sp.

MIMULUS MOSCHATUS DOUGL.—*Musk-flower.*—Revel-
stoke. June.

MIMULUS LEWESII PURSH.—*Lewis' Monkey flower.*—
Rocky Mountains. July.

ILYSANTHES RAF.

ILYSANTHES GRATIOLOIDES (L.) BENTH.—*Long-stalked*
False Pimpernel.—Calgary. June.

VERONICA L. Sp.

VERONICA ALPINA L.—*Alpine Speedwell.*—Laggan. June.

CASTILLEJA MUTIS.

CASTILLEJA COCCINEA (L.) SPRENG.—*Scarlet Painted Cup.*
—Manitoba. July.

CASTILLEJA INDIVISA ENGELM.—*Entire-leaved Painted*
Cup.—Laggan. June.

CASTILLEJA MINOR A. GRAY.—*Small-flowered Painted*
Cup.—Laggan. June.

CASTILLEJA ACUMINATA (PURSH.) SPRENG.—*Lance-leaved*
Painted Cup.—Canmore. June.

CASTILLEJA PARVIFLORA BONG.—*Small-flowered Painted*
Cup.—Pacific slope. May.

PEDICULARIS L. SP.

PEDICULARIS GROENLANDICA RETZ.—*Long-beaked Pedicularis*.—Banff. June.

LENTIBULARIACEÆ LINDL.

PINGUICULA L. SP.

PINGUICULA VULGARIS L.—*Butterwort*.—Banff. June.

PLANTAGINACEÆ LINDL.

PLANTAGO L. SP.

PLANTAGO LANCEOLATA L.—*Ribwort*.—Calgary. June

RUBIACEÆ B. JUSS.

HOUSTONIA L. SP.

HOUSTONIA LONGIFOLIA GAERTN.—*Long-leaved Houstonia*.—Manitoba. July.

GALIUM L. SP.

GALIUM BOREALE L.—*Northern Bedstraw*.—Laggan. June.

GALIUM JINCTORUM L.—*Stiff Marsh Bedstraw*.—Wolseley.

GALIUM SPURIUM L.—*Lesser-Goosegrass*.—Kananaskis. June.

CAPRIFOLIACEÆ VENT.

VIBURNUM L. SP.

VIBURNUM PUBESCENS (AIT.) PURSH.—*Downy-leaved Arrow wood*.—Winnipeg. June.

SYMPHORICARPUS JUSS.

SYMPHORICARFUS RACEMOSUS MICHX.—*Snowberry*.—Calgary. June.

SYMPHORICARPUS PAUCIFLORUS (ROBBINS) BRITTON.—*Low Snowberry*.—Calgary. June.

SYMPHORICARPUS OCCIDENTALIS HOOK.—*Wolfberry*.—Laggan. June.

SYMPHORICARPUS OREOPHILUS GRAY.—*Mountain Snowberry*.

LONICERA L. SP.

LONICERA SULLIVANTII A. GRAY.—*Sullivant's Honeysuckle*.

LONICERA CERULEA L.—*Mountain Fly Honeysuckle*.

LONICERA INVOLUCRATA (RICHARDS.) BANKS.—*Involucrated Fly Honeysuckle*.—Glacier. June.

VALERIANACEÆ BATSCH.

VALERIANA L. SP.

VALERIANA PAUCIFLORA MICHX.—*Large-flowered Valerian*.—Qu'Appelle Hill. June.

VALERIANA SYLVATICA BANKS. — *Wood Valerian*.—Revelstoke. June.

VALERIANA SITCHENSIS BONG.—*Mountain Valerian*.—Laggan. June.

CICHORIACEÆ REICHARB.

Ptiloria Raf.

Ptiloria tenuiflora (Torr) Raf. — *White-plumed Ptiloria*.—Gleichen. June.

TARAXACUM HALL.

TARAXACUM TARAXACUM ALPINUM (KOCH) PORTER.—*Alpine Blowball*.—Glacier. June.

LACTUCA L. SP.

LACTUCA SAGITTIFOLIA ELL.—*Arrow-leaved Lettuce*.—
Qu'Appelle Hill. June.

AGOSERIS RAF.

AGOSERIS GLAUCA (PURSH.) GREENE.—*Large-flowered Agoseris*.—Bow River Valley. June.

HIERACIUM L. SP.

HIERACIUM LONGIPILUM TORR.—*Long-bearded Hawkweed*.—
Qu'Appelle Hill. June.

COMPOSITÆ ADANS.

LACINIARIA HILL.

LACINIARIA PUNCTATA (HOOK.) KUNTZE.—*Dotted Button-Snakeroot*.—Wolseley. September.

LACINIARIA ACIDOTA (ENGELM and GRAY) KUNTZE.—
Slender Button-Snakeroot. Broadview. September.

LACINIARIA PYCNOSTACHYA (MICHX) KUNTZE.—*Prairie Button-Snakeroot*.—Broadview. August.

LACINIARIA SCARIOSA (L.) HILL.—*Large Button-Snakeroot*.—Broadview. August.

GRINDELIA WILLD.

GRINDELIA SQUARROSA (PURSH.) DUNAL.—*Broad-leaved Gum-plant*.—Canmore. June.

CHRYSOPSIS NUTT.

CHRYSOPSIS VILLOSA (PURSH.) NUTT.—*Hairy Golden Aster*.—Broadview. June.

CHRYSOPSIS VILLOSA CANESCENS GRAY.—*Hoary Golden Aster*.—Trundle Mt., Banff. June.

CHRYSOPSIS HISPIDA (HOOK.) NUTT.—*Hispid Golden Aster*.—Wolseley. June.

ERIOCARPUM NUTT.

ERIOCARPUM SPINULOSUM (NUTT.) GREENE.—*Cut-leaved Eriocarpum*.—Broadview. August.

SOLIDAGO L. SP.

SOLIDAGO JUNCEA AIT.—*Early or Sharp-toothed Golden-rod*.—Revelstoke. June.

SOLIDAGO RIGIDA L.—*Stiff Golden-rod*.—Broadview. August.

SOLIDAGO RIDDELI FRANK.—*Riddell's Golden-rod*.—Ellisboro. June.

SOLIDAGO NANA NUTT.—*Dwarf Golden-rod*.—Calgary. June.

EUTHAMIA NUTT.

EUTHAMIA CAROLINIANA (L.) GREENE.—*Slender fragrant Golden-rod*.—Calgary. June.

TOWNSENDIA HOOK.

TOWNSENDIA GLANDIFLORA NUTT.—*Large-flowered Townsendia*.—Medicine Hat.

ASTER L. SP.

ASTER LEVIS L.—*Smooth aster*.—Manitoba. September.

ASTER JUNCEUS AIT.—*Rush aster*.—Calgary. July.

LEUCELENE GREENE.

LEUCELENE ERICOIDES (TORR.) GREENE.—*Rose Heath Aster*.—Manitoba. July.

MACHERANTHERA NEES.

MACHERANTHERA TANACETIFOLIA (H. B. K.) NEES.—*Tansy Aster*.—Calgary. June.

ERIGERON L. SP.

ERIGERON ASPER NUTT.—*Rough Erigeron*.—Calgary. June.

ERIGERON SUBTRINERVIS RYDBERG.—*Threc-nerved Fleabane*.—Broadview. June.

ERIGERON CÆSPITOSUS NUTT.—*Tufted erigeron*.—Field. June.

ERIGERON PUMILIS NUTT.—*Low Fleabane*.—Near Lake Louise. June.

FILAGO L. SP.

FILAGO PROLIFERA (NUTT.) BRITTON.—*Filago*.—Manitoba. August.

ANTENNARIA GAERTN.

ANTENNARIA DIOICA (L.) GAERTN.—*Pink Cudweed*.—Banff. June.

ANTENNARIA DIMORPHA (NUTT.) T. & G.—*Low Everlasting*.—Broadview. June.

RATIBIDA RAF.

RATIBIDA COLUMNARIS (SIMS.) D. DON.—*Long-headed Coneflower*.—Medicine Hat. June.

BRAUNERIA NECK.

BRAUNERIA PALLIDA (NUTT.) BRITTON.—*Pale Purple Coneflower*.—Broadview. June.

HELIANTHUS L. SP.

HELIANTHUS ANNUUS L.—*Common Sunflower*.—Regina. June.

HELIANTHUS PETIOLARIS NUTT.—*Prairie Sunflower*.—Field. June.

VERBESINA L. SP.

VERBESINA HELIANTHOIDES MICHX.—*Sunflower Crown-beard*.—Manitoba. July.

COREOPSIS L. SP.

COREOPSIS CRASSIFOLIA AIT.—*Thick-leaved Tickseed*.—Broadview. June.

HYMENOPAPPUS L'HER.

HYMENOPAPPUS FLAVESCENS A. GRAY.—*Woolly Yellow Hymenopappus*.—Pacific slope. May.

HYMENOPAPPUS FILIFOLIUS HOOK.—*Low Tufted Hymenopappus*.—Qu'Appelle Hill. June.

GAILLARDIA FONG.

GAILLARDIA ARISTATA PURSH.—*Great-flowered Gaillardia*.—Calgary. June.

GAILLARDIA PULCHELLA FONG.—*Showy Gaillardia*.—Broadview. June.

THYMOPHYLLA LAG.

THYMOPHYLLA AUREA (A. GRAY) GREENE.—*Thyme-leaf*.—Trundle Mt., Banff. June.

ARTEMISIA L. SP.

ARTEMISIA CANADENSIS MICHX.—*Canada Wormwood*.—Manitoba, July.

ARTEMISIA FRIGIDA WILLD.—*Pasture Sage-Brush*.—Gleichen. June.

ARTEMISIA GNAPHALODES NUTT.—*Western Mugwort*.—Manitoba. July.

ARNICA L. SP.

ARNICA CORDIFOLIA HOOK.—*Heart-leaf Arnica*.—Laggan. June.

ARNICA LATIFOLIA BOUG.—*Broad-leaved Arnica*.—Laggan. June.

ARNICA CHAMISSONIS LESS.—*Chamisso's Arnica*.—Laggan. June.

SENECIO L. SP.

SENECIO TRIANGULARIS HOOK.—*Mountain Senecio*.—Field. June.

SENECIO FRIGIDUS LESS.—*Arctic Senecio*.—Lake Louise. June.

SENECIO INTIGERRIMUS NUTT.—*Entire-leaved Groundsel.*
—Kananaskis. June.

SENECIO LUGENS RICHARDS.—*Black-tipped Groundsel.*—
Canmore. June.

SENECIO CANUS HOOK.—*Silvery Groundsel.*—Broadview.
June.

SENECIO PLATTENSIS NUTT.—*Prairie Ragwort.*—Ellis-
boro. June.

SENECIO DISCOIDEUS (HOOK.) BRITTON.—*Northern Squaw-*
weed.—Wolseley. June.

SENECIO COMPACTUS (A. GRAY) RYDBERG.—*Western*
Squaw-weed.—Kananaskis. June.

SENECIO AUREUS PARVIFLORUS (PURSH.) BRITTON.—
Small-flowered Squaw-weed.—Laggan. June.

SENECIO PALUSTRIS HOOK.—*Marsh Groundsel.*—Mani-
toba. July.

CNICUS L. Sp.

CNICUS ERIOCEPHALUS GRAY.—*Woolly-headed Thistle.*—
Pacific slope. May.

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