

Cusick

Unworn Oregon
July, 20th 1878

My Dear Sir:-

Herewith I
send you a package of
plants for determination
Part were collected in
western Oregon part on
the road from there here
and the rest here
I should, probably, have
not sent them till fall.
but the hostile indians
are coming so close
there is some danger
~~that~~ of my having them
destroyed.

Some of the plants are
mentioned as from the
Eagle Creek mts. These
mountains are in this Co

~~Between~~ North of Powell's
River + the highest I
know of, in this vicinity

The seeds &c. you
wished me to send you
I shall try to send this
fall. Any criticisms on
my notes on specimens
will be acceptable

Have also, through
Mr. Hoolson, your *Flora of*
N.A.,. Though I am not qual-
~~ified~~ to criticize I doubt
not it is a most excel-
lent work + trust you
may be spared to complete
it

Very Truly Yours
Wm. C. Cusick

1
List of Plants from the
C. Curtis, Union Co Oregon

July. 1878

548 *Urena nemosa* &
Early spring. Willamette
Valley.

555 *Coprosma corymbosa*, Salisb.

Greenish white some of the
flowers are only staminate
Thick woods Cascade Mts
Tinn Co. April

628 *Lupinus latifolius*, Dougl
Purple dry mtn ridges
(this co.) June

68 *Astragalus Cusickii*

Fruit

- 5~~87~~⁷⁶ *Arenaria*? = *Cerastium arvense*, L.
White - Dry gravelly soil, lower
Cascades (Col. Riv.) April. M.
- 5637 *Arenaria* *Congrata*!
White, Low mtn. Heavy soil.
rare. June. (Have sent spec.
of this to Mr. Hooker)
- 561⁶ *Thlaspi alpestre*, L.
White. Eagle Crest mtns
Dry hillsides. June.
- 5633 *Arabis hirsuta*, Scop.
White. Stream banks rare
May June
- 582 *Cleome lutea*, Hook
Bright yellow. Very disa-
greeable odor! In sand about
mouth of Unalakleet Riv. April. M.

- 1 585 *Capsella divaricata*, Walp.
 White. Rare in grain field
 Spring
- 584 *Lappula laciniata*, Nutt.
 Rare white. Biennials, 6'-18'
 much branched at root, often.
 Rare in clefts of rocks in Jun.
- 591 *Salvia?* = *Ambrosia incana*
 Blue purple. In rocky hill
 lower Umavilla April, M. (just
 coming into blossom)
- 590
~~577~~ *Oenothera strigulosa*, 789.
~~White~~ Yellow
 White. sandy soil lower Umavilla
 April, M.
- 619 *Oenothera rayphorum diffusum*, 789.
 White. Edge crest mtns
 Dry ridges. June
- 664 *Epilobium organifolium*, Lam.
 Purple in & along small mtn
 stream. June Jul (sent you
 spec. of this last year)
627. *Claytonia Chamissonis*, Esch.
 White. The stolon producing

- 1628 *Grainlike buds which send
 up new plantlets. Wet soil
 High (Eagle Creek) Mtns. June*
- 1629 *Claytonia triphylla*, Wats.
 White. moist ground Eagle
 Creek Mtns. June (In connection
 with & considerably resembling
Hesperochloa pumilus)
- 1632 *Montia fontana*, L.
 Along small vernal streams
 High hills June
- 1631 *Oenothera inaequalis*, Nutt.
 Light blue 3rd - 7th. Deciduous. Moq.
 Hill side back of Dallas City.
- 1646 *Anemone forsteri*, Nutt.
 Yellow. Wet sandy soil. Common
 June 1st.
- 1636 *Senecio. Tomentosa* ?
 Yellow common on high hills
 open ground June.
- 1635 *Crepis occidentalis*
 Yellow common on high hills
 June

- 1642 *Antennaria racemosa*
White, Dry mt. sides, Eagle
Creek, June
- 1628 *Erigeron decumbens*
Purple, Dry mt. ridges Eagle
Creek, mt. June
- 1595 *Balsamorhiza* ^{Hookeri, ~~poning~~ ~~B. tenbrinthra~~}
Crawford's Hill Blue, mt.
(One spec; only coll.)
- 1584 *Townsendia grandiflora*
Pinkish, 3'-4' Lowa *Microtella*
Sandy soil, April, W.
- 1598 *Antennaria luguloides*
White, Common on low ridges
May.
- 1630 *Bahia oppositifolia*
Yellow, Dry soil, Eagle C. mt.
June.
- 1643 *Gaillardia aristata*
Rays yellow disk brownish
red, Grand Round Valley.
Dry soil June July.

- 5618 *Collomia linearis*, var. *subulata*
~~*Collomia*~~ White (sometimes pale
 yellow.) Sunny rocky mtn
 sides. Eagle Crest mtns, June
 (This resembles a small form of
C. grandiflora but is found in
 high mtns & blooms at least
 a month earlier than the latter)
- 5624 *Hydrophyllum virginicum*
 White. Inside of corolla lobes
 purple. Wet soil. Subalpine
 Eagle Crest mtns, June (Have
 sent spec. of this to Mr. Woodson)
- 5622 *Chimaphylla Menziesii*
 Not in full bloom when Collected
 Eagle Crest mtns.
- 5658 *Mondropia hypoleuca*
 Tawny. Black timber on low
 mtns July.
- 5643 *Diarella unguiculata*, Hook.
 (Flowers not seen. Sautman River
 Gunn Co. Col. in winter)

- 1 560 Saxifraga *viridula*, Mo 7
White. On rocks Sautem Riv.
Linn Co. Marsh,
- 580 *Fraseria nitida*; Benth (ex)
Blue On hill back of Dallas
Perennial! (*F. speciosa* - in
common form - grows for several
at years (4 or 5 at least) then
blooms & invariably dies.)
- 5623 *Rentsternia ovata* W.
Deep blue purple 1st 2nd much
branched at root. Rocky hill
sides Eagle Creek June (sent
me Woolson spec.)
- 5645 *Veronica purpurea*
Thick wet soil common.
common.
- 5644 *Rentsternia gracilentus*
Blue low into ridge, rare
June.
- 5609 *Polygonum tenuis*, Mo. -
Hill sides, stems often red
June

15647 *Eriogonum nudum*, Dougl. - var. *paniculatum*
 Dull white or pinkish white, strip
 down center of sepal. Cliffs
 low mts. Rose, Jul.

1558. *Garrya fremontii*, Torr.

Diocious. On rocks subalpine
 Cascade Mts (Lincoln Co.) a low
 Ceanothus looking shrub. Early
 spring.

- 643, *Saillandia aristata*.
- 644, *Pentstemon gracilentus*.
- 645, *Veronica peregrina*.
- 658 *Manfreda monstrosa* *Hypoxys*
- 622 *Chimaphila Menziesii*
- 624 *Hydrophyllum virginicum*.
- 630 *Botria oppositifolia*.
- 578 *Androsace leucoides*
- 595, *Balsamorhiza Hookeri*, *Gray*
to *Bilobedentata*
- 628, *Erigeron decumbens*.
- 642, *Ailanthia racemosa*.
- 635, *Crepis occidentalis*.
- 646, *Anemone foliosa*, *Gray*.
- 636, *Suaeda tomentosa*?
- 591, *Audubonia incana*
- 586, *Astragalus succumbens*.
- 588 " ? for want of fruit.
- 593 " " "

of collection ne Dec 1876

- 109 = *Carex festiva*
- 66 " *Jamesii*
- 607 " *Southernii*
- 599 " " *quadrilobus* form?

- 565 *Prozartes Menziesii*, *Gray*
White. W. Hill sides, Willamette
Valley. Spring
- 566 *Prozartes Oregona*, *Watson*
White, same habitat & time
of blooming as preceding.
- 567 *Trillium lanceolatum*, *Pursh*
Dark purple. Willamette val
ley, Spring.
- 594 *Calochortus elegans*!
Crawford Hill blue netus
- 610 *Calochortus elegans*, *Bth*, *var. nivalis*,
V. F. F. D.
Low netus Union Co. June.
- 621 *Calochortus strictus*, *Gray*
Purple, Eagle creek netus.
Rare, (Western Oregon also)
- 561 *Lithospermum cordatum*, *R. Br.*
Greenish. Common in thick

mossy woods, Linn Co.
Spring (sometimes tinged
purple)

↓ 659 *Habenaria gracilis*, Watson
Green. Growing in small
mountain stream bed, Loue
spec. only seen

↓ 576 *Cheilanthes gracillima*, Watson
On rocks higher Cascade
Mtns Linn Co.

A list of some plants from W. C. Cady,
 Museum Dr. 1880 - detoured Feb. 1881.

909 *Salix* *livida*, Wahl., var. *occidentalis*.
 Along stream. Early spring

908 *Salix*

Same as 909

875 *Salix cordata*, Wahl., var.

Same as preceding

826 *Salix* - not reported upon. Do not mistake it in herb
 Alpine boys &c. (sent Lachyran, you
 reported it sent to Mr. Britt.)

896. *Arabis Lyallii*, Watson

White alpine dry soil Aug.

892. *Candanthus hastatus*, Watson.

One very white; damp Alder thickets al-
 pine 3-4

644^a & 644, *Pentstemon gracilentus* = *P. attenuatus*, Dougl.

The form 644 was sent 2 or 3 years ago mist-
 ly in fruit. You named it as above
 This yr sent specimens 644^a &
 Dr. Gray said not *P. gracilentus* the
 stamens different. Thought it was
 an open form of *P. confertus*
 These two are the same, I think, 644 in

more sterile soil. It looks, in general appearance, much more like a slender form of P. globosus. It differs from P. confertus in at least one point: The latter in all its various forms is inclined to branch below the ground - stoloneiferous like, commonly sending up but one stem in a place. There ^(644 & 644a) are much branched above the ground, that is at the surface, after the manner of P. globosus.

484 Helianthus Nuttallii Torr. (Wet soil)

³⁻⁴ I suppose. Sent some years ago, I may send better spec. which no doubt you can name.

891. Asplenium Nuttallii, Watson - staminate
Sterile soil Aug.

683 actis Cusickii, Gray (1 spec. in Gray's wishel mass)

910 Antennaria Carpathica, DC. - low form
alpine. Sep. 8000 ft.

904. Hieracium triote, Willd., var. debonsum, Gray
yellow, alpine 10000 ft. (dry soil sep)

905 - Asplenium alpinum, Gray (& probably A. pulchellum, Eaton)
Purple white the preceding.

- 907 ~~Ptilocaulis~~ = *Stylocline filaginosa*, Gray
sterile soil - June
- 730 *Alopecurus laevis*, Gray
erect last year. You said it's sp. but don't
yet know the name.
- 208 *Rou Nutkoun* & low mtn's 2°-3°
- 906 *Sibbaldia Ivesia Gordonii*, Tom & Gr
Yellow turning white as they fade - grow
in sand Eagle Crest mtn's 10000 ft,
Sep.
- 886 carex - too young.
- 889 *Carex filifolia*, Nutt.
("Wool grass") Northern slopes. a very ten-
= cious sod.
890. Poa — ?
on low mtn's in unusually damp soil
June
- 815 *Danthonia sericea*, Nutt.
So named from poor spec. sent
last year, there are better, I hope
882. *Festuca occidentalis*, Hook.
Subalpine
- 881 ("Pine grass") *Poa canis*, All.
Subalpine in open pine wood
very common

- 880 Triticum carinatum, L. (4.)
 Low mts dry soil
879. Triticum commune, Trin.
 Subalpine, Dry soil
- 878 Festuca microstachya, Nutt.
 the same
- 877 Luzula comosa, Meyer
- 876 Melica Geyeri, Munro
- 898 Stipa occidentalis, Thurb., or near it.
 alpine Dry soil - Sept.
- 900 Melica bubosa, Geyer
- 764 Triticum repens, L. ("Blue joint")
 Native! In moist meadows forming a dense cover 2°-3°
- 763 Triticum repens, L.
 Native! More in "stems" than the preceding & commonly dryer soil 3°-4° I sent these last year but you wanted more spec. before naming.
- 885 Claytonia caroliniana var. serotifolia, Torr.
 Has never seen any "subtle leaf"
 Early spring.
- 887 Ranunculus flammula, L., var. optatus
 yellow. In soil that is wet in spring but dry after. Subalpine - May here.

~~prostrata~~ ~~small~~ ~~filix~~ ~~maris~~. ^{prostrata} narrow-leaved form of *L. palustris*, L.
The broader leaved specimens seem to be *L. Anandria*.

- 193 *Lathyrus ovalis* ?
- 888 *Lathyrus polymorphus*, Nutt., ^{with} ~~with~~ ^{the} ~~the~~ ^{less} ~~less~~ ^{developed} ~~developed tendrils
Purple - Dry hillside, June~~
- 756 *Lathyrus venosus*, Muhl., as called, but hardly the same
(Fruit-) Flowering sp. sent last year
^{which I did not} you could not name - wanted fruit
- 122 *Spiza betulifolia*, Pall.
white - common shrub 12-18' on low mountains. Commonly sending up but ~~a~~ ^{one} ~~single~~ stem from the root.
- 883 *Epigonum medium*, Fries
Pink. damp soil. Closing in cloudy weather. As at Union
- 872 *Nemophila parviflora*, Benth.
White - with purple spots. Wet soil
- 873 *Nemophila* ~~brexiflora~~ ? (From
- 253 *Aquilegia flavescens* & *flavescens*, Watson
Alpine yellow varying to red
- 830 *Sambucus racemosa*
Black fruit - sent last year
Pith brown or orange
^{✓ all no specimens of either - in between with some, from.}
- 94 *Habenaria dititata* ? *leucostachya*, Link.
- 893 *Corallorhiza innata*, R. Br.
Alpine moist shade any,

(6) The other, and before, seems to be a
distinct species.

214 Sedum Douglasii!

I have always called this. But spec
of another sp. sent in the summer
Dr Gray says = Bolander's of Mendocino
Co. referred to Douglasii. I shall send
roots of these (214) & find out whether
if I can get them this fall.

894 Phacelia circinata (alpine perennial ^{8000 ft} form)

895 Mitella pentandra, Hook (Alpine)

897 Lophanthus urticifolius, Bth.
alpine dry soil

901 Viola canina, L., var. rupicola, Reyer.
8000 ft. Eagle Creek Mtns Sep.

902. Pellaea Breweri, Eaton
On Rocks 8000 ft.

903 Potentilla? Gitua Larseni, Gray
white veined purple Anthers blue
Dry granite sand, 10000 ft, Sep.

850 Arenaria Fendleri, Gray
Sent in the summer & Dr Gray said
save some for Watson, on sterile sub-
alpine ridge near the mining village of
Hoyem June.

Allium, near A. parvum, Kell., but probably new.

Sent at the same time & left for you (Call, near the same place & at same time)

861 Celtis - Do not know yet

also sent in summer but could not be determined for want of fruit

I send all I have.

448 Epilobium tetragonum (again)

the common form

911 Epilobium - the small spec. which I find the large subalpine, purple both grow in beds of small streams and have the bulb-like clusters of leaves at root - ~~the~~ similar to 448, but I think they are distinct from it. I have not seen any forms of either (448-911) that seem to approach any nearer them than sent, and I have been watching them

all pretty carefully this summer

464 E. organifolium (the common form)

821 Alpine form in dry soil - Provenant - bent & differing considerably in general appearance. The specimen sent - 821 - is small

Epilobium alpinum, L.

The altitudes when given are only guesses

911. The large possibly E. organifolium
The small probably reduced E. tetragonum

list of Plants sent by W. B.
Cusick April 9, 1882

- 88 *Erigeron* ^{floribundus, Nutt} ~~*caespitosus*~~ ^{with} than always
called this but it seems just
like what you call *S. sphaer-*
rocephalum. Wryk.
- 992 *Urtica* ~~*hyattii*~~ ^{*holosericea, Nutt*} ~~*thalassia*~~ 3°-4° stem-
bark etc. Common
- 971 *Phlox longifolia*, Nutt
Rather decumbent - 10 or more lvs
a very pretty species.
- 968 *Salix Barclayi*, Hudson. I have
never sent you (Mr. Britton determines)
- 978 *Pentstemon* ^{*trichy. ins., Dougl.*} ~~*densatus*~~ ^{*Franch.*}
^{*in plants*} I may
call it but I think must

be wrong. There are the follow-
ing differences: 968 has leaves
in whorls of 4-5 is much more
branching & slender & decumbent
also blooms nearly 3 months
later. One plant only seen grow-
ing in face of a cliff & a few
in perfect specimens hastily
gathered. Please look at
• them again. I will now write
it a spec. of *P. densatus* as we

I named all 9 - some of these

- have it very common -
185 - *Pentstemon muricatus*, Dougl!
1573 *Saussurea americana*, Baker

Betta spec. - than before sent.

- 1995 *Aplopappus glaucocephalus*,
or a *probulbifolius*, or *virgatus* - the outside
I think this is but different
from the common form

- 533 *Antennaria*, *trifida*, var. *rigida*, Dougl! this
was called when sent some
years ago. You have perhaps
retitled it by this time, I think
it cannot be that.

- 1996 *Antennaria biennis*? Willd.
biennial - 1-3' profl. stem. - com-
mon on stream banks at 3000 ft.
alp. (said in Post-Cal not to come in for
west)

- 414 *Thalictrum occidentale*, Gray!
I call this but have not seen. -
Common on mountains at 4000 ft.

- 896 ~~*Thlaspi*~~ *alpestre* one of the lowest
but ones. - I have not the fruit.
You called it *Thlaspi* for me
a year ago - but it differs in
the roots which in the latter
are thick like those of *Cherem-
them* *Montanum*, & in having white

(3)
flowers. - white like A. Lyallii
has purple as given in Bot. Cal.
This is common & I'll try and
get fruit if you don't have it.
991 Arabis — n. sp.?

You said from flowers,
specimens subtyle
suffruticosus or suffruticosus
would seem to be a good name
for it, as it is woody at base.

W. C. Cusick.

Union Co., Oregon. Oct. 1884.

1204. Hypnum orthocladon Beauv.
1205. Orthotrichum sp? (anomalous?)
1206. Mnium serratum Laich.
1206'. Hypnum orthocladon Beauv. - form
nearer H. serpens than 1204.
1207. Pottia cavifolia Ehrh
1208. ? sterile.
-1209. Bryum pendulum Schp?
-1209'. Funaria hygrometrica Sibth.
-1210. Bryum roseum Schreb.
-1211. Funaria hygrometrica Sibth.
-1212. Bryum caespiticium L., (var?)
-1213. Aulacomnium androgynum Schwärz.
-1214. Bryum purpurascens. (?) B. & S.

C. R. Barnes Jan'y 1886,

Eastern Oregon Plants

from
W. C. Cressk - 1897. (Copy)

- 1815 & 1747 Ranunculus subserotinus
1815 is peculiar showing
orange flowers.
- 1796 Delphinium ^{sub album Gray} serpulorum V.
with white flowers - Rare
- 1669 Delphinium ^{var. glaucum Nutt} ~~var. glaucum~~ Nutt
was called for me many
years ago. - But of course
that is wrong. Dooley
(Blue) nitens. pure.
- 1798 Aconitum columbianum, ^{Nutt}
I have seen before.
A form of it has
nitens with yellow or white
flowers but always with
purple tinge shade.
Sometimes a yard or
more in height.
- ~~1668 Sedalcea spicata? Gray~~

1668

2

~~Buck Creek near the desert
Cook Co. June - just com-
ing into flower.~~

> 1669 *Cambya aurea* Watson.

In sand among sage-
brush - margin of the desert
Cook Co. June.

1662

F. l. alba - margin of
the desert. Stansbury Co. June
15-16.

1650 *Viola cornuta* var. (?)

Early Spring

> 1653 *V. nuttallii* (?)

Grass prairie - Southern
Blue mts June -

1608 *V. nuttallii*, as it
commonly grows here.

> 1739. *V.*

White fl. Blue mts
in bogs + c. Aug.

1647. *Arenaria*

1647 *Arenaria Fendleri* Gray
this has been called
for me, but I see
that *S. species* is not
given as found here
in *Syn. Fl. Ariz. Mexici*
of the desert S. E. Mex.
and not rare. June

1664 *Arenaria Frautleri*?

I have never seen
before - Mexican of the
desert June - Rare

1775 *Silene Douglasii* (?)

From the higher Blue Mts
Ariz.

1778 *Leptochloa asarifolia* (?)

Higher Blue Mts in wet
soil especially about
the base of cliffs.

71656 *Spraguea umbellata*.

Typical(?) From the section
Blue Mtns; Sandy soil in
open forests. - June.

71724 *Spraguea umbellata*,

S. multiceps? A well I
suppose, the prevailing
form here. - High best
Mtns

1668 *Sidalcea spicata*, form?

Buck Creek. - near the
desert Creek Co. June
just coming into bloom.

21769. *Linum Lewisii*, ♂

A form of the highest
Blue
mountains. 7-8000ft.

~~1678~~ *Linum*

~~from the Southern Blue
Mtns. Cook Co. June 28.~~

- 1632 *Lupinus*
Oto Valley, Malheur Co.
Common throughout
that region.
- 1716 *Lupinus*
dry open ground of the
highest Blue Mtns Aug
- 1737 *Trifolium longipes*,
We have this in many
different forms. Blue
Mtns.
- 1654 *Trifolium involucreatum*
meadows of the Blue Mtns
Bear Valley. June.
- 1654^a *Trifolium macrocephalum* (?)
Ruppl. - This may be
an abnormal form of
Salvia's River. - S. Blue
Mtns - June.
- 1696 *Trifolium*.
Ruppl. - Bear Valley
- Blue Mtns - June.

1658. *Astragalus*. (?)
 Bear Valley. - Blue River
 the dry sterile soils from
 1812 = 1658 - But a larger growth
 Honey Valley. - June -
- 1690 *Astragalus*.
 Mountain Creek, Grant
 Co. July 2.
1686. *Astragalus Hookerianus*
 from foot of Mt. Vintu, Grant
 Co. June 30.
- 1711 *Lathyrus Nuttallii* (?)
 Vintu gulches. July.
- 1814 *Tiarella unifoliata*. Hervey
- 1697 *Kosa pisocarpa*, Gray.
 From the Southern Blue
 Vintu where it seems
 to be the prevailing
 form. =
- 1705

Blue Vintu of Union Co.
 Found here only on the

7
rites at about 4000
ft alt.

1770 *Poterium bungei*.

Dr Watson called this for
me many years ago.

It is not widely distrib-
uted, apparently, Blue
rites of North Powder Riv.
4000-5000 ft alt.

1740 *Potentilla*.

Blue rites 6000 ft. Boy's etc.

Aug.
1658- *Potentilla*

Blue rites - Blue Valley
June.

1709 *Spiraea betulocoloria*, var.
conumbosa, White-fl.
Low dry rites.

1761 *Galium*

Tules of Grand Ronde Val

- Aug.

1672 *Del Tournefortia* -
desert region - June

- 1636 *Aster scopulorum*, Gray
 But differs some from
 spec. previously sent
 margin of the desert
 Common - June.
- 1721 *Lolidaea*
 From the highest mts
 (Bl.) Black summit, 9-9000
 feet alt.
- 1773 *S. multirostrata*, A. N. S.
Scopulorum, Gray
 or near it, highest
 Blue mts, base of cliffs.
 Aug.
- 1734 *Sol. missouriensis*, (?)
 I have never sent before
 broody hillsides not
 common - Aug.
- 1658^a *Aster* (?)
 (no duplicates) S.
 Blue mts.
- ~~1636 *A. scopulorum*, Gray.~~

~~1820~~

(9)

1820 *Aster Douglasii*.

The common (typical?) form

17769 *Aster*.

Nitidus (Pcha) 4000 ft alt.

Perhaps a depauperate form of

17821. ~~*Aster Douglasii*~~.

Common but apparently distinct.

1794 *aster*

Eagle Creek (Powder River)

Nitidus 5-6000 ft. Aug 30.

1788 *aster*.

~~Blue Nitidus 5000 ft alt.~~

Eagle Creek (Powder River)

as 9.

1771 a = 1794

apparently. - Blue Nitidus

1693 *Eugenia*

From the Southern Blue Mt.

near Ochs co. Riv. June 30. = (?)

1725 *Eugenia*

Blue Nitidus

(10)

- 1792 *Erigeron*
White-rays. -
Trout Creek - Eagle Creek
(Powder River) Utah
Aug 30. - 5000 ft. ab.
Steep banks.
- 1694 *Erigeron*
Pink rays. Not recorded
of the John Day's Riv.
July. 5.
- 1695 *Erigeron*
White-rays - with the
preceding. - Just coming
into bloom -
- 1736 *E. acris?* L.
- 1823 *Erigeron*
S. Blue Utah June 30.
- 1698 *Erigeron decumbens?*
White rays. - Lookout
Mtn. Crook Co. July 2.
- 1673^a *Antennaria Seppii*,
I never collected before
S. Blue Utah. Crook Co. June
30 just coming into bloom.

- 1673 *Antennaria Canadensis* (?)
 But it differs from
 that as we have it here
 S. Blue with Cook Co
 June 30.
1631. *Dimeresia Howellii* Gray,
 Hight. of. Lovell Rock with
 Walker Co. June 15.
- 1677 *Balsamorhiza sagittata*.
 But differs from that we
 have it here. - Hillsides
 of the Choctaw Cook Co.
 June 28.
- 1680 *Helianthus Douglasii*
 Gulches of the S. Blue
 with, Cook Co. June 30.
- 1768^a *Bidens frondosa* (?)
 Tules
- 1660 *Tanacetum* (?)
 alkalin soil. Hurley V. Co.
 8 or June

- 1641 *Arnicu foliosa?*
The form common in the
S. Blue Mtns. June 14.
- 1810 *Arnicu*
From the highest Eagle
Creek (Powder River) Mtns
8-9000 ft alt. Steep N.
Slopes.
- 1795 *Arnicu*
Steam-banks of Eagle
Creek (Powder River) Mtns.
5000 ft alt. Aug 28.
- 1710 *Arnicu latifolia?*
Blue Mtns, dry soil 4000
ft alt. July.
- 1797^a *Arnicu*
Steep banks of gulch
Eagle Creek (Powder River)
Mtns Aug. 30.
- 1789 *Arnicu*
Sterile ridges. Eagle Creek
Aug 20. (Powder River) Mtns. 5000 ft.

1617 Senecio

A form from moist sub-alkaline meadows. Seen in Powder Riv. Valley only.

June - July.

This comes near the form of S. Conus that is called S. Howdellii. From them anything else I have may be a distinct spec.

1776. Senecio

In granite sand base of cliffs in Blue Mtns 7-8000 feet above sea.

1674 Cinna

Wet meadows of the S. Blue Mtns

1676. Cinna.

Hillsides of Ochoco Mts.
Blue Mtns June 28.

1692

Hillsides of the John Day Riv.
July 1st

- 1763 *Cepis verrucata* T. G.
But differs some from
specimens sent before.
- 1665 *Doronicum pulchellum?*
margin of a small
lake near the desert
June. - But differs some.
- ~~1714 *Pyrola picta* dentata.~~
- 1605 *Wodeathen*
D. jeffreyi, var. Gray along
called this, but it
seems to me that
is wrong.
- 1638 *Dodecatheon*
From the Southern Blue
Mtns - head of Otis
Creek, fr. Crane Prairie
fl. June. - is probably
the same.
- 1635 *Fumaria*
From head of Otis Creek
Blue Mtns June 11.
Near *F. busckii* but
differs some.

1671

Sandy banks of S. fork of
Crooked Riv. near the head.

June 24. *aristella*, Gray

1672 *Gilia leptopoda*, Gray

S. Blue Mts., of the Ocher

1630 *Gilia micromeris*, Gray

Castle Rock Mts., 10 June

1737^a *Gilia Gayophytum* *pusillum*, Watson

Blue Mts. of North Powder
5000 ft. Aug.

1629 *Mertensia* *Siberica*, Don

but differs from spec.
previously sent.

Castle Rock Mts. June

10.

1693 *Convolvulus arvensis*, Linn

From the gravel washes
of gold mining of the
John Day, July 2.

1760 *Convolvulus*

This seems to be the same

but is thought to
be native of Grandlow
valley (Union Co.)

I was told by one
of the oldest settlers
at Union that this
plant was here when
he came, 35 years
ago. Found mostly
in cultivated grounds
where it is a great
pest. The long stems
are covered with buds
which start an ^{independent} ^{growth}
pendant, whenever
the plant is disturbed
by plow or cultivator.
Apparently I could
have not seen it but
in and near Union.

1637. *Rentstemon*. *Gairdneri*, Hook.
The typical form? Have never
seen it before - S. O. Blue
Nutt's *Herb. of Ohio* Cook?

>1675. *P. Richardsonii*,

I have never seen before
Cliffs of the Ocheres

>1796 *Castilleja viscidula*, Gray
this was called for me
but with a mark of
doubt. Highest Eagle
Creek (Powder River Mts.)

1742 *Castilleja pallida* "Kuntz."
~~Cyanous flowers~~
Is it the var. septentrionalis?

>1648 *Orthocarpus*?

From the S. Blue Vireos
Creme prairie, June 17

1702 *Orthocarpus*

I should be able to
match as it is common
+ July.

>1700 *Orthocarpus*

Summit Valley - Blue Vireos
July 6. Pale yellow readily
turns to red.

>1625

Hieracium of the Malheur, June

June and June 18th
connection with the *C. Janiflora* group
19 Feb. 98. J.M.S.

- 1763 *Polygonum amphybium?*
Tules of Grand Bend
- 1764 *Polygonum*.
With the preceding
- 1765 *Polygonum?*
- 1766 "
- 1691 *Eriogonum ovalifolium*, var.
Mountain Creek, Grant Co.
- 1759 *Chenopodium?*
Grand Bend Valley in
alban soil. Aug.
- 1663 *Atriplex argentea*, Nutt.
But more slender than
I sent before, margin
of the desert Honey Co.
- 1826 *Suaeda diffusa?* Nutt.
(Small) Grand Bend
Valley, Aug.
- 1827 *Allium Canadense*, Kaln.
Can't this? Blue Vitis
in swampy meadows, head
waters of John Day, July
6.

1642 Allin?

Blue Vitis. Head of Otis Creek
June 14. Purple - mostly
past bloom.

1671^a

Alaska's Soil near
desert.

Notes of Coll. J. & M. B.
Bevier. 1897.

1820. *Aster Chamissonis*. Gray.
Late Aug. early Sep.
Very abundant on
stream banks. (Lucas Co.)
3-3500 feet alt.
- 1821 *Aster Fremontii* Gray.
Aug. - early Sep. - Generally
distributed
in most situations. 3-4000
feet alt.
1769. *Aster Fremontii* Gray.
Aug. 18. Still wet. - not
dry soil - 4000 feet. in
one place only.
1736. *Eriogonum acris* L.
Aug. 5. - most shady
situations. 4000 feet alt.
Blue mts. of N. Powder River.

1768^a *Bidens ponderosa*, L.

Aug. 9. Tulas. of Grande
Ronde Valley. - 3000 ft
alt. only a specimen or
two seen - But evidently
native.

1713 *Crepis leucinata* V. J. G.
~~to~~ July. 15. Common in wet
subalpine meadows
3500 - 4000 ft.

1766 *Polygonum Persicaria*, L.
Aug. 9. Grande Ronde
Valley. 3000 ft. alt.
Especially in the "Tulas"
may be introduced.

1765 *Polygonum acre*, var. *leptostachyon*
= *grum*, *reiseri*.
Aug. 9. Tulas of Grande
Ronde Valley.

1603 *Sodeatherum media*, L. var.
Late May - Early June ^{July} - fruit
3500 ft alt. Common here.

- 1814 *Viola unijoliata*, ^{Wats.}
 Aug 5. Common in
 with bog stream-
 banks. 5-6000 feet alt.
1608. *Viola nuttallii*. Pursh.
 Very common in 3-4000 feet
 May.
- 1650 *Viola canina* L. v. ^{Gray} *adunca*
 17. June. Moist soil ~~Cross~~
 Crane Prairie, S. Blue
 with. 4000 feet. Probably
 not rare.
1709. *Spiraea betulocifolia*, v.
[^] *Corymbosa*, Wats.
 July 10. By with sides
 ridges. 4000 feet alt. - White
 fl. Commonly in partial
 shade. Very abundant
 here (renewed) but not
 seen (?) in S. Blue with.
 I have seen this several times
 thinking it a good species

1742. *Castilleja ovifolia*. *Grumma*
v. subintegra. Terminal
 Aug. 5. Common in the
 bogs &c. - never in thick
 shade - 6-8000 feet.
 Blue vitis (But apparently
 not far from) + Powder
 Riv. (Eagle Creek) vitis.
 Bracts deep purple red;
1798. *Scimitum Columbianum*, Nutt.
 Aug. 30. Bogs &c. of our
 highest vitis. Especially
 Powder River ("Eagle Creek")
 vitis. 6-7000 feet alt.
 (This differs considerably
 from the form common at
 ordinary altitudes (3500 feet)
 being much smaller &
 differently colored. The
 common form fl. in June.
 and is 4-6" high -
- This seed spec. of the
 common form not 1 year. Red
 edge.

1796 *Delphinium scapulosum*
var subalpinum, Gray.

5000 feet alt.

Aug 28.

4-80. Abundant in

dry gulches & banks in
the Powder River (Boyle Cr.)

rites. - Much more rare
in the Blue rites proper
dark purple fl. - A white
fl. form seen and sent?

1815
What I think is a young
specimen of *Del.* in my
herb. is labeled *Del. affinis* (B.)
not numbered.

Ranunculus Luteodorus Gray.

Aug 19. Blue rites 8000 feet
alt. about the base of cliffs
in disintegrated granite
where it almost always
grows. Common in all
our rites at this alt. & in
this situation.

In young specimens
the flowers are much larger
What I think is a young
specimen of *Del.* is the lobed leaf
of *Del. affinis* (B.) *Del. affinis* (B.)
not numbered.

6

207

1747 *Laucium* Surt & DayAug. 5. wet rocks S. of
the Blue River. ⁷⁵⁰⁰ 8000 feet.alt. (only a hundred
yards to S from no. 1815.)1702 *Orthocarpus tenuifolius*, BenthJuly 10. In situations moist
in the spring but dry later3500 - 4000. Probably not
rare.

Notes on Collection of 1899. - A. C. Curtis

- 2203 *Thermopsis montana*.
Common in moist or wet soil.
June 24 - July.
- 2331^a *Lupinus laxiflorus*, Dougl.
Mountain form. - Sweet slope of Wallawa
m^t's, and common. Sept. 9th (flowers)
1896. *Lupinus colcaratus*, Kell. (fruit only)
flowers set last year. - Hills near Snake
river, July.
2331. *Lupinus*.
Not rare on mountain stream banks. Banks
of West Eagle (Curb.) Sept. 1st flowers + fruit
2348. *Trifolium plumosum*, Dougl.
Grand Round Valley near mouth of Ladd
Canyon. July 1st.
- 2310 *Trifolium*
Purple. - Stream banks of Wallawa m^t's
6000 feet alt. Aug 5.
- 1951^a *Astragalus inflexus*, Dougl. or near it.
(collection of 1898) Hillsides in loose sand.

(1951^a) of Cotton-wood Cut near the
 Malheur - June 21st / 98.

2267. *Astragalus*.

Alpine ridges of the Wallawa mtns
 near the lake 9000 feet alt. July 28.
 (A scrap of this was sent last year)

2303. *Astragalus*

North slopes of the higher Wallawa mtns
 The species is well marked by the
 obtusely triangular fruit - in cross section.
 This was sent last year - no. 2103 from
 the banks of American fork. but not named.

2350 *Astragalus kentrophylla*,

this was called for me many years
 ago. but Sheldon calls it *A. tegularis* ^(Wats)
 Alpine summits of the Wallawa mtns July 28.

2095 *Oxytropis basichii*, Munzian.

Ridges of the Wallawa mtns - Alpine or a little below
 greenish white - July 29.

2320. *Oxytropis viscidula*.
 Bars of Wallawa River. below the lake.
 abundant. Aug 9. Mostly past bloom
2349. *Lathyrus*
 Soil, hillsides of Ludd Canyon. July 28
2262. *Anemone multifida*.
 Wallawa river where it is abundant
 but I have not seen it elsewhere. July 28.
- 2304 *Anemone parviflora* Nutt!
 This certainly must be. White flowers
 tinged blue externally. Some white-toler-
 iferous. Growing thickly but quite
 limited in habitat. High Wallawa
 river 4 or 5 miles S. W. of the lake. Aug 2.
- 2194 *Nyosurus*.
 Gravelly bars of Cathlamet Creek east of
 Leavenworth. May 28.
2259. *Ranunculus*.
 White flowers. Flourishing in small streams
 July 27.

2263. *Ranunculus luteo-odoratus* (2) Gray.
Higher Wallawa Nitris - July 28.
2319. *Ranunculus*
margin of Aneroid Lake, Wallawa
Nitris. 7000 feet alt. Aug 5.
- 2327^a *Ranunculus*.
Head water of West Eagle Creek,
Wallawa Nitris - South slope. - Wet rocks.
7000 (?) feet alt. Sept. 1st = 2319.
This is perhaps not rare, but I have overlooked
it, heretofore.
- 2214 *Ranunculus Populago* Greene f. *benignus* Jones.
South slope of Wallawa Nitris, type locality!
4¹/₂ - West Creek, margin of Snowdrift 6000⁰
feet alt. July 5. - Fruit same place Aug 3¹/₂.
- That is, fruit on the same stream but when
the snow lay later. - This form seems to take
the place of typical *R. dimorphus* var.
obisnullus in these Wallawa-Nitris
As I don't now recall having seen the
latter in that range, while this is common
on both slopes. - wet soil

2255. *Ranunculus alismifolius* v. *alsinoides*. Gray.
Head of Anthony's Creek Blue Nitro July 21st.
Sep 12 - Very abundant in the Blue Nitro.
2257. *Caltha leptosepala*.
This has always been called *pauciflora*.
- July 21. Sept. 12. - Blue Nitro, head of
Anthony's Creek.
- 2204 *Delphinium*
Stream-bank - near home - 3500 feet alt.
June 24. - Aug.
2230. *Delphinium*
Fine blue. Dry Nitro sides. Commonly in some
shade. 7000 feet alt. Several seeds Nitro
Ldals July 11. I searched very carefully
for fruit of this in Sep. but could find
nothing. The divergent folicles make
it a peculiar.
- 1890 *Delphinium* (Fruit only) under this no.
I sent flowers of this last year. Some fruit.
Tried to get fruit this season but got it little
Swains of Quin Valley, July.

2339. *Selphium*

Wet situations near lake head of Anthony's Creek thru Nitus. Sep 12. ^{flowers} (Sheep had trampled the young plants, so they are crooked as if too weak to stand erect.)

2296. *Selphium*

Nitus sides 7000(?) feet alt. Wallawa Nitus near the lake July 31. - just coming into bloom.

2191 *Parmelia Brownii*

^{3500 feet alt.} June 1st Fruit Sep 2. in the Nitus - at 5000 feet.

2312 *Troutvetteria grandis*

Banks of Anceoid lake Wallawa Nitus, Aug 5. Commonly in wet soil, but there on dry bank.

2195 *Berberis*

Dry open soil. May 15 - Sep. Rarely maturing fruit in open situations.

2314

White = Banks of Anceoid lake. Aug 5.

- 2293 *Lesquerella Bonplandii*, Watson.
Steep, dry slopes, Wallawa Nitus, July 31.
2245. *Arabis*
Cliff top. head of Archways Cuts. Blue
Nitus. July 20. - Sep.
- 2264 *Arabis*. near the lake.
North steep slopes; Wallawa Nitus, in
sliding of stones. July 28. Rose.
- 1907a

Purple showy flowers. - 2° - Dry N. slopes
of Pine Cuts near Snake River, May 31st
Fruit & flowers: the latter quite out of season.
Sent this cut year but got no report.
- only a few collected.

2292. *Leucococcus hastatus*, Watson.
Stony but moist Nitus sides, among low shrubs.
Wallawa Nitus near the Lake: rose. July 31.
"Blue mountains" is probably an error as
I don't remember having seen this in these
Nitus - Just the Wallawa - S. Slope called Eagle Cuts
Nitus - in 2 places only!

2301.

yellow fl. Cliffs of the ^{highest} Wallawa Mtns
S. W. of the Lake July 31.

2216 Viola

White-flowered - moist, eagle creek meadows
5000 feet alt. July 5. - Rare.

2233. Viola

In thick mtn shrubs; especially on the road
side between Cuprum & the Peacock mine
Seven miles N. of Idaho. 6000(?) feet,
alt. July 11. - Sep. 14.

2223. Blechnum

Barsof Snake River at Ballard's land-
ing. July 8.

2509. Arenaria conferta.

Low hills near Wallawa lake Aug 4
Common.

2301^a

bluffs of Wallawa Mtns near the lake.
9000 feet. July 31.

2299.

High Wallawa nitis near Wallawa
Lake. 8000[?] feet alt July 31

2213.

Wet slopes. Head waters of Big Creek, S.
Slope Wallawa nitis. July 31. - 5000 feet alt.

2296^a

Wallawa nitis near the Lake 7000[?] feet alt.
July 31.

2305^a

Abundant on the highest ^{n. slopes of} ridges of
the Wallawa nitis - north slope only, is
from the head of the Wallawa River northward.

2329. *Spizella*

Wet cliffs. Head waters of Eagle Creek, ^{8000 feet}
Sep 1st. - This is abundant on the S. slope
of the Wallawa nitis but not seen on the
n. slope of the same. Shrub 2° near as sep.

2300

Potentilla brevifolia [!]
Highest summits of the Wallawa nitis near the
lake. July 31st

2246. *Potentilla*

Face of n. cliffs highest Blue Nitro's head
of Anthony's creek 8000(?) feet alt. July 20.
(Also very little was seen in the wallum
Nitro's near the lake.)

2254 *Potentilla*

wet cliffs head of Anthony's creek Blue
Nitro's. July 20.

2352 *Rosa*

Fruit only. Fruit with weak prickles.

Cupressum On the ^{road side} ~~grass~~ between Bullard's landing and
= Cupressum; 5 miles from the former. Sept 15,

The plant in leaf + fruit resembles *R.*
nutkana except that it is larger in all
its parts. Flowering more abundantly
than is usual for that species, also, the
2-3' high + stout bushes being well cov-
ered with the large fruit. On a steep north
slope and not many bushes were seen this
I didn't have the road to hunt.

2327. *Saxifraga*
 Wet cliffs S slope of Wallaw Mtns. head
 of St. Eagle Crk. 7000(?) feet alt. Sept 1.
2357. *Sedum rhodiola*,
 (71) Wet rocks. Common in the highest
 mtns - Head of Anthony's Cut Blue
 mtns. July 20.
2225. *Sedum divergens* ^{var. *aricatum*} Watson.
 Bluff of Snake River - the type locality
 July 10.
2235. *Megarrhiza*
 Hillsides of Snake River near Ballard's
 landing. July 12 - mature fruit.
2231. *Lonicera utahensis* Watson
 Rare yellow & low bushy forest, 7 miles
 north of Idaho. 7000 feet alt. July 11.
2317. *Aplopappus lanuginosus* Gray var. ?
 A subalpine ridge, 8000? feet alt., between
 Wallawa lake and Camucapi. 2 miles S. of
 Anenoid Lake. Aug 5.

- 2344 *aplopappus*. *Carthamoides*. ~~Typical?~~
 Hillsides near Ballasdi ^{Snake River} ~~Laudin~~ ^{Idaho}
 2:12. - Sep. 20.
- 2343^a *aplopappus* *nanus*, *color.* (seen last year)
 but this is better known. A low shrubby
 shrub of cliffs (always!) Rays & disk. for white
 Sep 20.
- 2193 *Aplopappus* ~~*confertus*~~ ^{*stenophyllus*}
 Not rare on stony ridges, - 3500 feet alt. June 8.
- 2295 *Douglasia* ^{purple} ~~?~~ ^{near the lake}
 Pale blue alpine ridges of Wallowa ^{lakes} *nitens* 8000?
 feet alt. July 31. Biennial or rarely more enduring.
 Quite aculeate except 1 or 2 found growing
 among other things which seemed to draw the
 flowers up some. New and quite a surprise ~~to me~~
- 2294 *Douglasia* [?]
 Deep violet. Biennial or rarely short lived perennial
 Wallowa *nitens*. Alpine ridges 7-8000 feet alt. near
 Wallowa lake. July 31. Also new to me.
 The deep purple flowers much resemble *Abies* *pubescens*
 which I first took it to be.

2335 Aster

Purpl. Abundant in wet Eagle Creek meadows.
S. slope of Wallace Mts 5000 feet alt. Sep 2.

2353. Aster

Purpl. - Banks of sluggish stream lower part of
Pine Valley. Sep 19. The globular heads and
minute rays distinguish it - from anything
I have seen. It may be a Douglasii.

2297. Eriogon

Rayless - yellow. Alpine ridges Hallaw Mts
near the lake 8000 feet alt. July 31.

2346^a Eriogon

Bright blue. Pine Creek bottom near Snake river
Sept 16. - Probably not rare but quite out of season

2218. Eriogon

Blue. - Dry stony ridges near Saugu. 4000(?) feet
alt. July 6.

2270. Eriogon myrsinoides, var.?

Bright yellow. Subalpine ridge Hallaw
Mts near the lake 7000? feet alt. July 29.
A wide jump in altitude and almost distinct
enough to be called another spec.

2265 *Antennaria*

North slope of Wallrova nitis near the lake. Not
rare - July 28.

2308^a *Senecio Fremontii*

Typical & common in all alpine nitis

2308 *Senecio Fremontii* var. *occidentalis*?

Alpine ridge, Wallrova nitis, near the lake, 9000?
Feb alt. Aug 3. Stems & leaves dull purple.
Among loose rock. A small patch only and
all I have ever seen.

2345 *Senecio*

High ridge of 7 Devils nitis Idaho. 7500
feet alt. - 2 miles S.E. of Peacock mine -
14 Sept.

2080

Collected last year but not sent Grand Ronde valley
in Gray & Ronde Valley.
Introduced? or common, but not generally distribu-
ted. Road side Aug.

2250. *Vaccinium*

High (Blue) nitis bog. - Head of Anchor Creek.
July 20.

- 2249 *Kalmia glauca*,
Margin of bogs + b. Head of Au Chong's Aub.
July 20.
2313. *Ledum glandulosum*.
Bogs of the Wallawa mts. - on the trail between
Wallawa lake + Comucopia - 6-7000 feet alt.
Aug 5.
- ~~2226 *Heterocodon raciflorum*,
North bank of Pine Creek near Snake River.~~
2269.
Subalpine Wallawa mts. ^{near the lake.} 7000? feet alt July 29.
- 2238 *Heterocodon raciflorum*,
North bank, near North Pine Snake River region.
July 14.
2316. *Sedacatheron*,
Subalpine Prairie of Wallawa mts on the Wallawa
Comucopia trail 7000 feet alt. Aug 5, fl.
Eagle Creek meadows. S. Slope of Wallawa mts.
5000? feet alt. Sep 2 ^{high} with parts in + S. - The
only species found in ^{high} Wallawa mts except *S.*
raciflorum, given - sent many years ago, but called *S.*
Jeffreyi.

2253. *Sodecathion* as an inf. com., Green. (typical!)
 Wet rocks of Higher Blue Mtns. - Head of
 Anthony's Creek. 8000 feet alt. July 21, Sept. 12.
- 2252 *Sodecathion jeffreyi*.
 Margins of ponds etc. Head of Anthony's Creek.
 Blue Mtns. 6-7000 feet alt. July 21, Sept. 12.
- 2190 *Sodecathion*
 Stony swales (with in the spring but dry later.)
 3500 feet alt. abundant. May - June
 This was first many years ago. W. Gray
 calling it - *S. jeffreyi* var.
2226. *Fraxina albicaulis*.
 Low mountains near Cuprum. Idaho. July 10.
2336. *Gentiana simplex*, Gray
 Wet, very wet! Eagle Creek meadows. S. slope of
 Wallawa Mtns. 5000? feet alt. Sep. 2.
- ~~2331^a *Lupinus latifolius*, ?
 Trout Creek brook feet alt. Sep. 1.~~
2240.
 Paddy's Creek. S. Wallawa Mtns. - in the *Veronica comucopia* woods
Rubus comucopia in this region but not seen elsewhere.
 July 6 & 7.

2346. *Phacelia?*

A stout coarse perennial of the seven or eight inches
 Leaves - 7000 feet alt. on steep slopes among
 granite boulders. ^{beside the road. by the creek} Fruit only. Sep 15. This may
 be *P. peruviana* ^{Do not think so from the description} of the Sierra Nevada mts of Cal.
 Prof W. E. Jones of Salt Lake City was here along
 the road when this grows a short time a head
 of me. - must have seen it & if he thinks it
 new, no doubt, will name it.

2323. *Echinops pinnatus*

Biennial: - rocky bottom of Wallawa River below the
 lake. Aug 9. Rare.

2268.

See balpian ridges & flats of the Wallawa mts near
 Lake Lake 7000? feet alt. July 29. - A most beautiful
 plant with the first of blue flowers.

2347.

Parasitic on Potatoes & Mandelina in & near a
 garden in La Grande Oct. 6. (Bodden)

2341

Parasitic on alfalfa and a great pest. Lower Powder
 river in alfalfa fields. Sep 20. A. (Some plant?)

2227 *Touella floribunda*

Roadside near Aupuanu Idoho, 4000 feet alt.

July 10.

2328 *Pentstemon confertus* var.

Engle Creek & Trout creek: S. slope of Wallawa
 mtns - Sky blue. Moist situations 6-7000 feet alt.
 alt. Sept 5th. This is abundant in all our
 subalpine or alpine mtns, ^{7-8000 ft.} & last year from
 Steier's mtns. If it had yellow flowers
 it would be good enough *P. attenuatus*. Dougl.
 Having the same range in altitude and much
 the same ^{general} appearance as that species.

2220 *Pentstemon triphyllus*, Dougl.

always on cliff sides, near Snake river.

Purpl. - July 7.

2217 *Pentstemon glaberrimus*, var.

Purpl. - subalpine dry ridges, 4000 feet

alt. July 5. Common.

2206 *minutus luteus*.

Common in wet situations, June 28.

2236. *Mimulus*

Pink flowers. Moist bank near N. Pine
Creek 3000? feet alt. July 13.

2237. *Mimulus*.

Yellow flowers. Moist bank near West
Pine Creek. July 13.

2229. *Synthyris reniformis*?

Deep violet. 7 leaves nitid 7500 feet alt. July 11.
flowers - Wallowa nitid near the lake 7000 feet
alt. July 28 - fruit.

2094 *Castilleja Lemmonii*? (of last year)

Young specimens. From the same place - alpine
ridges of the Wallowa nitid near the lake
9000 feet alt. July 28.

2322 *Castilleja*.

Rocks of Wallowa River - 6000? feet alt. Aug 7.
Very little sun.

2354. *Castilleja*.

Pale. - Wallowa nitid near the lake - 7000 feet
alt. Aug 2.

2219. *Eriogonum*

Pala

Bright yellow. Steep mountain sides of Paddy's
Creek on S. slope of Wallawa Mts 4000? feet
a 1/2 common at lower altitudes, but never
before seen so high in the mountains.

2343.

Dry stony hill sides & bottoms near Snake River, in the
Canyon near Ballard's Landing; not seen elsewhere
Sept 22.

2355 *Coralorhiza*

Common on low mts, in dry shade. Wallawa
Mts S. slope July 14.

2337. *Spisanthus Romanzoffiana*,

Wet Eagle Creek meadows. 6000 feet alt. - not
rare. - Sep 2.

2232^a *Simulacra amplicaulis*.

7 Devils Mts of Idaho. July 11. - And not rare.

2208.

Moist shade - flowers faint red. Mts 4000
feet alt. Base of Blue Mts to Snake river
June 30. - Sep.

2212 *Allium*

white flowers rarely purplish tinged
Wallawa nitens, ^{south slope} head of Big cut 4000 feet
 (and ~~at~~ higher) July 4th; also ^{seen} near the
 head of the Wallawa river Aug 8. 8000 feet
 alt. I have sent this before viz. nos 950, 942
 & 954. but have never rec'd any name. A good
 species, certainly.

2356 *Allium validum*, Eaton.

Blue nitens near head of Anthony's Creek. Purple-
 Sept 13. (Also abundant on S. slope of the
 Wallawa nitens - but not seen on the north slope?)

2232 *Trillium ovatum*,

White flowers. - Thick damp forests of the
 7 Devils nitens Idaho. 4-6000 feet alt.
 July 11, mostly quite past bloom. (This is within
 a few miles of Snake river but strange to
 say, I don't think it occurs on the W.
 side in E. Oregon.)

- 2305 *Carex filifolia*, Alpine form.
 Highest summits of the Wallawa mts
 near the lake - 9000 feet. On a bare rocky
 ridge ^{Aug 2}. This I suppose is not specifically
 different from ^{the} common *C. filifolia* which
 is one of the most abundant plants at
 about 3500 feet.
2291. *Carex*
 Boggy springs + c. Wallawa near the lake
 July 31.
2197. *Carex filifolia*.
 The common form. 3800 feet alt. Dry soil
 very 15. This is most abundant on
 the best grain lands especially about
 the base of the Blue mts; with a very
 tough sod.
2202. *Carex Douglasii*.
 Common in moist situations. June 24.
2342.
 margin of irrigating ditch lower Powder
 (Powder) River. Sep. 20.

2248.

Wet cliffs of highest Blue mtns. head
of Anthony's creek 8000 feet. alt July 20

2164, 2164^a *Gayophytum racemosum* ~~not~~ one of
these was called for me last year
but I find them mixed + I doubt because
which is the true species.

2347^a

Roadside near La Granda where I have seen
it for several years - doubtless introduced

2354. *Juniperus occidentalis*, Hook.

This is Prof Sargent's determination.

Small spreading tree. From base of
Sierrona mtns where it is very rare
southward to Sierra mtns + westward
to Cascades + usually very abundant.

Report 95 / Report 156
nos. 29 April 99. nos. 24 April 99

✓ 2123 *Mollugo verticillata*, L.

1932 *Clematis ligusticifolia*, Nutt. ♂
Staminate fl. running over
rocks on Burnt River June
15.

✓ 2029^a *Clematis ligusticifolia*, Nutt. ♀
Reticulate fl. - Gulches of
Santo Rosa Nitro Nevada,
July 11.

✓ 2082^a *Clematis ligusticifolia*, Nutt. fruit.
Fruit. - Banks of the Wallawa
River. Aug 19.

✓ 2086^a *Clematis verticillaris* ^{DC.} var. ~~♀~~
^{Columbianus Gray}
Nitro of the Wallawa, Aug 22
But quite out of season. It is
abundant in these Nitro's
but commonly blooms in
June. You should have
good specimens from me
sent many years ago. She fl.

$$\begin{array}{r} 50 \\ 23 \\ \hline 22 \\ 9 \end{array}$$

$$\begin{array}{r} 156 \\ 25 \\ \hline 11 \end{array}$$

- ✓ 1873 *Acer monquinguefolia*
 (*Stout form*)
~~in Old Java, Robinson~~
 Wallowa vitis S. slope 4000
 feet alt. Common in those
 mountains, - but not seen in
 the Blue vitis proper. Pure
 white. - There is a purple
 variety. Have not seen it
 before from these (Wallowa)
 vitis. - May 23 - June 13 -
- ✓ 2126^a = 1973. *Acer monquinguefolia* L.
 (*Stout form*)
 From the vitis of W. Delaho
 ne at Ballard's Landing on
 Snake River. Sep 28. -
- ✓ 2036^a *Thalictrum Fendleri*, Engelm.
 Wild horse Creek in Steier's
 vitis, at about 5000 feet alt.
 Fruit only, 15th July.
- ✓ 2180 *Thalictrum occidentale*, Gray
 This has always been called
 for me, June 1 - 29. Common.

- ✓[#] 2114^b *Ranunculus Eschscholtzii*, Hook.
Below the highest Wallowa
creek, Aug 28.
nearly past bloom.
- ✓[#] 2006 *Ranunculus Sukasdorffii*, Gray
Just below the snow drifts
head of Wild-horse creek
Stein's Nitro. - about 7000
feet elevation. July 5.
The finest *Ranunculus* I
ever saw. Growing in
great abundance in
clumps of often a dozen
or so flowers.
- ✓[#] 1828 *Ranunculus* ~~*laetiflorus*~~ ^{*juiciferus*, Jones}
Petals white. Sepals
purple.
I got 4 roots ^{only} of this
last year + this one only
bloomed in my garden
last spring - very early.
Roots from the Southern
Blue Nitro. Head of
Olio Creek, 15. July.
Quite past fruiting.

✓ 2005-6 *althia leptosepala*, DC.

I suppose you call this
though it seems to me
it is distinct.

Head of Wild-horse Creek
Steris Nitro. just below

the snow. Most beautiful
- white; outside of sepals
purple - and in the
greatest profusion.

July 5. (Sent Dr Gray
the same from the Wallowa
Nitro many years ago,
in fruit.)

✓ 2181. *Delphinium simplex*, Dougl.
Common on stream banks

June 17.

1890 *Delphinium* sp.
In moist situations. - River
valley. 25 May -
violet sepals, white
petals.

1909 *Delphinium* ~~*simplex*~~ *distichum*, Gray

(1909) Abundant in steep gulches
and moist situations gener-
ally on Pine Creek blooming
in July.

All three of the preced-
ing have been called, for me
D. simplex, Dougl.

1982 *Delphinium simplex*, Dougl.?
moist situations in Stein's
Vitis. where it is abund-
ant. June 29.

2024 *Delphinium scapulosum* var.
stoechydum, Gray
Sarcocolla vitis nevada
(also in the Stein's Vitis)

July 11. *pauciflorum*, Nutt.
1966. *Delphinium decorum*, Torr.
~~var. *nevadense*, or near it~~

This has been called for
me by W. Watson.

Wet hillsides, May 10.

2112^a *Delphinium pauciflorum*, Nutt.
rad. depauperatum, Gray
Wet situations in the highest
Vitis. Have sent before but got
no answer. Aug 28

✓ 2089 *Aster spicatus* var. *argutus*
 (Fruit only) Red or white
 among broken rocks on
 N. side. Challewa
 Mt. Aug 22.

✓ 2000 *Aster* ^{*spicatus* var. *argutus*,}
 = 2089? _{Tour.}
 From Steins Mt.

July 4

✓ 1883 *Draba Douglasii*; Gray
 Steep stony soils. Rather
 rare here. May 23; fruit

✓ 2004 *Draba Currieri* Robinson, n. sp.
 Cliffs of the highest
 Steins Mt. - July 5

✓ 1853 *Arabis Holboellii*, Gray
 Common. May 2 - June 9?

✓ 1853 *Arabis suffruticosa*,
 from Steins Mt. Watson

✓ 1938 ⁺ *Panay mengjieii*, Greene.
 Common in dry situations.
 April 23. - June 12 -
 In this region it is prostrate
 lies prostrate but in
 Steins Nitro's it stands
 upright.

✓ 2028 *Lepidium montanum*, Nutt.
 A white-flowered annual
 In Oregon Crest valley - near
 the Nevada line - growing
 in stony alkaline soil

✓ July 9
 1955 - *Thelypodium laciniatum*, Eudl.
 White fl.; 3-6; biennial.
 Sage brush valleys of
 Cottonwood near the
 River. June 21

- ✓ 2022, *Stanleya viridiflora*, Nutt.
Greenish yellow ^{flowers} on a
sage brush in Oregon Creek
Valley, July 9.
- ✓ 1931 *Stanleya viridiflora*, Nutt. (fls. purplish
tinged)
Steep hill sides of Burnt
River, June 15.
- ✓ 1964 *Sisymbrium linifolium*, Nutt.
Yellow perennials. - Among
rocks. Steins vintus, June 25
- ✓ 1977 *Erysimum cheiranthoides*, L.
Yellow fl. Biennials: -
Stream-banks base of
Steins vintus June 29.
- ✓ 2002 *Strep. tauctus* ~~Howardii~~ ^{cardatus, Nutt.} (P)
High ridges & sides of
Steins vintus especially
on cliffs &c, July 4
Petals violet sepals
bright yellow but fading
purple. Biennials or short
leaved perennials. (often!)

✓ 2026, *Carlanthus crassicaulis*, Nutt.
 Sta. Barbara?

Sepals & petals violet, bi-
 curials & occasionally
 more deersable. Commonly
 much branched from the root.
 Santa Rosa Mtns Nevada
 A few very low shrubs. 11th
 July; just coming into
 bloom.

As to flowers this
 looks much like the
 preceding, but I ~~should~~
 think they are distinct.

✓ 2084, *Thelypodium flexuosum* ^{Rabins in}
 Alkali hills. not common

May 23.

✓ 2032, *Nasturtium sinuatum*, Nutt.

Dry cut bed, - Oregon Creek

July 13.

✓ 2054 *Lesquerella occidentalis*, Watson
 thru sides of near Canyon
 City - Grant Co., 21st July.
 Yellow flowers.

- ✓ 20³⁶ *Lesquerella occidentalis*, Watson
 Sandy ^{nitid} side, Steins
 Nitus - at ~~middle~~^{middle}
 altitudes - near Wild
 Horse Creek July 15.
- ✓ 20²⁵ *Physaria Newberryi*, Gray
 Santa Rosa Nitus.
 On or about cliffs.
 mostly July 11. Fruit
 dull purple, usually.
- ✓ 1895 *Physaria Oregona*, Watson
 Hillsides of Pine Creek
 near Snake River - The type
 locality - 25 May - Fruit
- ✓ 2010 *Arenaria verna*, L., var. *hirta*, Watson
 Highest Steins mountains.
 July 5.
- ✓ 2115 *Spergularia rubra*, J. & C. Presl.
 Road sides in the Walloua
 Introduced, but rare here.

2084. *Silene Spaldingii*. ^{Spalding}
 Hills near Halloway
 Lake, Aug 22.
- 2073 *Silene Oregona*, Watson
 Mountain valleys, 4000
 feet, Aug 10. - not rare.
2017. *Chionella stenosperma*, Coville
 Bright yellow, in the shel-
 ter of dense wood. Al-
 vord valley and Oregon
 Creek Valleys. July 7-17
1863. *Viola sumentosa*,
^{var. orbiculata, Gray}
 Coniferous woods 4000 feet
 May 10 - July 29. (Evergreen)
- 1849 *Viola Nuttallii*, Pursh
 this has always been called
 for me, but it seems
 to be distinct from the
 form sent last year & so
 called. Dry soil.

(1849) April 29 - June 7.

1987 *Viola* = 1849 *Nuttallii*, Pursh
From *Stem. vitis*, where
snow lies late, July 2
(no flowers)

1976^a "*Viola Nuttall*" Pursh
of last year. But this
is from steep *vitis* side
- 4000 feet alt. - in the
shelter of low shrubs.

May 20.

1986^e *Viola Nuttallii*, Pursh
(^{causes feet down})
Top of *Stem. vitis*.
June 30. th no flower seen.

1864 *Viola globosa*, Nutt.
Mountain bog etc. 4000
feet. July 10. - May 10

July 29,
1876 *Viola* ^{*præmorsa*, Dougl.} ~~*arctica* Kell. var. *variosa* Nutt.~~ ^{7 *Water*}
On or about cliffs. Commonly
4000 feet. May 21. (Common
Southward - *Stem. vitis* etc.)

✓^x 1901, *Viola canina*, var. *adunca*, Gray
 also under this no. *(forma laevigata, Gray)*
 Blue. - moist shade Pine

✓^x Creek. - 30. May.

2085 *Viola* sp.

Banks of the Wallawa River
 in the mts 23 Aug.

2107 *Claytonia* ~~no specimen~~
 Along subalpine streams
 Wallawa mts Aug 26

✓^x 1875 *Claytonia lanceolata*, Ph.
 Subalpine dry soil.

May 20.

✓^x 2148 *Montia parviflora*, Howell
Claytonia ^{var. *depressa*, Robinson} *perfoliata*, Gray
 this has been called for
 me, but must be wrong.
 Shaded gulches. etc.

May 11.

✓^x 2161 *Hypericum formosum*, HBK.

✓¹¹ 2053 *Sidalcea* *oregana*, Gray
Sidalcea. Purple:-
 stems hollow, thin wall-
 ed, Banks of Silvio's
 River in Bear Valley.
 also sent last year, - but
 got no report, - from
~~Buck Creek & Camp Creek~~
 (Aug 10.)
 "S. oregana" you will find
 notes with specimen.

✓¹¹ 2154 *Geranium incisum* ^{Walt.}
 Rich dry soil, July 29.

✓¹¹ 2063 *Lupinus ornatus*, Dougl.
 Pale purple - Vitis, 4000
 feet; commonly in par-
 tial shade, July 29
 For sep.

✓¹¹ 2048 *Lupinus leucophyllus*, Dougl.
 Pale blue, tinged brown

In the Blue water bend
of Trout Creek, Harney?
Co. July 19 - outer min-
am, Wallawa mts.

(fruit) Aug 9.

2050 *Lupinus carpaticus*, Nutt.
dark purple. A biennial
seen only in Silvio's Valley
and Bear Valley - both on
Silvio's River, - Harney? Co.

July 20. *polyphyllus*, Lindl.
1926 *Lupinus* *leucophyllus*.
this has been called for
me. Pale blue. - Dry
water sides, 4000 feet.

June 13 - Fr. Aug 9.
2040 *Lupinus Lyallii* Gray.
deep blue. High summit
of Steins mts. - close to
snow. July 15.

Growing in large open
-ing clumps.

896 Lupinus calcaratus, Kellogg
Dr. Watson called it his
many years ago. Spec-
imens bright yellow;
more commonly dull
purple, often white; all
fading to a dull pur-
ple. Very abundant
from Eagle Valley east-
ward to or near Snake
river. Dry soil, with a
range of at least 2000
feet in altitude. 26. May.

8132 = Lupinus calcaratus, Kellogg
= 1896. Dull purple with
yellowish tinge. Santa
Rosa Nitro Nevada

July 11

2020 Lupinus pusillus, Pursh
Rocks succulent. Sands of
Almond Desert - July 7.

2174 *Lupinus ornatus*, Dougl.
~~*Lupinus latiflorus*, Dougl.~~
 Very common form.

June 14 - July 18.
 2169 *Lupinus latiflorus*, Dougl.
 this has always been called
 but it seems to me dis-
 tinct enough to have
 a varietal name. With
 the preceding:
 June 21 - July 28.

2066 *Trifolium cyathiferum*, Lindl.
 Common. - 3-4000 feet
 alt. 29. July.

2038 *Trifolium viciophyllum*, Nutt.
 White - often tinged
 purple. Head of Wild-
 horse Creek. Steins Nitro

July 15.
 2075 *Trifolium viciophyllum*, Nutt.
 Hall's Nitro Aug 13

- 1859 *Trifolium megaceph-* (alumn. ^{West.}
 May 5.
2158. *Horachia Ruschiana*, ^{"Benth."}
 July 28. Common.
- 1952 *Petalostemon ornatus*, Gray
 Malheur region. - dry
 hillsides June 21.
- 1942 *Astrogalus lentiginosus*
 White. Malheur ^{var. fremontii, Nelson} & South,
 in dry soil 20-22. June.
- 1850 *Astrogalus salmouensis*, Jones
 White fl. tinged purple.
 Pods mottled. April 29
 - June 7. A common form
 on stony hills.
1978. *Astrogalus diphysus*, Gray
 Fruit. *Steins nitus*. - where
 it is common, but seldom
 forms fruit. July 29.

- ✓ 1910 *Astragalus* sp.
Fruit only, Hillsides
of Pine Creek May 31.
- ✓ 1878 *Astragalus* ^{*libbeyi*, n. sp.}
^{*falciformis*, Jones}
Flowers white. Common in
strongly soil ~~May~~ ^{May} 20 -
June 13
- ✓ 1877 *Astragalus leucicoides*, Gray.
Seen only on hillsides of Pow-
der River & Burnt River.
May 20. - June 13.
- ✓ 2095 [#] *Astragalus* sp.
From the highest summits
of the Wallowa mts.
Some remains of fruit an
rich leaf and about a
line broad were seen. It
is quite new to me.
- ✓ 2103 *Astragalus alpinus*, L.
^{reported as *Astragalus* sp.}
this has been called, but I
think it goes by a different
name now.

(2103) 19

Baro of Hurricane Creek

Wallowa mtns. Aug 25

1868. *Astrogalus roventis*, Gray
Fl. pearl white. Steep hills
3-4000 fut. alt. May 12
— June 10.

1951^a *Astrogalus Purshii*, Dougl.
Fruit only. Cottonwood
Creek (near the Malheur)

1989 *Astrogalus Mortonii*, Nutt.
White. Sandy shore of
Mans Lake (Burren Valley)
July 1st. (A common species
but more dwarf & quite
decumbent, which the
common form is not.)

1993 *Lathyrus palustris*, L.
In deep shade; bank of
Sioux Creek in Steins
mtns. July 2.

19^a

✓[#] 1992^a *Lathyrus coriarius*, Torr. & Gray
~~White~~
J. G. White
Purple - Stream-banks
- but not wet soil - in the
higher Steier's nitro.

July 4.

✓[#] 1918 *Lathyrus orgoumei*, J. G. White
Purple. - In moist mead-
ow; Pine Valley, June 3.

✓[#] 1882 *Lathyrus ussishii*, Nutt.
White. Dry, shaded nitro
sides. 4000 feet alt.

May 21. This is usually
found with *P. nevadensis*
and *Scaevola* seems to
differ from it except
in its narrower leaves

✓[#] 1881 *Lathyrus nevadensis*,
Nutt.
White. Dry nitro sides
and ridges. 4000 feet
alt. May 21.

✓[#] 1902 *Vicia Americana*, Muhl.
Purple. Hillsides of Pine
Creek - near Snake Riv. 30 May.

2104 *Hedy sarum* *Mockenzi*; ^{Richards.}
 Rare purple. Very abundant on the n. slope of the Wallowa mts.
 - Not a specimen seen outside these mts.

Aug 25. Mostly past bloom

2146 *Rumex emarginata*, Walp.
 A shrub or small round-topped tree. Fruit bright red; bitter and astringent

June 17. - Aug 9, ^{Walp.} ~~fruit~~

2147 *Rumex demissa*, ~~Walp.~~
 Shrub or small, straight tree 20 or 30 feet high & 5'-6' in diameter. Fruit black at maturity; barely edible. June 21. Aug 17.

Often branching when only a foot or so high

(There is no question about the names of these, but I want to know what you call them now.)

- 1968, *Spiraea discolor* P. K. ^{glabrescens, Gray}
 n. var. ~~lucida, Nutt.~~
 A very diffuse shrub.
 2-4'; Abundant about
 cliffs &c. in the
 Steins ruts. (not seen
 n. of there) June 26.
- 2179 *Geranium triflorum*, P. K.
 A common plant at about
 4000 feet alt. - May 24 June 13
- 2189 ~~*Potentilla glutinosa*, Nutt.
Geranium macrorhizum, Nutt.~~
 Common. July 12.
- 2037^a *Potentilla Breweri* Nelson
 var. *sierrae*, Nelson
 Stream bank; head of
 Wild-horse Creek. Steins ruts
 July 13.
2046. *Potentilla Newberryi*, Gray
 var. *areolaris*, Rydberg
 Petals white. 19 July.
 Honey Valley, in marsh
 situation. (Eaten by cattle.)

- ✓ 1899⁺ *Potentilla shouboidea*, Rydb.
yellow. Base of cliffs
Rnie Creek - May 26,
- ✓ 1975⁺ *Horkelia parviflora*, Nutt.
Summit of Stein's Nitus, where
snow drifts deep. June 28.
- ✓ 1969⁺ *Jussiaea Baileyi*, Watson
Cliffside. Stein's Nitus
June 27.
- ✓ 2143⁺ *Cratogeomys Douglasii*, Lindl
Shrub or small tree. Stream-
banks or gulches. Fl. white.
Fruit black. Barely edible
(Eaten by Beems Coyote &
Sage-hens) May 31. Aug.
- ✓ 1858⁺ *Amelanchier Cusickii*, Small^{2. sp.}
Scarlet fruit, turning black
in drying. Dry stony
hillsides, Tall - 6' - 10' with
slender flexible branchlets,
May 5. - Fr. June -

- ✓
1871 *Amelanchier alnifolia* Nutt.
Fruit black. May 12.
Very common - a low
shrub, 6^o-8^o; much branched
with rigid crooked branches
branchlets. Stony gulches
hillsides, ^{often common on} low nitro (4000
ft alt.).
- ✓
1879 *Peraphyllum ramosissimum* ^{Rt.}
Fl. whit-tinged purple. Fr.
yellowish green when mature
Extremely bitter and nauseous
- not eaten by any thing -
Shrub 3^o-4^o in large clumps
the tips of branches often
when bent to the ground tak-
-ing root. May 21. - Aug.
(dry stony hills)
- ✓
1870 *Aeschera cylindrica*, Dougl.
^{var. alpina, Watson}
Cliff sides, Sern's Nitro
June 27.

- ✓ 2170 ⁺ *Heuchera cylindrica* Dougl.
var. *ovalifolia*, Wherry.
Common on cliffs or
broken rocks. June 15
- ✓ 1993 ⁺ *Heuchera rubra*, Torr.,
cliffs of Stein's Butte
July 2.
- ✓ 1908, ⁺ Bolander Oregon Nat.
Tripping rock S. Pine Creek
near Snake River when
it is abundant, 31, May
- ✓ 2147. ⁺ *Ribes oxycanthoides*, L.
"Goose-berry". Common on stream
- banks. - dry soil - fruit black
and shining. May 2 - July 15.
- ✓ 2141. ⁺ *Ribes cereum*, Dougl.
white, tinged purple; fruit
orange red. Hillsides. May 2
June 28.
- ✓ 1731. ⁺ *Ribes lacustre*, Poir.
dull red. Fr. black or red.
A shrub of the highest

(1731) ^x Mountains. Fl. (in 1899) in Blue
 mtns. July 20. Fl. ('98) Wall
 mtns. Aug 23.

✓ ^x 1994 *Sedum debile* Watson.
 Bluffs of Steins mtns. 2 July.
 Fl. yellow.

✓ ^x 2099. *Epilobium latifolium*, L.
 Rose purple. N. Slope of Wall
 mtns. 7-8000 feet alt. Aug 23.

✓ ^x 2116. *Epilobium paniculatum*, Nutt.
 Very common annual. in dry
 soil. Sep. 3.

✓ ^x 2120. *Epilobium paniculatum*, Nutt.
 Purple. - Hillsides of Pine Creek
 Sep. 24.

✓ ^x 2027. *Epilobium alpinum* L.
 In wet soil ^(*E. lactiflorum* Hausskn.) Santa Rosa
 mtns, nev. July 11.

✓ ^x 1998. *Epilobium* ~~*paniculatum*~~ ^{*glaberrimum*, Gray} var. *latifolium*
 Steins mtns. moist situations ^{Basin}
 5-6000 feet alt. July 4.

- ✓ 2164 *Gayophytum racemosissimum*
 Common. — July 29, J. G. S.
- ✓ 1940 *Oenothera alyssoides* Hook. & Grev.
 White. Common in the des-
 ert region. June 20.
- ✓ 1944. *Oenothera scapoidea*, Torr. & Gray
 Bright yellow. In the desert
 region June 20.
- ✓ 2178. *Oenothera heterantha*, Nutt.
 A common perennial in moist
 situations. Yellow fl. 3500
 - 4000 feet alt. May 30.
- ✓ 2184 *Symphoricarpos rotundifolius*,
 Gray
 June 21. Aug 9, '77.
- ✓ 1897. *Galium multiflorum*, Kellogg
 var. *matsonii*, Gray
 Hillsides of Pine Creek
 May, 26.
- ✓ 2131 *Valeriana sylvatica*, Banks
 Head of Wild-horse creek
 Steier's notes 6-7000(?) feet
 July 15.

- ✓⁺
1999 *Valerianella maculosa*, Gray
Stems ritis; probably
common. July 2.
- ✓⁺
2168 *Galium boreale*, L.
this has been called, but
doesn't seem to answer the de-
scription exactly.
June 27. Aug 5.
- ✓⁺
2020² *Hyssopus micrantha*, Gray
Sands of Alford desert.
July 7. Quite past bloom
and fruit.
- ✓⁺
2087. *Eupatorium occidentale*^{Abok.}
ritis ~~5~~ 6000 feet alt
Aug. 22.
- ✓⁺
2102 *Biscellia grandiflora*, Nutt.
Lime stone cliffs of the
Mullona ritis - 5000? feet
alt. Roots somewhat suc-
culent. Aug 25.

✓ 2121 *Pickellia microphylla*, Gray
Stony hillsides of Pine
bark near Snake River.
Swoody based perennial
Sep 24.

✓ 2185 *Grindelia nana*, Nutt.
Hillsides near Prairie
City Grant Co. July 21.

✓ 2058. *Grindelia nana* Nutt.
In red clay soil. 3000
— 3500 feet alt. July 27.
(Union Co.)

✓ 2074. *Chrysoopsis villosa* Nutt.
var. *hispida*, Gray
On rocks of *Thermophilum* (river)
Hallowa Nitus. Aug 9.

✓ 2186 *Chrysoopsis villosa* Nutt.
var. *hispida*, Gray
Lime-stone cliffs of Hallowa
Cane Creek, Hallowa Nitus
Aug 28.

- ✓ 2125 *Aplopappus nanus*, Eaton
 Shrub a foot high and
 often as broad. Rays +
 disk pure white. Cliffs
 of Snake River near
 Ballard's Landing. Sep. 28
 (mostly past bloom.)
- ✓ 2093 *Aplopappus Lyallii*, Gray
 Cliffs of the highest crullow
 mtns. Aug 22.
- ✓ 2077. *Aplopappus conthamoides*,
 var. *busckii*; Gray.
 Subalpine ridges of the
 Bullowa Mtns. (and widely
 distributed) Aug 13.
- ✓ 1966. *Aplopappus acaulis*, Gray
 Steins mtns June 25.
- ✓ 1962 *Aplopappus Floydii*, Gray,
 Top of Steins mtns - not the
 highest - June 25.

- ✓ 1943. *Aplopappus lanceolatus* Gray
 var. *truncicaulis* Gray.
 In wet alpine soil
 Malheur June 20, ~~about valley~~
~~(the canyon) July 8.~~
- ✓ 1943^a *Aplopappus lanceolatus* Gray
 = 1943 var. *truncicaulis* Gray
 only larger & growing
 in grass near it in the
 Malheur, June 20.
- ✓ 2056 *Aplopappus hirtus* Gray,
 Moist open gulches: Burnt
 River in the Blue Mts.
 July 23.
- ✓ 2055. *Aplopappus lanceolatus* Gray
 var. *truncicaulis* Gray
 Moist, subalpine meadows.
 about valley, July 7.
- ✓ 2135 *Solidago* ~~longifolia~~ *perrotiana* Gilg
 (Det. G. M. F.)
 Common in rich bottom
 Aug 8.
- ✓ 1935⁺ *Townsendia Watsoni* Gray
 Biennial! Malheur region.
 June 17.

- ✓
2126. *Aster conspicuus*, Lindl.
Mts of Idaho near But-
lard's Landing, common
every where in shaded
mountains. Sep 28.
- ✓
2127 *Aster Hallii*, Gray
Banks of Snake River, But-
lard's Landing. Sep 27.
- ✓
2083 *Aster conspicuus*, Lindl.
apparently approaching
A. radicans. Wallawa
Mts on the main,
Aug 12.
- ✓
2112 *Aster membranaceus*, Greene
Violet. Stream banks
of the highest Wallawa
Mts. Aug 28.
- ✓
2119 *Aster ponderosus*, T. & G.
Grand Bend Valley, Sep 4
- ✓
2178 *Aster multiflorus*, Ait.
Grand Bend Valley. Sep 3.

2071. *Aster foliaceus*, Lindl.
 var. *Eastoni*, Gray.
 Banks of the Mearns River
 Aug 4
- 2057 *Aster*, ~~shastensis~~ *shastensis*, Gray
 Dry prairies of Bear Valley
 , Southern Blue Mtns July 20
 This, I suppose, = what you
 thought last year might
 be *A. Shastensis*, Gray. It
 comes from the same region
 and I think is a good
 species
2099. *Aster* ~~canescens~~ *shastensis*, Gray
 Banks of Hurricane Creek
 Wallowa Mtns Aug 25.
- 2105 *Aster busckii*, Gray
 Purple. Thick shade
 Wallowa Mtns. Aug 26.
- 2088 *Aster fremonti*, Gray
 Wallowa Mtn sides, Aug 23.

- aphanactis, Gray.
- ✓ 1941^x *Erigeron Concinnus* F. & G. var.
Mathews. June 20
- ✓ 278^x *Erigeron chrysopsis*, Gray.
Roh yellow (not golden yellow)
Hillsides &c. (Mun Co.)
May 12.
- ✓ 1985^x *Erigeron ~~Bloomeri?~~ Austinae, Greene*
Heads turning brown as
they approach maturity.
Summit ridges of Steier's
ruts June 30.
- ✓ 1892^x *Antennaria argentea*, Benth.
Gulches &c., Pine creek near
Susque River. May 25
- ✓ 1867^x *Antennaria luguloides*,
- Torr. & Gray
moist hillsides & gulches
May 12.
- ✓ 1925^x *Antennaria ~~divin.~~ rosea, Greene*
rosea
Common, June 10.

- ✓^x 1924 *Antennaria* ~~*diversa*~~ ^{*umbrellata*} ^{*Boydii*}
 Hills & low mts., especially north slopes.
 June 10.
- ✓^x 1848 *Antennaria* *dimorpha* ^{Nutt.}
 Stony hills. April 29.
- ✓^x 1856 *Antennaria* *stenophylla*, Gray
 Stony hillsides. May 3.
- ✓^x 2068. *Gnaphalium* *palustre*, Nutt.
 moist situations. Aug 3.
- ✓^x 1922^a *Dimorphia* *Howellii*, Gray.
 Steep mti sides. Steins
 mts. June 28.
- ✓^x 2129 *Frauseria* *Hookeriana*, Nutt.
 Bars of Snake River. Oct 1 ²¹
- ✓^x 2033 ^a 92129. *Frauseria* *Hookeriana*, Nutt.
 (Young plant)
 Sands of Almond desert.
 July 13.
- ✓^x 1872 *Balsamorhiza* *Hookeri*, Nutt.
 Stony hills. 3000-3500 feet
 May 19. — June (fr.)

- ✓ 19⁺2¹ Balsamorhiza ^{nut} hirsuta
 Grand Rond Valley, near
 the mouth of the Saddle
 Canyon; dry stony soil
 (This is doubtless, ex-
 actly, the type local-
 ity. June 7, mostly past
 bloom.
- ✓ 1984 Balsamorhiza ^{nut} teretica
 this may be, but it is
 peculiar. Subalpine
 ridges of Steins Mtns
 June 30 (Fruit only seen)
- ✓ 1933, Helianthus ^{nut} busckii, Gray
 Malheur region. June 16
 (dry hill sides)
- ✓ 2166, Chamaecrista ^{nut} douglasii, HBK.
 The common form. July 18.
- ✓ 2111 Hulsea ^{nut} nana, Gray
 Highest, Mullawa on All Sides
 in coarse sandy. Aug. 28.

- ✓^x 2157 Gaillardia aristata, Ph.
A common plant here.
July 13, Aug 10.
- ✓^x 1990 Artemisia discolor, Dougl.
Gravel bars foot of Steins
Vitis July 2nd.
- ✓^x 1991 Artemisia discolor, Dougl.
Straggling and decumbent.
Gravel bars. Steins Vitis
and common July 2.
- ✓^x 2055 Artemisia arbuscula, Nutt.
Blue Vitis. head of Burnt
River. July 22. (Common
south).
- ✓^x 2052 Bigelovia Douglasii, Gray.
var. pumila, Gray.
Silvies Valley, in sterile soil
July 20. (A diffuse shrub,
4'-5' high.)
- ✓^x 1947 Tetradymia glabrata, ~~Gray~~ Gray
A shrub - 1-2' - of the desert
region. - June 18.

- ✓^x 2096 *Arnica Chamissonis*, Less.
 About cliffs of the highest
 Hallowa mts.
 Aug 23 just coming into
 bloom.
- ✓^x 1929, *Arnica alpina*, Olin
 (*Arnica angustifolia*, (Pohl.)
 Hills of Baker Co., June 15
- ✓^x 2037 *Helianthus Hoopisii*, Gray
 Bright yellow. - Pale green
 leaves. Water soaked stream
 - banks of the higher
 Steins' Vitis. - ~~East of~~
 Wild horse and Bivene
 creeks. July 15.
- ✓^x 2188. *Senecio canus*, Hook.
 Steins' Vitis 30, June.
- ✓^x 2074^a *Cnicus edulis* Gray
 Hallowa mts. - 4°-6° Aug 11.
- ✓^x 2133. *Cnicus undulatus* Gray, (*Theobis speciosus*)
~~*Cnicus edulis* (Pursh) Gray~~ (= *C. undulatus*, f. Big)
 Very common in dry soil - 3°-4°
 Aug 9. 10

✓^x 2019 *Stephanomeria protacharta*, Eaton
white fl. Sands of bl over desert.

✓^x July 7.

2041. *Lygodesmia spinosa*, Nutt.

Abundant in the desert
region. Base of *Steins viti's*

✓^x 16. July,

2127. *Stephanomeria minor*, Nutt.

Pink. - Open hill sides, Idaho
near Ballard's Landing. (not over
snow) Sep 30.

✓^x 1988 *Crepis scopulorum*, Coville

Black summits of *Steins viti's*
mountains July 1st

✓^x 2014 *Crepis Androssonii*, Gray

Moist subalpine meadows. Abundant

Abundant valley. July 7.

✓^x 2160. *Airacium Scouleri*, Hook.

Yellow. common. Aug 5.

✓^x 2011. *Traximon heterophyllum*, ^{Sargent} Nutt.

Steins viti's. Moist hillsides.
July 6.

- ✓ 213^x *Lactuca pulchella*, DC.
Blm. Stoliferous. - a few in
cultivated grounds.
- ✓ 1870 *Dodecatheon leucichii* Greene
Open mountain sides.
3500 feet alt. May 12 - June
- ✓ 184^x 3 *Dodecatheon* ^{conjugatum, Greene} ~~leucichii~~ ^{Gray}
Common on open steep
north hill sides. April 25
June 8.
- ✓ 2007 *Dodecatheon paniculatum*, ^{by Greene}
Wet rocks &c. highest
Steins Vitis July 4
- ✓ 1874 *Dodecatheon leucichii*. Greene
- From exactly the same local-
ity. Vitis 4000 feet. In
partial shade. May 20.
- ✓ 183^x 2 *Primula leucichiana*. Gray.
Violet. Wet ^(only in the Spring) stony situations
April 13. - May 8.

- ✓ 1885⁺ *Asclepias cryptoceras*,
steep hillsides of Powder
River, 24 May - 15 June
(not rose southward)
- ✓ 2016 *Elythra Douglasii* Gray
moist meadows of Flood
valley, July 7.
- ✓ 2027^a *Frasera* ~~*obliqua*~~ ^{*bract*} ~~*obliqua*~~
Fruit only. Lower White Cla-
ke, near Ballou's Landing
Sept 28.
- ✓ 1920⁺ *Frasera* *beuchii*, Gray
mountain ^{sw.} of Union, worthy
the type locality. June 6.
- ✓ 1635⁺ *Frasera* *beuchii* Gray with some
doubt last year. Fruit
only. Southern Blue White
July 20.
- ✓ 2101⁺ *Gentiana* *Amarilla*, L., var. *acuta*, Hook. & G.
Wet ridges of the Wallawa
Aug 25

- ✓ 2100 "Svertia pennis", L.
 Will you look at this
 again? It differs from
 that species as described
 by Gray in *Flora* in having
 opposite leaves & parts of
 flowers in 4's. You have
 specimens in your Herb.
 from me from the Blue
 Mtns, many years ago
 which answer the de-
 scription exactly (?).
- ✓ 2155 *Gilia aggregata*, Spreng
 July 29.
- ✓ 1973 *Gilia terrestris*, Gray
 Stern's Mtns. - steep, stony
 sides. June 28.
- ✓ 2136. *Gilia intertexta*, Steud.
 Blue. - July 12.
- ✓ 2140 *Gilia* (*Pallonia*) *gracilis*, Hook.
 May 23.

- ✓ 2033 ~~Gilia~~ *Goldenia Nuttallii*, Hook.
 Abundant desert in sand
 July 13.
- ✓ 1976 *Gilia pumila* Benth.
 var. *isquamosa*, Gray
 Cliffs of *Asteris nitus*
 June 29. (Common)
- ✓ 2149 *Neurophyllum breviflorum*, Gray
 Common. May 11.
- ✓ 2142 *Phacelia Menziesii*, Torr.
 June 15. Common
- ✓ 1979 *Phacelia Menziesii*, Torr.
Asteris nitus? Dry situations
 June 29. (Apparently common
 throughout the desert
 region.
- ✓ 2132. *Phacelia humilis*, Torr. & Gray
 Purple. Dry hillsides.
 Santa Rosa *Asteris nitus* Nevada
 July 11.
- ✓ 1946 *Emmenanthe pusilla*, Gray.
 Malheur, alkaline soil
 June 20

~~Gay (ind.?)~~

✓ 1957. *Gonolobus pariflorus*.
 Sandy soil of the ^{dry} mal ^{hills}
 The type locality. June 21.

2042 *Heliotropium Curassavicum*, L.
 Camp Creek. Stoney Co., (Rare)

July 18. (Terns black in drying)
 ✓ 2176 ~~*Lithospermum pilosum*, Nutt.~~
~~*Lithospermum hispidum*, Nutt.~~
 Common in dry soil.

May 20. - July 18.

1830 *Mertensia oblongifolia* Don
 one of the earliest flowers
 Stony dry soils. Disap-
 pearing completely soon
 after blooming. April 13

1911^a *Mertensia paniculata* ^{Steud.}
 mouth of North River (Cwt)
 June 1st. A yard high
 commonly grows higher
 in the mountains & blooms
 much later.

~~✓~~ 1886 *mertensiana* ~~Siberica~~ ~~Don~~,
~~var. umbrotilis, Greenean, n. sp.~~
 This has been called +
 "var. paniculata" the narrow
 leaved form. I think it
 distinct from both. Dry
 in this near Sparta (Union
 Co. ? May 25 - June 3rd
 Commonly growing in
 shelter of small shrubs.
 I have sent it 2 or 3 times
 before.

1970^a *Plagiobotrys hispida*, Gray
 Dry steep on sides of Stein's
 cutis (few seen) June 28
 Where the roots touch the
 paper in drying they
 color it a bright red-
 purple

✓ 1945 *Echinops peruvianus* Redowskii, Lehmann
 var. *occidentalis*, Malcom
 Malheur (Common) June 20.

1913 *Krynitzkia* & *Tomyana*, Gray.
Hillsides of Pine Creek
June 1st

2028 ~~*Eutrichium*~~ *Krynitzkia sericea*, Gray.

Stony subalpine ridges
Santa Rosa Mtns Nevada
July 11. (flowers white)

2045 *Krynitzkia mollis*, Gray.

A stout rooted perennial of
Honey Valley in moist
alpine situations. 18. July.

1906 *Echinopernum hispidum*, Gray.
Flowers, hillsides of Pine Creek
the type locality. - Fruit
similar habitat on Burnt
River. May 31st - June 15.

1887. *Echinopernum diffusum*, Lehm.
Perennial! Near Sparta Tenn. Co
2, 3 May (The large one just coming
into bloom. Sterile Mtns 30 miles
The small one & the ripe fruit.

- 1936 *Nicotiana attenuata*, Torr.
 Burs of the Malheur
 17. June. - Just coming into bloom.
- 2183, *Pentstemon* on *Guideri*, Hook var.
Organius, Gray
 Purple. The only form of
 the species I have seen except
 1637. Last year which I have
 called a n.s.p.
- 1974 *Pentstemon humilis*, Nutt.
 Bleak summits of Steins
 mountains. Growing in
 dense mats a foot or more
 across. June 28.
- 1980^a *Pentstemon confertus*, Dougl.,
 var. *caeruleo-purpureus* Gray.
 A form from Steins Mtns
 June 29.
- 2173 *Pentstemon confertus*, Dougl.,
 var. ?
 Common in moist situations
 (The typical form is not found
 on the E. of the Blue Mtns.)
 June 15 - July 18.

- ✓^{*}1900. *Pentstemon oratus*, Dougl.
Purple. Gravelly bars of N.
Pine Creek near Snake River
May 26.
- ✓^{*}1937. *Pentstemon acuminatus*, Dougl.
Dry sandy soil on or near the
moraine June 18. (Blue)
- ✓^{*}1893 *Pentstemon glandulosus*, Lindl.
Purple. Steep hillsides, espe-
cially n. slopes of Pine Creek
&c. May 25.
- ✓^{*}2175 *Pentstemon densatus*, Dougl.
Suff. white. June 13. Aug 6.
- ✓^{*}2172 *Pentstemon venustus*, Dougl.
Suff. purple. Dry hillsides.
June 13. Aug 6.
- ✓^{*}2171 *Pentstemon glaber*, ~~From~~ Pursh
^{form near var. *cyanthus* Gray.}
Sky-blue. Short-lived perennial
From the lowest valleys to near
the tops of the highest mountains -
June 10. July 18.

2151 *Callinscia* 47^a
pariflora, Dougl.

2152 *Mimulus nanus*. Hook. & Arn.
Deep crimson fl. July 12.

1891 *Mimulus clivicola*, Grunau,
Pink. Hillsides of Pine Creek
May 25.

1996 *Mimulus exilis*, ~~Hutchinson~~ Durand
Yellow.

1951 *Mimulus Bigelovii*, v. *ovatus*.
(*Grunau* *Arizonicus*, Grunau)
Perhaps never published.
Orinson, Hillsides of Cat-
tonwood Creek - near the
Malheur, June 20.

2005-a *Mimulus primuloides*, Bth.
Higher Stein's *Mitro*.

1847 *Synthyris rubra*, Benth.
When the plants first appear
the spike is a dull purple
hence the name, doubtless
April 26. - June

OK.

- ✓ 1917 *Castilleja miniata*.
I thought it was when I got it but it doesn't seem to match that, but it is young. Pine valley wet meadows. June 3.
- ✓ 2094 *Castilleja Lemmonii*, Gray?
Bracts most intense crimson on highest ridges of the Wallowa mts near the lake. Aug 23.
- ✓ 2029 *Castilleja ^{linariaefolia} ~~linearifolia~~*, Benth.
✓ 2029^a Red mts sides, Santa Rosa mts July 11. Silius River (mts sides) July 20.
This was collected under 2 different nos. but seems to be all the same.
- ✓ 2110 *Castilleja ~~viscidulifolia~~ ^{dropala} ~~viscidula~~* ^{Greenm.}
^{(white) ~~viscidula~~ ^{dropala} ~~viscidula~~}
meadows of the Wallowa mts near the lake. Aug 28
Greenish yellow

Bastilleia pallascens, Yuccum.

~~*Bastilleia pallascens*, Yuccum.~~

✓ 2144 for the cupus *pallascens*, Gray

Stony hills, June 3.

✓ 1923 *Bastilleia pallida* & the
^{var. *camporum*, Yuccum}
this has been called for me.

Wet subalpine meadows.

3500 feet alt. June 7,

✓ 2064 *Orthocarpus* ^{*hispidus*, Benth.} ~~*laevissimus*~~

moist subalpine prairie

4000 feet alt. July 29.

✓ 2034 a *Corydanthus capescens* Gray
~~*Orthocarpus*~~ Torr.

near hot alk. saline spring

Albond Valley, July 14 &

✓ 1927 *Orthocarpus pilosus*, Watson

not rare on dry hills. June 13

✓ 2035 *Orthocarpus imbricatus*, Torr.

Stein's nitro July 10.

✓ 2059 *Pedicularis racemosa*, Dougl.

very common in nitro

mk.

July 26.

✓^x 2078 *Radiolaria bracteosa*, ^{Benth.}
 Subalpine ridges, north
 slopes, Wallawa mts.
 Aug 13

✓^x 2032 *Abronia turbinata*, Torr.
 Sands of Alvord desert.
 July 14.

✓^x 2128 *Megarrhiza Oregon*, Torr.
 Gulches of Snake River
 Oct 1st Dried past fruit.
 The roots are said to be
 very large, 100 lbs? "Vines"
 10-15-0- 2-3 Seeds to an
 ovary, !. I had not
 seen it before east of the
 Blue mts.

✓^x 1967 *Verbena bracteosa*, Michx.
 Margin of Shallow Lake
 Malheur Co. June 26.

- ✓ 2043 *Menyanthes Canadensis*, L.
Camp Creek base of Steins
vitus July 18.
- ✓ 1939^a *Scutellaria galericulata*, L.
Harper Ranch - along ditches
Malheur. - 18 June
- ✓ 1956 *Monardella odoratissima*, Benth.
Common in the Malheur
region - June 26.
- ✓ 1889 *Audubertia incana*, Benth.
A low shrub on hillsides
of Eagle Valley, May 23.
- ✓ 2001 *Lophanthus Cusickii*, Grimmer, n. sp.
Dry river sides - Steins
vitus, July 4
- ✓ 1950 *Scutellaria nana*, Gray,
greenish yellow. Steins
vitus, where it is not
rare. June 2
- ✓ 2145 *Scutellaria ~~amblyophylla~~ ^{angustifolia}*, Rydberg
Common on hillsides - June 13.

~~1961. Plantago~~

~~Wet meadow in Barru~~

~~Valley, June 25,~~

✓ 2072 *Bumelia vulgaris*, L.

Misam River banks. Rare

Aug 4

✓ 1961 *Plantago major*, L. var.

Wet meadows in Barru Val-
-ley. Aug 4.

✓ 2013. *Sida argentea* ^{Walt.}

Shrub or small tree. Margin
of the Algod Desert (and
Common southward) "Buck
brush," "Buffalo brush," ~~Grease~~
"Grease
wood" are local names. -

✓ July 6. - Immature fruit.

✓ 2013a *Leucocoma* sp. (No flowers or fruit)

Parasitic on *Scutellaria*.

✓ 1934 *Chorizanthe Watsoni*, Torr. & Gray
Walburn. - 17 June. - North to
Union Co. - Southward.

- 1959^{*} *Myriophyllum spicatum*, L.
In slow running stream
near Skull Spring Mal-
heur Co. June 24
- 1960^{*} *Rumex salicifolius*, Wimm.
by lakes of Barren Valley.
June 25.
- 210^{*} *Polygonum* ^{*minimum*, Watson} ~~*bistortoides*, Pursh.~~
Wet sides, crevices of rocks
etc. Aug 28. Yellow-green
- 1986^{*} *Polygonum bistortoides*, Pursh.
Wet meadows top of Steins
nitis, June 30.
- 2128 *Eriogonum*. no specimen
Hill sides of Snake River
Oct 1st (white)
- 2046^{*} *Eriogonum elatum*. Dougl.
Southern margin of Steins⁴
Blue nitis, Harney Co.
July 19. (Common this year)

- ✓ 1880 *Eriogonum thyroides*, Benth.
 Stony ridges, Union Co.,
 May 21st. (Purple-white)
- ✓ 1963 *Eriogonum Douglasii*, Benth.
 Top of Steier's Vitis June 25
- ✓ 1957^a *Eriogonum dichotomum*, Dougl.
 Hillsides of the Malheur
 Cottonwood Creek. June 21.
- ✓ 1938 *Eriogonum Baileyi*, Watson
 Greenish white. "Chalby"
 hillsides of the Malheur
 region. June 18.
- ✓ 1953, *Eriogonum cernuum*, Nutt.
 var. *terrestris*, Torr. & Gray
 Too young. - old plants
 much larger!) Hillsides
 of Cottonwood Creek, near the
 Malheur. June 21.
- ✓ 1930. *Eriogonum ochrocephalum*, Watson
 "Chalk" hillsides of Burnt River (and
 Southward?) June 15. Pale yellow.

- ✓⁺ 1954 *Eriogonum angulosum*, 731k.
Hillsides of Cattawood
Creek June 21.
- ✓⁺ 1912 *Eriogonum sphaeroceph-*
alum ^{Donk.} ~~Donk.~~
this has been called for
me. Hillsides of Pine
Creek June 1st
- ✓⁺ 2039 *Eriogonum ovalifolium*, Nutt.
Stein's Nitro, near the high
head of Wild-horse Creek
July 15. Just coming into
bloom. But little seen.
- ✓⁺ 1965 *Eriogonum umbellatum*, Torr.
Stein's Nitro. June 25.
- ✓⁺ 2163 *Eriogonum virginicum* ^{Donk.}
Common on hillsides etc.
Aug 2.
- ✓⁺ 2012 *Oenothera deudraides* ^{Nutt. O. foliosa, Nutt.}
Sierra Ranch! Sagebrush
Soil - Pink fl. July 5

✓ 20^x 30 *Spierstockys occidentalis*,
A suffruticose herb. ^{Matson}
of alkaline soil. Oregon
Crest valley, near the state
line. July 12.

✓ 21^x 24 *Chenopodium Botrys*, L.
Sand bars of Snake River
outlet

✓ 1928. *Atriplex Nuttallii*, Watson
Sterile sage & plains. Common
June 10.

✓ 20^x 34 *Atriplex Nuttallii*, Watson
this was also called
for me by Dr. Watson, but
it's certainly incorrect.
A shrub a yard high
Boiling Spring, margin
of alluvial desert and
out road, north to the trail
here, where I got it before

July 12

- ✓ 2031, *Suaeda occidentalis*, Watson
 Growing in the shelter of
 greasewood. - Oregon buck
 valley. July 12.
- ✓ 2044. *Suaeda depressa*, Wats.
 Hamey Valley in alkali
 soil. July 18.
- ✓ 2043^a *Suaeda intermedia*, Watson
 Hamey Valley near Malheur
 Lake. July 18
- ✓ 1939 *Suaeda intermedia*, Wats.
 Valley of the Malheur
 River. June 18.
- ✓ 2070 *Urtica Lyallii*, Watson
 Purple stems. about sub-
 alpine springs etc. 4-6000
 feet. alt. Aug. 4. - 4° 5°
- ✓ 2069. *Urtica gracilis*, Ait.
 5° 6°. Common at 3000 - 3500
 feet alt. Aug 3.

- 2162 *Euphorbia* ~~*glandulosa*, Michx.~~ ^{*glabrescens* Snyden.}
Generally distributed up
to about 4000 feet alt.
Aug 5.
2098. *Betula glandulosa*, Michx.
Wet situations in the high
highest nitro. Aug 25.
- 1909 *Populus trichocarpa*, Torr. & Gray
Gulches of Pine Creek
near Snake River.
May 31. - Sep. 25.
- 1889^a *Populus trichocarpa*, Torr. & Gray
Gulches near Pine Valley
May 23 - Oct 1st.
- 1839 *Populus trichocarpa* Torr. & Gray
A common tree. Gulches
3500 feet alt. May 9.
1997. (*Salix californica* Torr. & Gray)
In small pond foot of
Stein's nitro, near Sidine
Creek. July 3.

- ✓ 2075 *Goodenaea menziesii*, Link.
A common plant on low
moist. shale, Aug 13
2062. *Habenaria Alaschensis*, Wats.
Dry nitid ridge, 4000
ft alt. in open woods
July 28. (Greenish fl.)
- ✓ 2137 *Allium acuminatum*, Hook.
Cinnson. June 24 - July 12.
2000. *Allium attenuifolium*, Kell.
White. In wet gulches
of Stein's nitid near
Divine Creek, July 4.
1862. *Allium macrum*, Wats.
White. Bulbs commonly grow-
ing in clusters.
May 10. - June 10
- ✓ 1861. *Allium Cusackii*, Wats.
Greenish white or dull pur-
ple. Stony hills, 3500 ft
alt. May 9.

- ✓ 1894^x *Culochortus elegans*, ^{var.} var.
white. Abundant on
Pine Creek May 25.
- ✓ 2060^x *Zygadenus elegans*, Pursh
greenish white. Stream-
bank & on lava nitro's 4000
feet alt. July 28.
- ✓ 2094^a *Zygadenus elegans*, Pursh
fruit only! From the higher
Wallowa nitro's where it
occurs in great profu-
sion. Aug 23.
- ✓ 2076^x *Phlegopteris dryopteris*, ^{fr.}
little common. Rare.
- ✓ 2091^x ~~*Podsia ^{var.} ~~elegans~~ Eaton*~~
~~*Wallowa nitro's*~~
Wallowa nitro's. Aug 23
- ✓ 2165^x *Sidalcea campestris*, Greene

Final report -
18 May 1999
JMS

12.1
15.4
12.9
12.8
25

Names with data of specimens
with data, from Wm C. Cusick
Union, Oregon July 5/88

- 1907^a *Arabis arcuata*, subvillosa, Watson
Hillsides of N. Pine (Creek) May 31
98. Violet flowers. (Pepper's determination)
2095. *Oxytropis cusickii*, Munro (n. sp.)
Greenish white. Alps & subalpine ridges
of the Wallawa Mts. Aug 23
- 2164 *Goyophytum paucissimum*, P. & G.
Common in dry soil July 29.
- 2164 *Goyophytum lasiocarpum*. Incom
mon in dry situations, July 29.
- 2232^a *Smilacina amplexicaulis*,
Seven Devils Mts of Idaho 7000 feet
alt. July 4.
- 2291 *Carex Deweyana*. Bolanderi, Benth.,
Stream bank etc. Wallawa Mts (and
common). July 31.
2293. *Lesquerella occidentalis* Wats.
(over)

Determined by
Prof. Piper

- (2293) Subalpine nitid sides of the
Wallawa mts near the lake.
7000? feet alt. July 31. 29
[I think this should be L. Douglasii]
- 2296^a *Senecio pygmaea*, Rob.
Subalpine Wallawa mts. 7000 feet
alt. July 31.
- 2295^a *Echinocystis oregona*, Leuzner.
Fruit only, dry soil near Snake River
near Baccus's Landing, July 31.
(Megarrhiza oregona!)
- 2301^a *Arenaria sajanensis*, Willd
Cliffs of Wallawa mts. 9000 feet
alt. July 31.
- 2305^a *Dryas octopetala*, L.
Alpine Wallawa mts. white fl.
abundant but ^{scarcely} past bloom.
Aug 3. '99
- 2308^a *Senecio Fremontii*, occidentalis, Gray.
Alpine Wallawa mts where it
is common. Aug 3.

- 2313 *Lidium glandulosum*, Nutt.
East fork of Mollawa river: 6000?
Subalt. Land common, Aug 4.
A low shrub - 2'; white flowers.
in bogs, etc. Deciduous of the
leaves used by hunters "astea"
- 2327^a *Ranunculus Eschscholtzii*, Schlecth.
("Probably") South slope of the Mollawa
river: head waters of Eagle's Creek
Sept 1st.
- 2322^a *Bastillea rustica*, Piper. (n. sp.)
On limestone cliffs of the Mollawa
river toward the source. Dark, dull
red fl. Aug 9, -'99. (You have
all the specimens collected.)
- 2343^a *Aplopappus* ^p_r *nanus*. Eulim.
White flowers (rays & disk!)
Low (1') shrub of the cliffs of
Snake river, Idaho side - near
Ballasch's landing. Sep. 20.
- 2331^a *Lupinus* (?) sp.
Pale blue. Trout Creek in South
slope of the Mollawa river Sept. 1st
No name was given me for this
Prof. Piper saying I must wait
for Dr. Robinson's revision of the genus.

- 2346^a *Erigeron divergens*, V. V. G.
Blm. Gravelly bottoms of Pine
creek near Snake river, Sep + 15⁻
(Quite out of season.)
2347. *Viscota californica*, Choisy
Parasitic on Potatoes & *Grindelia*
manu, at near garden in
La Grande Oct 6.
(There should be label for this,
but not for
- 2347^a *Xanthium spinosum* L.
2347^a Near La Grande, - introduced
Oct 8.
2358. *Juniperus occidentalis*, Hook
(Prof Sargent's determination)
Hills of Union Co. Sep 21.
Slow wide branching tree; road
here.
- 2951^a is a mistake I have not
got near to that number yet -