

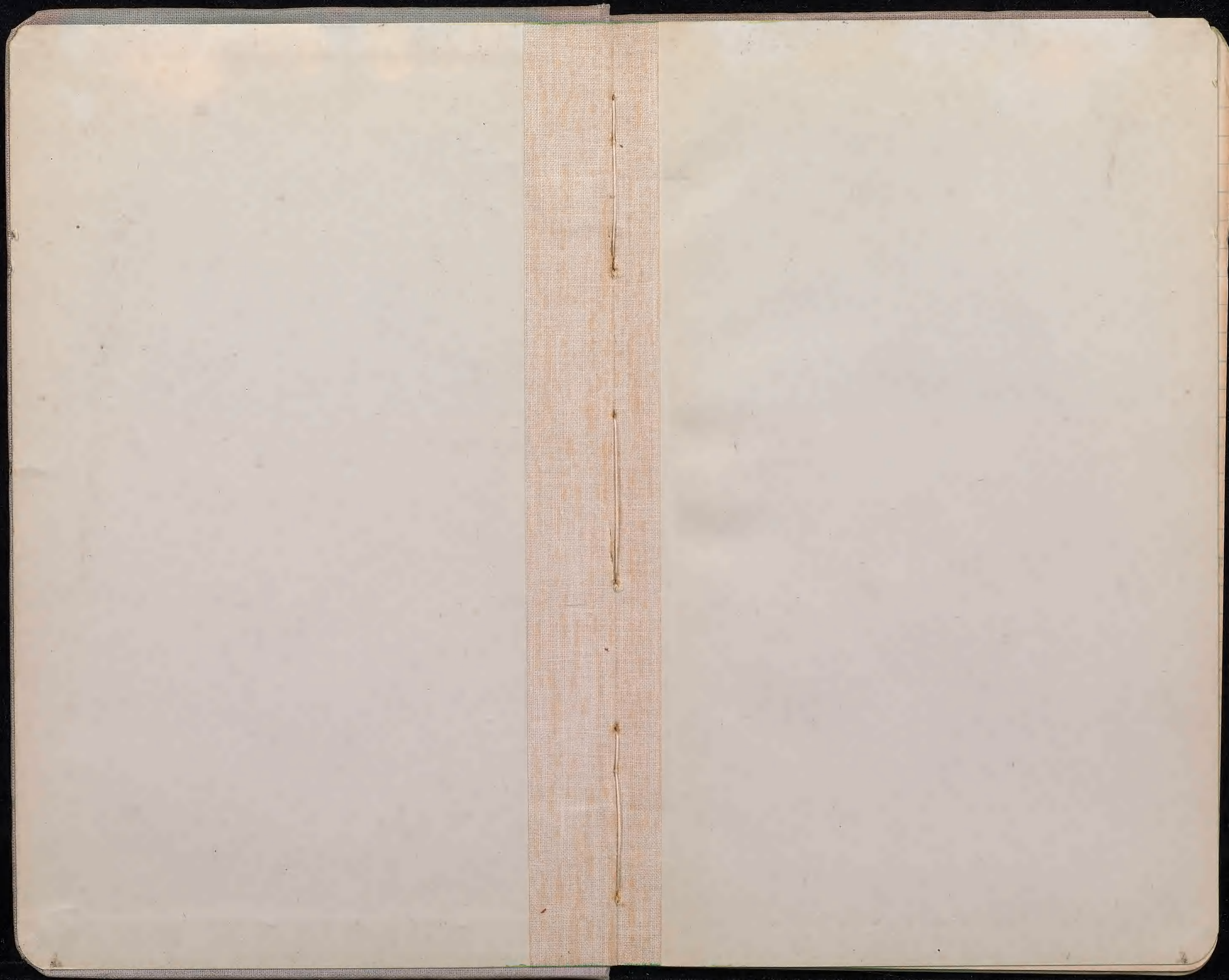
A. S. Hitchcock

1923

22043

—22618

41



Ecuador 1923
Compani,

22043
Herb

22044 Legume (Asteraceae)
Perennial Herb fl. purple

Agrostis breviculmis
22045 *Agrostis*

22045 $\frac{1}{2}$

Herb
all
050
37
73
20M

22046

Silene
After period

22049

Vicia
fls blue-purple

22047

Mars
Composit

22050

Composit
Hills, level which surface.
fls white.
leaves sharp shape, 2-ranked up
long culms on the ground - especially
in stone plants

22048

Composit
Among on edge of lake
fls yellow

22051

Peru
Colonia Perené - alt. 21. A
Rocky cliff. *Andropogon bicornis* (590M)

0.050

1937

173

22052 *Lasiacis sorghoidea*
Lasiacis sorghoidea
Shady slope

22053 *Lasiacis ruscifolia*
Lasiacis (*ruscifolia*?)
Bushy slope

22054 *Lasiacis sorghoidea*
Lasiacis sorghoidea
Forest beside trail

Panicum trichanthum
22055 *Panicum trichanthum*
Forest beside trail, growing
up in a century plant.

Olyra heliconia
22056 *Olyra*
Forest beside trail

Panicum stoloniferum
22057 *Panicum stoloniferum*
Open ground in forest beside trail

Panicum frondescens

22058

Panicum stoloniforme
ditto but larger than 2057

Panicum polygonatum

22059

Panicum polygonatum

Olyra microantha

22060

Olyra microantha
Forest hillside trail

Paspalum decumbens

22061

Paspalum decumbens
Rocky cliff.

Axonopus compressus

22062

Axonopus compressus
Open ground along trail

Arundinella berteroneana

22063

Arundinella
Rocky cliff

22064 *Panicum laxum*
Rocks, diff - mossy place.

22065 *Eleusine indica*
Open ground.

22066 *Paspalum decumbens*
Open ground

22067 *Ichnanthus pallens*
Shady bank

22068 *Pseudechinolaena polystachya*
Shady open ground

22069 *Ichnanthus candidus*
Rocky diff. Consecut

22070

Olyra heliconia
Olyra
Rocky cliff. - a few old fls.

22073

Paspalum virgatum
Paspalum
Along ditch 4 ft

22071

Cyperus
Open ground

22074

Eragrostis ciliaris
Eragrostis ciliaris
On stone wall

22072

Paspalum paniculatum
Paspalum paniculatum
Cult ground

22075

Syntherisma sanguinalis
Syntherisma sanguinalis
Open moist ground

22076

Paspalum crassum
Paspalum
Along ditch

22079

Valota insularis
Valota insularis
Mud in pasture

22077

Andropogon condensatus
Andropogon condensatus
Grassy slope

22080

Axonopus scoparius
Axonopus
Cut in field for pasture
Not in flower. Well liked by sheep
Called maikila. May be same
as the Axonopus cut. by M. Cleveland

22080

Leptochloa domingensis
Leptochloa filiformis
Mud in garden

22081

Cenchrus hillebrandianus
Cenchrus hillebrandii
Mud in field, common in sandy
fields. Appears to be the same as
the Hawaiian plant.

22082 *Syntherisma sanguinalis*
Syntherisma
Mud in field

22083 *Rytidix granulata*
Rytidix granulata
Mud in field

22084 Compositae
Edge of forest on hill 2-3 ft
fls blue

22035 Compositae
Stems 8 ft, leaves in clusts
at base of scabrous growth, naked
below. Inf 2 ft fls purple
Edge of forest on rather dry slope

22086 *Axonopus scoparius*
Axonopus
Grassy slope among stumps
at edge of forest.
Looks the same as 2080. Some
old inflorescences remaining

22037 *Paspalum multicaule*
Paspalum
Sandy field

22088

Axonopus compressus
Axonopus (compressus)
Sandy field

Syntherisma chinensis

22091

Syntherisma
Sandy field

22089

Paspalum conjugatum
Paspalum conjugatum
Sandy field

22092

Syntherisma chinensis
Syntherisma
Sandy field

22090

Syntherisma chinensis
Syntherisma
Sandy field

22093

Compositae
Sandy slope - left.

Chaetochloa vulpiae Oct 22
22094 *Chaetochloa*
Shrubby shady bank

22095 *Chaetochloa poiretiana*
Chaetochloa
ditto no fls. probably *C. sulcata*

22096 *Andropogon selloanus*
Andropogon leucostachys
Rusty place

Chloris radiata
22097 *Chloris radiata*
Wet in field

Paspalum plicatulum
22098 *Paspalum plicatulum*
Wet place in meadow

Panicum laxum
22099 *Panicum laxum*
ditto

22100 *Leptochloa domingensis*
Leptochloa virgata
Open grassland

22101 *Panicum trichoides*
Panicum trichoides
Mead in field

22102 *Paspalum virgatum*
Paspalum virgatum
Mead in field in meadow
Called here Cortadera

Arundinella berteroniana
22103 *Arundinella* COLL
In wet by river

Oplismenus hirtellus
22104 *Oplismenus burmanni*
Shady bank in forest

22105 *Arctostaphylos* COLL
on branch of tree by river
Fls yellow

22106

Chusquea
Chusquea

Grows by river, climbing over
shrubs in somewhat open places
no fls.

22107

Eupatorium
Edge of forest 5 ft fls white

22108

Sporobolus berteroi
Sporobolus berteroi (Lentocoma)
Pasture land by river

22109

Chaetochloa geniculata

ditto

Chaetochloa geniculata

22110

Cenchrus pauciflorus
Cenchrus (Carolinian)
Sandy open ground by river

22111

Axonopus capillaris
Paspalum Axonopus capillaris
Clay cliff in moist soil

22112

Compositae
Edge of forest. 6 ft fls white

22113

Andropogon brevifolius
Andropogon muricatus
Clay cliff

22114

Cyperaceae
Sandy field

22115

Panicum hirticaule
Panicum
Sandy field, annual, spreading
at base, culms asculms or
erect

22116

Lasiacis ligulata
Linnæus diversicollis
Among brush at edge of forest
47 grams

Oplismenus hirtellus Oct 23

22117

Oplismenus humbertianus
Shady place in forest
see 2104

22118 *Lasiacis sorghoidea*
Lasiacis sorghoidea
Edge of forest
high

22119 *Lasiacis sorghoidea*
Lasiacis sorghoidea
Edge of forest
open

22120 *Lasiacis sorghoidea*
Lasiacis sorghoidea
Edge of forest
a very bushy form
young shrubs along forest edge

22121 Bamboo
Main cane 2 dm thick
20 ft high but recluses,
only saw one plant

Lasiacis sorghoidea
22122 Lasiacis sorghoidea
Edge of forest
open protected form

22123 *Gynerium sagittatum*
Gynerium sagittatum
Low ground along river
part of leaf
leaf
section of very broad leaf
section of culm at base
young shoot
photo of plant

22124 *Panicum polygonatum*
Panicum polygonatum
along stream.

22125 *Lagiocis sorghoides*
Lagiocis sorghoides
sterile plant
to grass culm

22126 *Compositae*
low ground along river
8 ft

22127 *Compositae*
low ground along river
8 ft

22128 *Ichnanthus calvescens*
Ichnanthus calvescens?
Rocky cliff - sterile - very pubescent

22129 *Compositae*
climbing on tree on edge
of forest on side of hill by
river.

La Merced - Oct 23

22130 *Eragrostis nigricans*
nigricans
Mud in park - purple

22131 *Eragrostis buchtienii*
nigricans
Mud in park - plumbeous

22132 *Paspalum*
Paspalum parvifolium
Sandy soil along road
a small tree

Cenchrus hillebrandianus

22133 *Cenchrus hillebrandianus*
ditto

Cenchrus pauciflorus

22134 *Cenchrus pauciflorus*
Mud in park

Muhlenbergia fastigiata

22135 *Muhlenbergia*
Open ground along road

Ornithoglossum

22136

Calamagrostis densiflora
Calamagrostis
dry bank above Arroyo

22139

Agrostis
ditto

22137

Calamagrostis densiflora
Calamagrostis
ditto

22140

Agrostis
ditto

22138

Calamagrostis inberbis
Calamagrostis
ditto

22141

San Marcos to Tama, Oct. 24, ^{collected at} steps of automobile
Dry slope, old ranch only
Cortaderia guila

22142

Cortaderia guila

Cortaderia
Dry slope - Tufts like the
kind around Alausi etc

22143

Andropogon lateralis

Andropogon
Dry hill

22144

Festuca megalura

Festuca (romana)
Dry hill

Agrostis virescens

22145

Agrostis?
Dry slope

84189

22146

Lamprothyrus peruvianus

Calamagrostis
Dry hill ♀

Andropogon hirtiflorus

22147

Andropogon
Dry hill

84190

Trachypogon montufari
22148 *Elevum*
dry hill

Pennisetum bambusiforme
22149 *Pennisetum*
moist place on hillside

Eragrostis buchtienii
22150 *Eragrostis*
dry hill

Sporobolus berteroi
22151 *Sporobolus berteroi*
dry hill a small forest

Calamagrostis montevidensis
22152 *Calamagrostis*
moist hillside

Oplismenus minutum
22153 *Oplismenus*
Rocks cliff - somewhat moist

22154

Muhlenbergia tenuissima
 Muhlenbergia
 Dry slope

22155

Aegopogon cenchroides
 Aegopogon
 Dry slope

22156

Andropogon lateralis incanus
 Andropogon
 Dry slope

22157

Axonopus scoparius
 Axonopus
 Dry slope

22158

Chaetochloa scandens
 Chaetochloa
 In a field

Tarma, Oct. 28 3000 meters (10000 ft)
 on a dry hill with cactus. Somewhat
 moist from the seepage from small irrigation ditch

22159

Bromus unioloides
 Bromus (near unioloides)

22160 *Pennisetum trisetachyum*
Pennisetum
open in large meadow

22161 *Stipa brachyphylla*
Stipa (immature)

22162 *Eragrostis lurida*
Eragrostis
panicle almost black

22163 *Eragrostis lurida*
Eragrostis
Same as 2162 but panicle
spreading. The open hairs from
base to panicle

22164 *Nassella pubiflora*
Nassella

22165 *Muhlenbergia rigida*
Muhlenbergia
Panicle dark purple

Andropogon saccharoides parvispicula

22166 *Andropogon saccharoides*
Looks just like the northern form

22166 $\frac{1}{2}$ - *A. saccharoides perforatus*

Bouteloua simplex

22167 *Bouteloua simplex*
Annual - purple - on a moist
spot mixed with 2/67

Aristida adscensionis

22168 *Aristida*
see 2/67

Lycurus phleoides

22169

Lycurus?

Chaetochloa geniculata

22170 *Chaetochloa geniculata*
spikes dark purple

Poa pratensis

22171 *Poa* (probably *P. pratensis*)
Along irrigation ditch

22172

Polypogon interruptus
 Along iron factory ditch

Oroya Oct 25. Just above the
 Lyon Pass along the Rio Grande river. Plants of
 the dry hills for most part, finding more moisture
 at base of hills by river.

22173

Festuca fibrifera
 Large bunches on rocky cliff hanging
 from face

22174

Stipa ichu
 Very common on all the hills here
 mostly not in flower. Bunches

22175

Poa *Poa* *videt*
 Large bunches hanging from face of
 rocky cliff. Common

22176

Poa fibrifera
 Along river among stones in first
 hollow. Common. Rhizomes. Sometimes
 forming areas 1-2 feet across. Panicle
 branches reflexed the lower often
 conspicuously so

22177

Polypogon interruptus
 Along river in first hollow mostly
 near the water.

22178

Nassella pubiflora glabriflora
Nassella
 Along river in forest bottom.

22179

Festuca weberbaueri
Festuca
 bunch grass in forest and second
 bottom along river. Also higher up
 but more in flower. Common.

22180

Elymus angulatus
Elymus
 Among stones in forest bottom
 along river, also common on rocky cliff -
 the old hills with diverging crevices are
 from the rocky cliffs. These plants had green
 heads also which were like those of the
 river bottom.

22181

Stipa micronata
Stipa (*micronata*)
 Common in river bottom.

22182

Epilobium knuthiana
Epilobium or *Epilobium*
 River bottom, second bunch. Head
 very dark.

22183

Stipa brachyphylla
Stipa
 Base of skulls, Common.

22184

Koeleria cristata
Koeleria cristata

Small bunches, a single
 Bunch of stalks and a second hollow
 of rice. Some specimens are dried
 some apparently not

22184 1/2 - *Calamagrostis heterophylla*22184 2/3 - *Frietum spicatum*

22185

Agropyron attenuatum
Agropyron attenuatum

Bunch of stalks

22186

Poa scaberula
Poa scaberula

Small bunch among stones on side
 of hill

22187

Agrostis virescens
Agrostis virescens

Poa *Poa*
 Bunch of stalks. All same species?

22188

Poa candamoana
Poa candamoana

Poa
 Bunch grass in second hollow,
 may be same as 2175

Oct 28

Collecting from
ranch house

Ranch or Hacienda Atotzaco
 west of Jimine, a station between Orizaba &
 Cerro de Pasco. Alt. 13400 (level lower) (4060 meters)

22189

Agropyron
 Valley land on Panamero
 this plant same as same specimen
 as on low mead.

Poa annua

22190 *Poa annua*
Common around the building
and along the stream

Festuca rigescens

22191 *Festuca*
Bottom land of the stream,
Rather small bunches, blue
green, common

Calamagrostis brevifolia

22192 *Calamagrostis*
Small bunches, bottom land
and lower slopes - common

Festuca parvipaniculata

22193 *Festuca*
Small bunches, bottom
land & lower slopes, occasional

Calamagrostis rigescens

22194 *Calamagrostis*
Small bunches in springy place

Poa subspicata

22195 *Poa*
Large bunches, bottom land

22196

Poa candamoana

Cremes of dunstone rocks.
rare

22199

Fisetum spicatum

Trisetum

Spongy place

22197

Festuca rigescens

Common large bunch grass
of the hills

22198

Calamagrostis preslii

Calamagrostis
Spongy place

22201

Poa subspicata

Poa

Spongy place

22200

Calamagrostis preslii

Calamagrostis

Common on slopes among
rocks and among large grasses

22202

Agrostis haenkeana

Agrostis
Among rocks.

22203

Dissanthelium calycinum

Dissanthelium?
Among rocks, rare

22204

Dissanthelium calycinum

Dissanthelium
Rocks slopes, common

22205

Agrostis breviculmis

Agrostis
Rocks slopes, common

22206

Calamagrostis imberbis

Calamagrostis
Common in bottom lands
on slopes. Heads flexuous or
curly

Oct 29

Collected at a sheep camp a few
miles west of the road house

22207

Dissanthelium calycinum

Dissanthelium
Along Montaro river. 12500

22208

The only stand seen. Proliferated
places in rocky cliff.

22209

Calamagrostis brevifolia

Bunch grass in moist ground

22210

Bromus unioloides

Bunch grass
Bank near Montano River

22211

Stipa mucronata

Stipa
Rocky bank near Montano River

22212

Poa candamoana

Poa
Rocky bank near Montano River
Bunch grass

22213

Poa candamoana

Poa
Bunches hanging from rocks
along Montano River

22214

Dissanthelium calycinum
Agrostis
Grassy slope

22215

Carex
Grassy slope

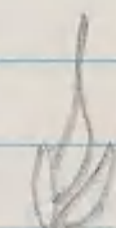
22216

Poa Poa caudamosa
Rocky slope on Montano River
Root stubs. Seems different from
2212 which it resembles

22217

probably *Nassella pubiflora*
Nassella
Mossy rocks by Montano River

22218

Acisachne pulvinata
tricholeuca? 
Rare sedge on hills, more or
less common, but in small
patches

22219

Calamagrostis imberbis?
Calamagrostis?
Bunches on hills - common

22220 *Calamagrostis imberbis*

Single bunches common
on hills

Calamagrostis (elegans) eminens

22221 *Calamagrostis*

Dense bunches in spruce place
on hills

Calamagrostis rigescens

22222 *Calamagrostis*

Spruce place on hills

Calamagrostis densiflora

22223 *Calamagrostis*

Rocky ledge. Large bunches

Cerro de Pasco, Oct. 31. The hotel is
about 14000 ft. 4242 meters.

Hordeum andicola

22224 *Hordeum*

Partial bunches near ditch in open ground
and along ditches. Old culms, prostrate.

Calamagrostis imberbis

22225 *Calamagrostis*

Plains before coming to C. de P.

22226

Stipa brachyphylla

Stipa
Plain before coming to C.P.

22229

Calamagrostis imberbis

Calamagrostis?
Small bunches, dry hills abundant

22227

Festuca casapaltensis

Festuca
Dry hills, small bunches
Old culms more or less sporeal
see specimen in box

22230

Bromus unioloides

Bromus
Partial bunches on upper ground
near hole

22228

Desmanthelium calycinum

Desmanthelium
Dry hills, abundant
see specimen in box

22231

Bromus lanatus

Bromus
growing on a bunch of Festuca
on top of hill.

22232

Festuca scirpifolia

Festuca

Bunches on dry hill
Probably the plants matured as out of
season

22233

Dicranthelium calycinum

Dicranthelium

Dry hill - abundant

22234

Festuca rigescens

Festuca

Bunches on dry hill, blue-green

22235

Festuca rigescens

Festuca

Bunches in more place on hill.
Seems a little different from 2234
green-green, spike larger.

22236

Calamagrostis preslii

Calamagrostis

Bunches on dry hill

22237

Agrostis breviculmis

Agrostis

Bunches on dry hill

Calamagrostis rigescens
22238 *Calamagrostis* ?
not plant in hills

Festuca rigescens
22239 *Festuca*
Bunches on hill
is this same as 2235?

Dicranthelium minimum
22240 *Dicranthelium*
Common in places on hill

Nov. 1

along Ry to
south.

22241 *Stipa haus-meyeri*

Calamagrostis
Bunches on hills. The specimens are
in more separate places. Mostly the ones
in part flower.

Dicranthelium calycinum
22242 *Dicranthelium*

Slope of Ry cut. One spec in flower.
This appears to be *Dicranthelium* from the
more humid form (2246). Are both
of this genus?

Stipa brachyphylla
22243 *Stipa*

Bank of Ry cut. More moisture
here

22244

Festuca parvipaniculata
FestucaBunches on bank of R. cut
through dry hill

22245

Festuca parvipaniculata
Festuca

ditto

22246

Disanthelium calycinum
Disanthelium

ditto

Agrostis breviculmis

22247

Agrostis

ditto

44888

22248

Poa annua
Poa annua

In hazy pool

44889

Acridone pulvinata

22249

Acridone pulvinata
(Muhlenbergia)Dwarf succ. not abundant
of old sp. hills

44890

Calamagrostis podophora
22250 *Calamagrostis*
Large bunch meadow

Poa horridula
22251 *Poa*
on top of wall

Festuca rigescens
22252 *Festuca*
Bank of hill. Common

Calamagrostis breifolia
22253 *Calamagrostis*
Superior place on slope

Trisetum spicatum
22254 *Trisetum*
ditto

Calamagrostis rigescens
22255 *Calamagrostis*
Common in hay and mown
places.

Acicachne pulvinata *Acicachne*

22256

(*Muhlenbergii*)

Acicachne

Open slope. Part of brush
about 2 ft in diameter. The
brush is *Quercus* - his growth
in the brush, low below 2 yds
ground of the green plants. The
original green up at the periphery of
the brush and then the periphery of
leaves beyond it the most common.
The green plants produce heavy seeds

22257

La Quindua, 10 kilometers below
Cerro de Pasco, alt. 11000 ft.

The plants were collected on the way
to Quindua and in the vicinity of that place

22258 *Stipa inconspicua*

Stipa

same place in partial shade

Brachypodium mexicanum

22259

Brachypodium

in part in shade of large shrubs

Poa horridula

22260

Poa

Large bunches along river
Rare common in some cliffs

Hordeum andicola

22261

Hordeum

Prostrate bunches in pasture
Culms prostrate or somewhat
ascending

22262 *Polygoum interruptus*
moist place in pasture

22263 *Agropyron attenuatum*
moist place in pasture

22264 *Agrostis virescens*
moist place in pasture

22265 *Poa horridula*
moist cliff
= 2240?

22266 *Poa trivialis*
Forming stony mounds along
small stream. The leaves float
along the edge of the water

22267 *Elymus angulatus*
moist cliff

Bromus lenis (buchtienii)
22268 *Bromus*
Wine bank, Pinnel downy

Fisetum spicatum
22269 *Fisetum*
Wine bank

Pectusa scirpifolia
22270 *Festuca*
Rocky cliff. Large bunches

Fisetum spicatum
22271 *Fisetum*
Rocky cliff

Bromus lenis (buchtienii)
22272 *Bromus*
Wine bank on cliff
Probably = 2268 but small

Calamagrostis tarmensis
22273 *Calamagrostis*
Large bunches on cliff

Agrostis nurescens
22274 *Calamagrostis?*
Rocky cliff

Calamagrostis brevifolia
22275 *Calamagrostis*
Rocky cliff - small bunches

Festuca scirpifolia
22276 *Festuca*
Bunches on Rocky cliff

Poa trivialis
22277 *Poa (trivialis?)*
Along small stream
probably same as 2266

Elymus angulatus
22278 *Elymus*
Rocky cliff

Poa trivialis
22279 *Poa*
Along small stream
= 2277?

22280 *Poa horridula*
Rock cliff
of 22604 2265

22281 *Festuca scirpifolia*
Festuca
Large bunches on rocky cliff.

22282 *Festuca rigescens*
Festuca
Rocky cliff - small bunches

Boyllarisinga Nov 6. a coal mine
of the company. in the curve (13700 ft). 30 km. Col-
22233 little along road down a deep
valley towards the river. (4151 meters)

Calamagrostis recta
Calamagrostis
Hillside

22284 *Agrostis*
along irrigation ditch.

Paspalum bouplandianum glabrescens
22285 *Paspalum*
Hills

22286

ditto

Polygonum interruptus
Polygonum

22289

ditto

Poa candamoana
Poa

small form of 2268?

22287

ditto

Festuca australis
Festuca - annual

22290

ditto

Bromus unioloides

Bromus

22288

ditto

Poa candamoana
Poa

22291

ditto

Agrostis virescens

Agrostis

22292

ditto

Stipa inconspicua
Nassella

22295

ditto

Stipa inconspicua
Nassella

22293

Dry

Stipa pinnata
Stipa siliqua
slope

22296

ditto

Agrostis verticillata
Agrostis

22294

Wet bank

Frustrum spicatum
Frustrum
bank

22297

Agropyron attenuatum
Agropyron
growing up decaying stumps
on slope

Brachypodium mexicanum

22298

Brachypodium
Forest bank
Leaves often forming a
dense clump, only a few
old panicles observed

Stipa mucronata

22299

Stipa
dry slope

Festuca scirpifolia

22300

Festuca
A large bunch grass
on dry slope

Calamagrostis rigescens

22301

Calamagrostis
moor slope

Poa horridula

~~*Lampothyrus peruvianus*~~

22302

Poa
Large bunch on slope
mostly ^{part} of flowers. Somewhat
erect slope

Lampothyrus peruvianus

22303

Cortaderia
Rocky slope

22304

Lamprothyrus peruvianus
Cortaderiaditto. Probably a smaller
form of 2303

22305

Calamagrostis fuscata
Calamagrostis

Dry slope

22306

Cortaderia guila
CortaderiaRocky slope
A large bunch, same as 2303
showing tall stem

22307

Stipa macronata
Stipa

Dry slope

22308

Episcampes caerulea
Episcampes

ditto - Large bunch

22309

Festuca australis
Festuca - annual

Open ground on slope

22310 *Agrostis virescens*
ditto *Agrostis*

22311 *Stipa inconspicua*
ditto *Russella*

22312 *Bromus lenis (fuchtmii)*
ditto *Bromus*
dry slope

22313 *Festuca fibrifera*
ditto *Festuca*
dry slope - long bunch

22314 *Calamagrostis recta*
ditto *Calamagrostis*
dry slope

22315 *Calamagrostis recta*
ditto *Calamagrostis*
dry slope - long bunch

Goullarisquisga (orca) Nov. 7
A short distance from town
along an incline (cable R.) about
5000 ft high to a new mine, also
at base of ^{incline} mine. Much more moist
in this valley and grasses in good con-
dition about 4000 M?

22316 *Poa* ~~*Poa*~~ *horridula*
Rocky slope *herb* *herb*

22317 *Carex*
mt place

Calamagrostis recta
22318 *Calamagrostis*
mt slope *herb* *herb*

Elymus angulatus
22319 *Elymus*
mount bank

Agrostis breviculmis
22320 *Agrostis*
Pampas at top of incline

Agrostis virescens
22321 *Agrostis*
mount slope

22322

Poa horridula
Along small streamLooks like *P. proclumens*

22323

Trisetum spicatum
ditto *Trisetum (spicatum)*

22324

Bromus unioloides
Bromus
Moist slope

22325

Bromus pitensis
Bromus
Moist slope

22326

Bromus pitensis
Bromus
Moist slope
May be a small form of 2325

22327

Calamagrostis humboldtiana
Calamagrostis
Bank of streamlet Large bunches

Pectus scirpifolia

22328

~~Moss~~ ~~slope~~ ~~Large bushes~~
Fishesy

Agropyron breviaristatum

22329

~~Moss~~ ~~slope~~
Agropyron

Agrostis humboldtiana

22330

~~Moss~~ ~~slope~~
Agrostis
Wet bank of streamlet

Agrostis gelida Trin.

22331

~~Moss~~ ~~slope~~
Agrostis
Is this a alba?

Calamagrostis (elegans) eminens

22332

~~Moss~~ ~~slope~~
Calamagrostis (awna)
Wet bank of streamlet
Large bushes

Polygonum interruptus

22333

~~Moss~~ ~~slope~~
Polygonum
Open place on narrow slope

Alopecurus bracteatus
22334 *Alopecurus*?
Buffy slope

Poa candamoana
22335 *Poa*
moor slope

Cortaderia guila
22336 *Cortaderia*
Back main slope
much

~~22337~~
Lima Nov. 12
Collected in company with Dr. Weberbauer
ditches and gardens toward Miraflores

Polypogon interruptus
22337 *Polypogon*
Along ditches
Are these all the same?

22337 $\frac{1}{2}$ - *Agrostis verticillata*

Paspalum racemosum
22338 *Paspalum* (caudatum)
a common weed in fields

Eriochloa ramosa
22339 *Eriochloa*
Along ditches

22340 *Polypogon elongatus*
Along ditches

22341 *Bromus willdenowii*
Common in fields

22342 *Echinochloa crus-galli* *crus-galli*
panicle drooping

22343 *Capriola dactylon*
Common

22344 *Poa annua*
Common

22345 *Chloris radiata*
Chloris (radiata)

22346

Phalaris minor
Phalaris
 mud in field

22347

Holcus halepensis
Holcus halepensis
 along ditch - awnless

See no
 22346

22348

Holcus halepensis
Holcus halepensis
 along ditch - awned

Mollendo - Nov. 17
 Hills back of city. Usually a desert
 but now green after collection 12 days
 immediate vicinity of coast dry & almost
 of vegetation.

22348
 22348

22349

Cuculorhiza humilis Hitchc.
Cuculorhiza
 Dry sand all plants dwarf,
 one as much as another

22350

Stipa nardoides
Stipa
 Bunches in rocks on slope

Eragrostis peruviana

22351

Eragrostis peruviana
Eragrostis peruviana
 Sandy hills - common, erect or
 prostrate. Heads brown almost
 globose to oblong and rather slender,
 green, brown or purple

22352 *Nanpa* *nazia alvina*
Sandy dunes - not common

22353 *Sporobolus virginicus*
alkaline sandy rather succulent
west (1/2 mile)

22354 *Mallow*
Sandy dunes fls rose

22355 *Alsinaea* *92255*
Sandy dunes fls white

22356
Sandy dunes fls white

22357 *Boraginaceae*
Sandy dunes - fls white

22358

Ice plant

ditto

22359

Lyturus?
ditto - Ice plant

22360

Compositae
ditto
dark - dark brown
2 ft

22361

Compositae
Rings pink ditto

22362

Solanum
ditto, fls yellow

22367

³
Chenopodium
ditto

22364

ditto

Legume

22367

ditto

Suspect shrub

10888

22365

ditto

Liliaceae
fls white

22368

1-2 ft

fls pinkish white

10889

22366

ditto

Spurularia
fls pinkish blue

22369

fls purple

Liliaceae

10890

22370

Boraginifera

22373

Solanum

05899/

1/2 rose 2 ft

22371

Dulanga

Round more brown - probably
a milk yes green.

2-3 ft

22374

Dulanga

2 ft. 1/2 white

22372

Amorcania

1-2 ft in spreading bush
yes white

22375

Grindelia

2 ft bushy branched rays
yellow - plant sticky

22376

Elcom
2 ft fls white
disagreeable odor to plant

22377

Boragin
stems 5 ft in internode
hills, scattered on north
slope fls white

22378

Lupinus
2-3 ft fls dark purple
standard with yellow spot
in center

22379

7 ft
On a rock - north slope
Notholaena breckensidgei Baker

22380

Galium
shade of slope - north slope

22381

Compositae

22382

Borag
Sandy slope

22383

Intellig
fls white

22384

Borag

22385

Inarua
fls light blue

22386

Drosera stricta
In anthesis. Some branches
spread or even slightly reflexed
Sandy slope. Appears to be
mildewy.
Sandy slope

22387

Pectis a megalaria
Pectis (monoid)
Sandy slope

22388

Unkilled
Sandy slope in shade of
shrub

22391

ditto
Vitaceae

88899

22389

ditto
Vicia
fls blue

22392

ditto
Solomon
Straggling - trailing & creeping
over rock in shade of shrub

22390

ditto
fls white

22393

ditto
(Peperomia?)
On rock in shade of shrub

88898

22394

Boraginifera
ps lilae

2-4 ft

22397

Calceolaria

ditto

22395

Sandy slope

22398

ditto

22396

Calceolaria

In shade of shrub on moist
slope ps light yellow

22399

Narrow

Moist, a little path - probably
a meadow

22400

Labiata
2-3 ft fls. flowers white
milk white.

22401

Plantain
Sandy slopes

22402

Mullein

22403

Oenothera arequipensis
Menz & Johnston
n. sp.
Cunila

22404

Scroph
ditto

22405

Euphorbia
ditto

22406

Brounif 3

ditto

22409

Compositae

22407

Sporium
fls like or non-purpa

22410

Witeine

22408

Legum

22411

Graphalium

22412

Liliae

22415

Alsiaceae
fls white

22413

Trifolium
fls Salmon-pink

22416

Compositae
fls bright yellow
Perennial - 2-3 ft

22414

Compositae

22417

Mentzelia
Annual - up to 3 ft.
fls yellow
Petals are four enclosed
in cups in the reflected petals
and curved down to the styles.
Plant with silicles, etc.

22418

Commelyna
vs blue

22419

Wulffia
Dusky branched 1 ft

22420

Mallow
vs rose

22421

Lobelia
vs blue

22422

Polygala
vs rose - purple to whitish

22423

Ruellia *Koeleria trachyantha*^{ch(?)}
The dominant grass (but
not the dominant plant) growing
between other plants on the
interior hills

22424

Eragrostis attenuata
trichostachya

Peruvian - Samey slope
of interior hills - common
partly on ascending.

22425

Acicuta

Lima - wood Meads &
Balama Garden

22426

Lolium temulentum
temulentum

22427

Briza minor
Briza minor

45188

22428

Echinochloa crus-galli crus-pavonis
Echinochloa

45189

Arigripa - Nov. 22
meads along irrigation ditch.

22429

Distichlis spicata
Distichlis

!

22430

Bromus unioloides
Bromus

22433

Polypogon interruptus
Polypogon

22431

Polypogon elongatus
Polypogon

22434

Sporobolus berterianus
Sporobolus berterianus

22432

Polypogon elongatus
Polypogon

22435

Triticum aestivum
~~*Triticum aestivum*~~
Wheat
The common form cultivated here

22436

Poa annua

Poa (terminalis)

Along ditch - long stems floating
or swimming in the water

22437

Agrostis verticillata

Agrostis (montana)

Along irrigation ditch

22438

Nassella pubiflora

Nassella

Along irrigation ditch

Chuanibambilla - Nov. 27

The Government Excess Sta. between
Juliacu + Curo, 68 miles from Juliacu
alt. 12829 ft. Few grasses & flowers.

3867m

Pennisetum clandestinum

22439

"*Pennisetum clandestinum*"

Chico.

"Kikuyu Grass" from Brit. E. Afr.
on farm of Mrs. Selgato Vivanco at
Ariguipe.

22440

Fern

On rocky cliff

Filix fragilis (L.) Gilib.

22441

Fern

On rocky cliff

Cheilanthes pumila Kaulf.

22442

Poa caudamoana

On rocky cliff

Panicle blades reflexed

22443

Poa horridula

Rocky cliff

Same as the larger species at
Cerro de Pasco

22444

Stipa brachyphylla

Hills

Calamagrostis imberbis

22445

Calamagrostis ? CHASECommon on the hills of pasco
old inflorescence. Scapes curly - the
old ones white.

22446

Nassella meyeniana

In garden - prostrate

22447

*Stipa ichu**Stipa ichu*Common on hills of pasco
the specimen from river bank

Muhlenbergia fortigiata

22448

Muhlenbergia

Along river, common as the
under grass of the prairie. Considered
yellow grass.

Pennisetum clandestinum

22449

Pennisetum

From plantation on farm of Exp. Sta

See 2439

Distichlis humilis

22450

Distichlis

Patches of Exp. Sta. patio - ♂ + ♀

Poa annua

22451

Poa annua

84499

From Exp. Sta. patio.

Cisco - Nov. 29. All a farm
east of the city alt 3450 M

Stipa micropycna

22452

Stipa

84500

Festuca scirpifolia

22453

Festuca

a large much of prairie stiff
leaves

Avena fatua
22454 *Avena elatior*
Cultivated

Festuca orthophylla
22455 *Festuca*
Lump with grass
Cb 2453

22456 Bean
Commonly cultivated in the
valley of Collija Habos - fruit
seeds large than some beans, brown &
purple

Hordeum vulgare
22457 *Hordeum*
Cult in Cuzco Valley. Specimen
taken from local of field. Nearly
one meter.

Nov. 30
Hills north of city.
Poa horridula
22458 *Poa*
Side of ravine
Is this same as 2454? Small

Poa horridula
22459 *Poa*
Side of ravine

22460

Stipa ichu
Stipa ichu
Side of ravine

22461

Melica scabra
Melica
Side of ravine

22462

Agropyron breviaristatum
Agropyron
Side of ravine. Spike drooping

22463

Eragrostis lurida
Eragrostis
Open ground, Prostrate

22464

Filum
Rock cliff
Polypodium angustifolium Swartz

22465

Aegopogon cenchrroides
Aegopogon
On rock

22466

Eupatorium
Common along roads, fls. white. Plant 2-4 ft.

Bromus unioloides

22467

Bromus unioloides
Old field on top of hill.
Small specimens of the common species.

22468

Eupatorium
Along roads: on hill. 3 ft.
fls. blue

22469

Poa candamoana
Side of hill. Panicle branches reflexed

22470

Fern
Rock cliff.
Chilanthus pruriata Kaulf.

22471

Frisetum spicatum
Frisetum
Hillside in early moist ground.

22472

Barley field

Lolium temulentum var. *arvense*
Lolium temulentum

22473

From
Side of bank by river
Notholaena nivalis (Poir.) Desv.

22474

Festuca megalura
Festuca (serotina)
Old field

22475

Cortaderia quila
Cortaderia (quila)
Slopes & gullies.
Could find only *pedunculata*.
Old sheath of culm like strawman, gotten
out and an any cross blades.

2475 1/2 Sedge

Polygonum interruptus
22476 *Polygonum* (interruptus)
Along irrigation ditch
forms mats in more open ground

22477

Poa horridula
Poa
Bank near irrigation ditch
is this same as 2475?

22478

Promus unioloides
Promus unioloides
 Along road

22479

Poa horridula
Poa
 Hillside

22480

Fisetum spicatum
Fisetum
 Hillside

22481

Nassella meyeniana
Nassella
 Common along roads & in fields
 in hills and along walls

22482

Brachypodium mexicanum
Brachypodium
 Banks. In analysis the plants
 are rapidly spreading.

22483

Stipa mucronata
Stipa
 On hill

22484

Agrostis pittieri

Can. hill

Agrostis

22487

Polypogon elongatus

near water fall in spray

Polypogon

Alamita y Tambo - Del. D. alt 3000 M

A new road was built from Ciudad
Allende to Santa Clara. The terminus is
now at kilometre 63 near Tambo. The
road is very dry. Alamita y Tambo is km 67.

22485

Paspalum humboldtianum

Rocky bank

Eragrostis contracta

22486

Eragrostis

in dry ditch

22489

Bromus unioloides

Bromus mucellus

Common in fields and along
ditches

22490 *Eragrostis fuchtiensis*
In dry ditch

22491 *Bouteloua simplex*
Bouteloua annua
In dry ditch, 1 spike

22492 *Chloris beyrichiana*
Chloris
Open ground along road

22493 *Glebeclaria*
Near stream

22494 *Cyperus*

22495 *Bromus trinii*
Bromus
Old field

22495 $\frac{1}{2}$ - *Poa annua*

22496

Avena fatua
Avena fatua
Old field

Andropogon saccharoides parvuspícula
22499 *Andropogon saccharoides*
Stony ground

22497

Eragrostis nigricans
Microperla
Sandy soil near stream

Eragrostis lurida
22500 *Microperla*
Stony field

22498

Eragrostis nigricans
Microperla
Wet shady place
Same as 2497 but much
a larger more spreading plant
In the open it is like 2497

22501

Poa candamoana
Poa
Wet bank of stream

22502

Grassy

Stipa neesiana
Stipa (*mucronata*)
bank of stream

22505

Stipa mucronata
Grassy bank of stream

22503

ditto

Nassella pubiflora
Nassella
Common

22504

Bank

Fern
of stream

Dryopteris incarum Maxon, sp. nov.

22506

Festuca megalura
Grassy bank of stream

Festuca (*brownii*)

22507

ditto

Sporobolus berteroi
Sporobolus berteroi

22508

Polygonum interruptum

Polygonum interruptum
Along irrigation ditch

22509

Chaetochloa geniculata

Chaetochloa geniculata
Falls near ditch - common
all have purple buds and short
awns.

22510

Stipa neesiana

Stipa neesiana
Among banks of stream,
cf. 2509

Pennisetum bambusaiforme

22511

Pennisetum
Bank of stream

22512

Fern

Bank of stream

Adiantum poiretii Wikstr.?

22513

Poa horridula

Poa
Among clumps - bank of stream

22514

Stipa inconspicua
NassellaAmong clumps - bank of
stream.One form has open panicle
another has glumes above
panicle, are they different
species? cf 2503

Dec 3

Went home back down the valley to above
km 53 - distance of 12 miles,
with end of the grade for the
new road.

22515

*Axonopus (Paspalum gregoriensis)**Axonopus*Large bunches on hillside
short, flattened, slender at
base, prostrate without
roots.

22516

Polypodium
Rocksideside

22517

Eragrostis lugens #1699

Rocksideside, perennial

Eragrostis lurida

22518

dry hillside
ditto ditto #1699*Eragrostis lurida*

22519

dry hillside
ditto ditto #1699

22520

*Sporobolus berteroyanus**Sporobolus berteroyanus*

Rueky hill side

Same as 22515
MongatMostly glume but sometimes
all like single culm.

22521

Cortaderia guila
Cortaderia (guila)

Large bush on side of ravine.

22522

*Eragrostis contracta**Eragrostis contracta*
Rueky hill side, preceding
In this same 22515
much not appended.

22523

*Nassella pubiflora**Nassella*

Rueky hill side

22524

*Tillandsia*On Cactus - Illustration
Photo taken at Olloventaytombos

dry

Rains near town. Olloventaytombos 3000M

22525

Fern

Cliff of rock cliff

Polypodium subvestitum Maxon

22526

Andropogon hirtiflorus
Andropogon
 Cliff of Rock cliff

22527

Stipa ichu
Stipa ichu
 ditto

22528

Filum
 Cliff of stone wall
Notholaena nivea (Poir.) Desv.

22529

Filum
 Cliff of stone wall
Cheilanthes myriophylla Desv.

Dec 15

Went up a small valley ^{stepped side} more than
 2000 ft above the main valley. About
 3600 Malt *Bromus lenis* (Buchtenii)

22530

Bromus
 High up in valley among
 shrubs. Pinnule drooping

Bromus pitensis

22531

Bromus
 In more shady place beside
 waterfall. Half inch of dozen
 stems - erect, panicle branches
 drooping

22532 *Festuca ulochaeta*
Festuca
High up rocky ravine, in shade

22533 *Agrostis*
Grass land high up

22534 *Agrostis virescens*
Agrostis
Grass land high up

22535 *Frisetum spicatum*
Frisetum
Moist grass land high up

22536 Fern
Rocky place, moist high up
Asplenium sessilifolium Desv.?

22537 Fern
delto
Polystichum nudicaule Rosenst.

Agropyron breviaristatum

22538

Agropyron
Mud bank among shrubs
half way up

Agrostis virescens

22539

Agrostis
ditto
of 2534

Poa scaberula

22540

Mullein leaf
Open somewhat shaded places
in lawn in moist soil. From
half way to top. Common

22541

Fern
Rocky cliff halfway up
Cheilanthes, n. sp.?

22542

Fern
ditto
Cheilanthes pruinata Kaulf.

22543

Fern
Moist shady bank ditto
Filix fragilis (L.) Willd.

22544

delle

Fern

Asplenium monanthes L.

22545

delle

Fern

Polystichum nudicaule Rosenst.

22546

Rully cliff - dry, snow base

Delaginella

(*Delaginella peruviana* (Milde) Hieron)

22547

delle

Fern

delle

Polypodium subvestitum Maxon

22548

delle

Fern

delle

Notholaena bonariensis (Willd.) C. Chr.

22549

delle

Fern

delle

Notholaena nivea (Poir.) Desv.

22550

7 m

delle

delle

Pellaea ternifolia (Cav.) Link.

Dec. 6

at 3000 M

At terminus of Railroad, Velocidad 63
(Gran Lince) 5 km south of Allamagamba

Eragrostis nigricans

22551

Eragrostis

Open ground by side of corn field
perennial annual

22552

Chloris berythiana
Chloris

delle

perennial creeping forming mats, the
stems culms ascending or nearly
prostrate

22552½ - Chusquea

Aristida adscensionis

22553

Aristida subscensu

delle

Eragrostis lurida

22554

Eragrostis

delle

Perennial, prostrate

22555

Eleocharis

In shallow pool by ori-
gation ditch

22556 *Stipa mucronata*
Stipa
Along irrigation ditch - com-
mon

22557 *Stipa plumosa*
Stipa
Among clumps on terraced
field. Specimen with culm is
from long culm broken up, the
culm being fragile when
heated.

12200 ft Bolivia
3700 M La Paz - Bolivia, Dec 14
On road to ^{Palca} Palca, east of La Paz

22558 *Stipa ichu*
Stipa
Rocky slope, common. Large bunches
of seed heads

22559 *Poa buchtienii*
Poa
Rocky slope. Near Palca

22560 *Festuca scirpifolia*
Festuca
Along small gully, near Palca
Large, well-developed bushes
near Palca

Bromus unioloides
22561 *Bromus*
In midst of large bunch of *Festuca*
near 2560

Bromus unioloides

22562 *Bromus unioloides*
swampy place in open dry ground

Frisetum spicatum

22563 *Frisetum*
dry slope

22564 *Poa Poa videt.*
dry slope

Melica adhaerens

22565 *Melica*
shaded dry bank

Hordeum andicola

22566 *Hordeum*
near open ground

Poa Poa fuchtienii

22567 *Poa*
dry slope

22568 *Festuca scirpifolia*

Dry slope, common, large
branches of erect stiff leaves

22569 *Polygonum elongatum*

Moist bank

22570 *Poa Poa buchtienii*

Dry partially shaded bank ♀

22571

Poa Poa buchtienii
Ditch ♂

22572

Poa pratensis
Poa pratensis
Along irrigation ditch

22573

Cortaderia quila
Cortaderia
Banks of ravine, common
♀ (leaves fine as ♂)

22574

Poa annua

Poa annua
along ditch

22577

Stipa mucronata

Stipa
open dry ground

22575

Lolium perenne

Lolium perenne
along ditch

22578

Nassella pubiflora

Nassella
ditch

22576

Polyzozon interruptus

Polyzozon
along ditch

22579

Nassella pubiflora

Nassella
open

22580
Ditto

Stipa mucronata
Stipa (mucronata)

22583
Ditto

Pennisetum chilense
Pennisetum
Spikes purple to purple
lanceolate

22581
Ditto

Stipa ichu
Stipa

22584

Chloris beyrichiana
Chloris

Dec 15. Palca to Pelaya

Pil 13000 ft
4000M

22582
Ditto

Bromus unioloides
Bromus unioloides

22585
Sagey meadow, Pelaya

Alopecurus bracteatus
Alopecurus

Muhlenbergia repens

22586

Muhlenbergia
Open grassy slope between
high-passes.

22587

Poa asperiflora
Dry grassy slope

Dec 16. Slope of Illimani
16000 ft highest
4850 M

22588

Cultivated for edible tubers, Patagonia
Called Papa Lisa or Papa Lisa
Said to have disappeared after
when weather had an agricultural taste

22589

Poa *Poa* *indet.*
Illimani below snow line
at

22590

Calamagrostis glacialis
Calamagrostis
Below snow line, Illimani
Large bunch, highest vegetation
about 16000 ft

Calamagrostis ovata

22591

Calamagrostis
ditto - ditto, small bunches

Acrochne pulvinata

22592

Acrochne

Bushes on hills and banks
about 14000 ft. 4240M

Dec 17 Bitumen Pilaya + Pico
3900M

Nassella pubiflora glabriflora

22593

Nassella

dry slope

Sporobolus argutus

22594

Sporobolus argutus

dry slope

Nassella pubiflora

22595

Nassella

cutto

Trip to Yuncos. Dec-20 to 27, 1923

Accompanied by Dr. Aldo S. B. of La Paz. Train La Paz to
Pongo (20), miles to San Felipe (20), to La Florida (21), to Chupa de Selva (22)
to Chulumani (22), to Choca (23), to Finca Villa Carmen (23), to Coripata
(24), to Anapata or Finca San José (24), to Coroico (25), to Juan
Cari (25), to Bella Vista (26), to Pongo (26), by train to La Paz (27)

Muhlenbergia repens

22596

Muhlenbergia

3000M

Open ground along Ry at Ponce de

Dec 20

Altitudes

Pongo = 3639M

San Felipe - 2800M

La Florida - 1840

Chupa - 1000

Chulumani - 1600

Milliguaya - 1380

San José - 1380

Coroico - 1560

Lowest point

San Felipe - Dec 20

22597

Paspalum candidum
Paspalum (Thrasyna?)

Straggling, branched 1-2 ft high, on moss
bank - San Felipe, Dec 20

22598

Poa scaberula

Wet bank

Are the small ones same as the larger ones?

22599

Polygonum elongatum
Polygonum

Along stream

22600

Agrostis virescens
Agrostis

Wet bank

Calamagrostis montevidensis

22601

Calamagrostis

Wet bank

Trinuclea stipoides

22602

Trinuclea?

Wet shaded bank

Aegopogon geminiflorus muticus

22603

Aegopogon

Wet bank

22604 *Sporobolus berterianus*
Sporobolus berterianus
Open prairie along trail

22605 *Paspalum subfalcatum*
Paspalum
ditto

22606 *Syntherisma sanguinalis*
Syntherisma sanguinalis
ditto

22607 *Cortaderia quila*
Cortaderia (quila)
Side of ravine.

La Florida, Dec. 21 1840M

22608 *Axonopus scoparius*
Paspalum uruguayense
Cult. for forage. (The wild form
set out by roots). Called *Cachi* - also
caricachi.

22609 *Paspalum subfalcatum*
Paspalum
Grassy bank

Ichnanthus riprechtii

22610

Ichnanthus pallens
Shady bank

Bromus unioloides

22611

Bromus
Open ground

Paspalum penicillatum

22612

Paspalum
Mead in field

Eragrostis buchtienii

22613

Eragrostis
Open ground along trail

Panicum missionense

22614

Panicum
Much branched, straggling
Edge of woods

Andropogon saccharoides parvispicula

22615

Andropogon saccharoides
Grassy hill

226
Sha

22616 *Lasiacis ligulata*
Lasiacis dimerica
Woods along tract

22
Op

22617 *Andropogon buergeri*
Andropogon buergeri
Grassy slope

22
Me

22618 *Andropogon condensatus*
Andropogon condensatus
Grassy slope

281½

