

inaportu... = 18818

PLANTS COLLECTED IN ECUADOR DURING 1923 BY A. S. HITCHCOCK.

Guayaquil June 18, 1923

- ✓19914 Panicum
Tidal marsh along Rio Guyes, water front of city. Stems
creeping at base; has much the aspect of next.
- ✓19915 Eriochloa
same locality
- ✓19916 Panicum
same locality
- ✓19917 Chloris June 19
low moist ground
- ✓19918 Low moist ground near river. Gregarious, 4-6 ft. tall,
erect or decumbent at base; fls. pink.
- 19919 Low ground. Weed in pasture, 2 ft. tall, much branched;
fls. pink.
- ✓19920 Same loc. 2 ft. tall.
- ✓19921 " " 4-6 ft, wand-like branches; fls. yellow.
- ✓19922 " " 3 ft. tall; fls. yellow-orange.
- ✓19923 " " 3-6 ft; fls. white.
- ✓19924 " " 1-2 ft.; fls. lilac; annual.
- ✓19925 " " 2-4 ft. fls. white; rootstocks produced.

21827 = *Gynaecropsis*

PLANTS COLLECTED IN MARCH 1911 BY A. S. MITCHELL.

Geographical Data in 1911

✓ 1911 (1911)

That which is now the site of the
camp of the 1st Regt. U.S. Cavalry

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- 19926 Swampy soil near river. Gregarious, with bulbs and rhizomes;
2-3 ft. tall; fls. white.
- ✓19927 On rocky cliff. Shrubby, 6-10 ft.; fls. white.
- 19928 " " " Large shrub; fls. yellow; leaves simple or
with 1 or 2 leaflets at base.
- ✓19929 Rocky hillside. Shrub 8-12 ft.; fls. pale yellow, viscid.
- ✓19930 Same. Stout vine climbing over bushes, masses of bright
pink fls.
- ✓19931 Same. 3 ft. tall.
- ✓19932 Same. 4-6 ft.; fls. white.
- ✓19933 Same. Climbing vine, 20-30 ft. fls. white.
- ✓19934 Open ground. Seed, 3 ft., fls. white.
- ✓19935. Same. Seed, 3-4 ft. fls. orange-yellow.
- ✓19936. Climbing on shrubs, fls. purple-blue.
- ✓19937. Climbing on shrubs; fls. (bracts etc.) white.
- ✓19938. Rocky hillside. Tree 20-30 ft.; fls. lemon-yellow.

Hills across Rio Guayas, west of Guayaquil June 20

- ✓19939 Open cut-over ground. Annual, pods like crucifer.
- ✓19940 Hillside among shrubs. Straggling half-shrub, 6 ft.
- ✓19941 Shrubby hillside. Shrub 5 ft. fls white.
- ✓19942 Cut-over ground. 3 ft., sticky.

- ✓19943 Cut-over ground. Bouteloua. Annual decumbent spreading.
19944 Same Vine on shrubs, small blue fls.
✓19945 " " fls. yellow.
19946 " 5-pointed capsule.
✓19947 " Panicum
✓19948 " Paspalum straggling, much branched,
roughened.
19949 " Perennial bunches
✓19950 " vine; fls. pale yellow, falling
quickly; fruit orange.
✓19951 " 2 ft. fls. orange and red.
✓19952 Shrubby hillside. 8-12 ft. tall; fls. pale yellow,
fading to pink.
19953 Same Pennisetum large bunches, up to 8 ft. tall;
straggling-creeping at base,
✓19954 " shrub with Cephalanthus-like
fruit; 6-10 ft. prickly.
✓19955 Cut-over land. Paspalum 2-4 ft. straggling, much branched.
✓19956 " " " straggling half-shrub; fls.
pinkish.
✓19957 " " " Vine, fls. yellow.
✓19958 " " " " " scarlet.
✓19959 " " " " " dull purple or white.
✓19960 " " " shrubby 6-8 ft; fls. yellow.
✓19961 " " " 4 ft.
✓19962 Among shrubs Olyra

- ✓19963 Among shrubs Lesiacis long simple branches, 8-10 ft.
✓19964 Cut-over land fls. lilac.
✓19965 Low ground near water. Tree 30 ft.; fls. white.
✓19966 " " " " Shrub, straggling, 10 ft.
✓19967 " " " " Scrambling shrub, several feet;
fls. white.
✓19968 " " " " Annual; fls. lilac-blue.
✓19969 Among shrubs Penicum much branched, straggling, 5-6
ft.
✓19970 " " Straggling herb, 6-10 ft.
✓19971 " " " " several ft.;
fls. white.
✓19972 " " Vine, fls. white.
19973 " " Fungus, on Convolvulus.
✓19974 River bank Weed, fls. white, fruit black.
✓19975 Along road "
✓19976 Open ground 2 ft. much branched.
✓19977 " " along road. Sporobolus
✓19978 Bank of river
✓19979 " " " Vine, fls. blue.

Province Guayas. Oil camp at Belen, port. at end of launch
journey, between Guayaquil and Salinas. June 21

- ✓19980 Low ground, very wet in wet season.
✓19981 " " Tree, 20 ft.
✓19982 " " Herb

✓19983	Low ground, very wet in wet season					
19984	"	"	"	"	"	(Discarded)
✓19985	"	"	"	"	"	4-6 ft., fls yellow.
✓19986	"	"	"	"	"	Tree, 20 ft. fls. white.
19987	"	"	"	"	"	(Discarded)
✓19988	"	"	"	"	"	Half shrub, 3 ft., fls.
19989	"	"	"	"	"	orange. Tree 10-15 ft.
19990✓	"	"	"	"	"	Chloris common
19991✓	"	"	"	"	"	Tree, 10-15 ft; fls. green.
19992✓	"	"	"	"	"	
19993	"	"	"	"	"	
19994						(Discarded)
19995✓	"	"	"	"	"	Clambering vine, fls. green.
✓19996	Tidal flat					Shrub up to 6 ft.
97✓	"	"				fls. pink-purple.
98✓	"	"				
99✓	"	"				
20000✓	"	Sporobolus				
01✓	"	"				
02✓	"	"				
✓03	"	"				
✓04	"	"				Tree, 16 ft. fls. scarlet.
✓05	"	"				fls. blue

Province Guayas, Oil Camp between Guayaquil and Salinas;
collections made along grade of new Ry, Los Quemados. June 22

20006 ✓	Rolling scrub-land		Dactyloctenium	
20007 ✓	"	"	"	Vine, fls. yellow.
8 ✓	"	"	"	" " orange red.
9 ✓	"	"	"	Fls. purple, viscid.
10 ✓	"	"	"	cluster of bristly fruits.
11 ✓	"	"	"	Vine; fls. yellow; fruit globose, 6 in diam. looks like water-melon.
20012 ✓	"	"	"	Vine, fls. yellow; fruit tuberculate.
13 ✓	"	"	"	Tree, 30 ft, fls. white.
14 ✓	"	"	"	" 15 ft. fls. white
15 ✓	"	"	Eragrostis	
16 ✓	"	"	"	Shrub 4 ft. fls. white & yellow.
✓17	"	"	"	Vine; fls. greenish white and lilac.
✓18	"	"	"	Tree 10 ft. fls. white.
✓19	"	"	"	Halfshrub, 6 ft. fls. lilac.
✓20	"	"	"	Shrubby, 5 ft. fls rose.
✓21	"	"	"	Vine, fls. lilac-pink, fruit large
✓22	"	"	"	3 ft.

✓20023	Rolling scrub land			Shrub, 5 ft. fls. yellow.
24✓	"	"	"	" 6 ft. fls. yellow.
25✓	"	"	"	Vine fls. blue.
26✓	"	"	"	" " white.
27✓	"	"	"	" " rose-purple.
28✓	"	"	"	
29✓	"	"	"	6-8 ft. fls. yellow.
30✓	"	"	"	vine, fls. dark purple-magenta
31✓	"	"	"	" " rose.
32✓	"	"	"	Anthehora
33✓	"	"	"	" " "
34	"	"	"	Rust on 20035
35✓	"	"	"	Vine
36	"	"	"	Rust on 20037
37✓	"	"	"	Vine
38✓	"	"	"	Vine
39✓	"	"	"	
40✓	"	"	"	" fls. rose and white.
41✓	"	land		Shrub, 8ft. fls. rose.
42✓	"	"		19950
43✓	"	"		fls. yellow.
44	"	"		aspect of 20043, but fls. white.

20045✓	Rolling land			Vine, fls. yellow.
46✓	"	"		
47✓	"	"		Shrub, 4 ft. fls. pink.
48✓	"	"		6 ft.
49✓	Swamp			
50/	"		Oryza	
51✓	"			
52✓	Rolling scrub-land			
53✓	"	"	"	Straggling shrub or half shrub, very fragile; fls. yellow.
54✓	"	"	"	Vine, fruit only.
55✓	"	"	"	fls. scarlet.
56			Chloris	
✓57			Lasiacis	Always find this a single long culm, 4-8 ft., sparingly branched toward summit; panicle narrow.
✓58	"	"	"	Scrub, 6 ft., fls. red & orange.
✓59	"	"	"	Tree, 30 ft. fls. white.
✓60	"	"	"	Herb, 3-6 ft.; fruit
61	"	"	"	Gall or fungus on tree with yellow flowers 19928

- 20062 ✓ Rolling scrub-land Tree, 10 ft. fls. white.
63 ✓ " " " fls. pale blue.
64 " " " Chloris
65 ✓ " " " Syntherisma
66 ✓ " " " "
67 ✓ " " " fls. white.
68 ✓ " " " vine.

Province Guayas, Oil camp between Cusyaquil and Salinas; in vicinity of Road Camp, 15 km. S.E. of main camp. June 23.

- 20069 ✓ Open dry woods. vine on tall tree (cut tree down), fls. yellow with yellow-green eye.
✓70 " " " Tall tree, cut tree down, but flowers broken in falling, bright yellow (slightly orange); no leaves on tree.
✓71 Border of swamp Cyperus
✓72 " " " Vine, fls. yellow.
✓73 " " " fls. yellowish white.
✓74 In water o swamp Hymenachne form large area in swamp.
✓75 ✓ Border of swamp Cuscuta on 20079
✓76 On water of swamp Lemna
✓77 In " " " and in mud along edge. Fls. yellow.
✓78 Shade of woods near swamp
79 ✓ " " " border of swamp
✓80 " " " " " " Oplismenus

20081 ✓ Border of swamp. Large shrub or small tree, 10-15 ft. fls.
white.

82 ✓ " " " Herb

83 ✓ " " " Echinochloa

84 ✓ Swamp; in water and in mud along edge. Sagittaria, up to
8 ft; blades up to 18 in.; fls. white; fruit
from 20987 (19987 discarded).

85 ✓ Low woods Small tree, 15 ft. fls. yellow.

86 ✓ Near swamp on shrub

87 ✓ Mud, edge of marsh Eleocharis

✓88 Border of marsh (19984 discarded)

✓89 Water of marsh 6-8 ft., fls. purple.

✓90 " " "

91 shallow water of marsh

✓92 Sandy bank Eragrostis

✓93 Border of marsh shrub 4-8 ft. fls. white

✓94 " " " Climbing on shrubs; fls. white

✓95 water of marsh Pulls up easily; blades float-
ing; fls. all closed (3
p.m.) Above sur ace, but
afterwards retreat below
surface.

- 20096✓Swimming just beneath surface of water of swamp.
97 Floating on water of marsh.
98✓Marsh (a mixture of 20096 and 20076?)
99✓Floating on water of marsh, in flower; spathes greenish-
white.
20100✓Woods Large tree up to 50 ft; fls. orange-red.
101✓ " Vine climbing on shrubs; fls. red & orange red.
102✓ " " fls. greenish white with bluish tinge.
103✓ " Single stem, 4 ft. branched at summit, with cluster
of leaves and bright rose inflorescence (bran-
ches and flowers).
104 " Shrub.
105 " Vine, woody.
106✓Sandy bank of stream. Spreading-decumbent
107 " " " " Leptochloa
108 " " " "
109✓Woods Vine, herbeceous, fls. brown.
110 " fungus on 20110.
111✓ " shrub 6-10 ft. fls. white.
112 " fungus on mallow.
113✓ " 3-4 ft. fls. red.
114✓ " Shrub 4-6 ft. fls. rose.
115✓Swamp Stems very spongy, floating on surface
of water; fls. yellow.

Province Guayas, Oil camp between Guayaquil & Salinas; rail-
way grade to west. June 24.

20116 ✓ woods

117 ✓ "

fls. rose-scarlet.

118 ✓ "

Herb 6 ft.

119 ✓ "

straggling herb, fls. yellow,
fruit globose, 1 cm. diam.
scarlet.

120 ✓ "

Half-shrub, 5 ft. fls. pale
blue.

121 "

Woody vine, fls. white.

22 ✓ "

herbaceous vine.

23 ✓ "

" " , 3-celled
capsule in involucre.

24 ✓ Straggling out of a pile of railway ties.

Guayaquil, road west across Rio Guayas. June 26.

20125

Lasiacis

pubescent and glabrous sheaths
on same plant.

✓126 Among brush along river, straggling herb, 6-8 ft.

✓127

shrub, 6-10 ft. fls. white.

✓128

small tree, 20 ft. fruit glo-
bose to ovoid, like a young
orange.

129

Lasiacis

130

(Discarded)

✓131

6 ft; fls. pale yellow with
small purple eye.

- 20132 Paspalum young plant showing annual
root.
- ✓133 Lasiacis spikelets small otherwise
looks like sorghoidea.
- ✓134 Paspalum
19955
fungus on Lasiacis ruscifolia.
- 135 Lasiacis more or less pubescent.
shrub 10 ft.
- 136 Lasiacis Tree 25 feet.
- ✓137 Shrub or half shrub 6 ft.
fls. white.
- ✓138 near river woody vine.
calyx and pedicels dark pur-
ple, corolla white.
- ✓139 half shrub, 6-8 ft, fls. white.
Tree 30 ft.
- ✓140 small tree, 20 ft.
- ✓141 Vine
woody or half woody vine.
- ✓142 147 along river, shade of small trees Opismenus
- ✓143 Woolly vine; fls. white tinged
with orange.
- ✓144 Vine, fls. crimson.
- ✓145
- ✓146
- ✓147
- ✓148
- ✓149

- ✓20150
✓151 fls. yellow.
✓152 vine, fls. rose-lilac.
✓153 5 ft., fls. yellow.
154 small tree, 20 ft.
✓155 vine
✓156 fls. white
157 Straight small trunk, 4 ft,
no leaves, cluster of
flowers at top; inflores-
cence red.
- 158 *Lasiacis*
✓159 Tall herb, up to 15 ft.

Province Guaymas, Milagro June 30

20160 Open ground along railway

- 161 " " " " *Paspalum* common in lawns and
grounds.
✓162 " " " " "
163 " " " " *Leptochloa*
✓164 " " " " prostrate, rooting.
✓165 " " " " "
✓166 " " " " Fls. yellow.
✓167 " " " " "
✓168 " " " " *Eragrostis*

✓ 20169	Open ground along railway				
✓ 170	" " " "				fls. white.
171	" " " "	Eleusine			
✓ 172	" " " "	Leptochloa			
✓ 173	" " " "				
174	Lawn about house	Axonopus			
175	Garden in shade	Oplismenus			
176	" " "	Eragrostis			
✓ 177	Weed in garden	Paspalum			
178	" " "	Chloris			
✓ 179	" " "	Eragrostis			
✓ 180	" " "	Paspalum			

Province Guayas, near Milagro, along Ry. west of Ingenio
Valdez, mostly weeds.

✓ 20181		Half shrub 8 ft. fls. orange-yellow.
✓ 182		" shrub, 4-6 ft. fls. lilac; fruit glo- bose, fleshy, lilac purple.
✓ 183		" shrub; 8-10 ft; fls. greenish white.
184		Vine herbaceous; fls. white.

- 20185 Moist place. 5-8 ft, fls. pale yellow
with orange-red apex,
and orange red leaf
below; leaves at regular
intervals along stem.
- ✓ 20186 Shrub, 6 ft.
- ✓ 187 3-4 ft.; corolla red,
crown orange.
- ✓ 188 Cenchrus
- ✓ 189 Erect half shrub; fls. lilac.
- ✓ 190 more or less woody, fls.
greenish white.
- ✓ 191 2-4 ft.; fls. white.
- ✓ 192 shrub; fls. white, in clus-
ters in axils.
- ✓ 193 Panicum common in cut over soil.
- 194 Coix
- ✓ 195 herb
- ✓ 196 Vine, fls. yellow.
- ✓ 197 herb, 5-8 ft, fls. lilac.
- 198 fls. pink-purple.
- ✓ 199 Panicum
- ✓ 200 8 ft. fls. white.
- ✓ 201 Simple stems, equally leafy;
fls. yellow, dark green
at apex.
- ✓ 202 Dry pond Paspalum

- ✓20203 Vine, herbaceous
- ✓ 204
- ✓ 205 Shrub, very prickly, 5 ft;
fls. rose,
- ✓206 half shrub, 2-5 ft, fls.
pink.
- ✓207 herbaceous vine, fls. lilac
& purple.
- ✓208 viscid. fls. purple.
- ✓209 Vine
- ✓210 2-3ft. fls. pink.
- ✓211 woody at base; leaves fleshy.
- ✓212
- ✓213 Panicum
- 214 "
- 215 "
- ✓216 straggling, 6 ft. fls. white.
- ✓217 3-6 ft. fls. green.
- ✓218 2 ft. fls. yellow.
- 219 Tree 30 ft, planted along
fence; fls. pink-tinged.
- ✓220 8 ft. fls. yellow.
- ✓221 Fls. smaller than in 20220
- ✓222 herbaceous vine, fls. white.
- ✓ 223 6 ft.
- ✓224 Shady place Ichnanthus

✓ 20225

226

herbaceous vine, fls. purple-blue
Blades palmate; fls. green, short
pediceled; fruit 1 in., ovoid,
smooth.

Scrubby woods, native vegetation; low flat land, very
wet in wet season, now completely dry except for a few ponds
(all except as otherwise noted)

July 1, 1923

20227

6-12 ft. fls. white.

✓ 228

shrub 10-12 ft. fls. white.

✓ 229

Tree 15-20 ft, fls. in axillary
clusters white.

✓ 230

Herb, long straggling branches,
fls. lilac.

✓ 231

8-12 ft. fls. lilac.

232

4 ft., felty and prickly; fruit
globose, felty-hirsute, 2
cm. diam.; fls. white.

✓ 233

Axonopus

long runners floor of scrubby
forest.

✓ 234

Small tree or tall shrub, 10-
20 ft., fls. green-yellow-
ish green.

- ✓ 20235 On dried mud, in wet seasons in pond. Water plant, fls.
white.
- ✓ 236 Lasiacis, clambering in woods, same as
Gueyaquil, fr. small for sorghoidea.
- ✓ 237 Oplismenus
- ✓ 238 Tree 30-40 fr, fls. greenish.
- ✓ 239 shrub 6 ft. fls. small, yellow-
ish green; blades lobed.
- ✓ 240 shrub 5-8 ft. fls. medium pale
yellow; blades scarcely lobed.
- ✓ 241 Small tree, 10-15 ft., fls.
white.
- ✓ 242 fls. white.
- ✓ 243 Shrub 6-15 ft.
- ✓ 244 tree 25 ft. fls. greenish.
- 245 tree 25 ft. fls. white.
- ✓ 246 vine, 30 ft. fls. greenish.
- ✓ 247 herbaceous vine, fls. yellow.
- ✓ 248 Half shrub 8 ft. fls. orange-
yellow viscid.
- ✓ 249 Fruit of a prickly Mimosa with
rose fls., already collected.

- ✓ 20250 Half shrub, erect, 5-8 ft, fls. white.
- ✓ 251 Surface of water of pond.
- ✓ 252 Around pond, Homalocenchrus
- ✓ 253 Moist place 3-6 ft., fls. clear pale yellow
- ✓ 254 " " Pennisetum Single spikes terminating culms or the few very long branches; culms decumbent-rooting at base.
- 255 " "
- ✓ 256 Dried up pond Paspalum
- ✓ 257 " " " Panicum
- 258 Vine, fls. yellowish green, pods long and slender.
- ✓ 259 Shrub, 6-10 ft. fls. white.
- ✓ 260 5-10 ft., bracts scarlet at margin & apex; lowest bract usually developed into a blade; blades sometimes bronze beneath.
- ✓ 261 Shrub, 8 ft. fls. white.
- 262 Dried up pond .
- 263 Herbaceous vine, fls. white.
- ✓ 264 Woody vine, inflorescence scarlet.
- ✓ 265 Tree 25 ft. fls. white.
-

	Same	July 2
20266	Rytilix	
✓267	Along fence	3 ft.
✓268		6 ft. fls. pink, fading to bluish.
✓269	In cut cornfield.	Vine, fls. yellow, considered a pest.
✓270		Vine fls. white.
○ 271	Along roadside Syntherisma	
✓272	" " "	
✓273		On a tree.
✓274	Raspalum	Rough sheaths; common, clamber- ing over bushes, fence posts and trees to as much as 15 ft., old racemes reflexed.
✓275		Herbaceous vine, fls. yellow.
✓276	Dried up pond	Herb
✓277	" " "	Fls. yellow, petals fugacious.
✓278	" " "	
✓279	" " " Manisuris	
✓280	" " "	
✓281	" " "	Annual, fls. yellow with purple eye.
✓282	" " "	Herb.

- 20283 Along stream Panicum Among Cynerium sagittatum; hairs
on sheaths prickly, irritating
- 284 ✓ Tree 40 ft. fls. white.
- 285 ✓ Among shrubs and grasses Leptochloa
- 286 ✓ 4 ft.; fls. a beautiful blue-
purple.
- 287 ✓ Woody vine, inflorescence red.
- 288 ✓ Tree, 25 ft. fls. yellowish green
- 289 ✓ Herbaceous vine, fls. white with
purple spots in eye.
- 290 Edge of timber Papaya, wild, similar to the cult.
Dioecious. with sessile fls,
2 in. long: fruits numerous, shape
of cult. but smaller, 4-6 in.
Trees 1 to 15 ft. in panicles
1 ft. long; fls. smaller.
- 291 ✓ Shrub 6 ft. fls. yellow & red.
- 292 ✓ Herbaceous vine
- 293 ✓ Shrub 15 ft, with straggling or
vine like branches; fls.
white.
- ✓ 294 Panicum Straggling and branching at base.
- ✓ 295 Lasiacis

- . 20296 Herbaceous vine, fls. blue.
297 Among bushes
✓ 298 Small tree, 15 ft. fls. yellow.
✓ 299 In timber Lasiacis straggling and branched at base.

Province Chimborazo. Haigra. Along July 4
Ay 2 km. to east

- 20300 Organ cactus, up to 20 ft.
✓ 301 Herb. vine fls. purple.
✓ 302 Shrub 6 ft. fls. blue.
✓ 303 2-3 ft.; fls. white.
✓ 304 Halfshrub, 6-8 ft. fls. pale lilac
✓ 305 6 ft.
306 Shrub 3 ft. fls. blue.
✓ 307 " 10-20 ft. fls. white.
✓ 308 Flat mats in open ground
✓ 309 Weed along track.
✓ 310 Half shrub 8 ft. fls. white.
311
✓ 312 Straggling much branched.
313 Chsetochloa
✓ 314 " " " fls. crim-
son.
✓ 315 Thick stem, 1-2 in., 1 ft. tall,
infl. at summit, fls. white,
pink-tinged; no leaves present.

- ✓ 20316 6 ft fls. lilac
- ✓ 317 Shrub, 8 ft. fls. orange.
- ✓ 318 fls. yellow.
- ✓ 319 Shrub 10 ft. fls. white.
- ✓ 320 Growing on various shrubs and
herbs; fls. shining white.
- ✓ 321 3-5 ft. fls. yellow.
- ✓ 322 Along Ry cut Muhlenbergia
- 323 herb 3-5 ft. fls. scarlet.
- ✓ 324 5 ft. in fruit.
- ✓ 325 Vine, leaves all withered.
- 326 Along Ry cut Percilema
- 327 " " "
- ✓ 328 Slope of hill Andropogon
- ✓ 329 Heteropogon Annual, culms mostly single.
- ✓ 330 Flowers scarlet.
- 331 Vine fls. scarlet
- 332 ✓ Woody vine in fruit.
- ✓ 333 Dry slopes Uniola Bunches.
- ✓ 334 Herb 3-5 ft. fls. yellow.
- ✓ 335 6 ft fls. salmon pink.
- ✓ 336 Small tree or shrub 8-20 ft.

- ✓30337 Herb. branches slender, vinelike
fls. yellow.
- ✓338 Tree or shrub 6-20 ft.
- 339 Rocky out
- ✓340 Open ground Leaves with dark spot.
- ✓341 Paspalum
- ✓342 Shrub 6-8 ft. fls. white.
- ✓343 " 10-15 ft. rays crimson.
- ✓344 Dry slope, among shrubs Felice
- ✓345 Vine, fls. white.
- ✓346 Shrub 10 ft. fls. white.
- 347 On trees, fls. lilac.
- ✓348 Half shrub fls. orange.
- ✓349 Bog Polypogon
- ✓350 " Agrostis
- ✓351 " Perennial with rhizomes.
- ✓352 "
- 353 Rocky slope Pennisetum
- 354 Rocky cliff
- ✓355 Vine, all upper part herbaceous;
fls. white.
- ✓356 Creeping over rocks and along
ground.
- ✓357

- 20358 Common on the slopes; leaves 2-4 ft. even 8 ft. long, mostly 4-6 in. wide, infl. 10-15 ft.
- ✓359 Shrub 8-15 ft. blades white-tomentose beneath, fls. yellow.
- ✓360 *Cenchrus*
- ✓361 Slope *Chaetochloa* Base decumbent and tangled in shade of bushes.
- 362 *Lesiacis*
- ✓363 Shrub 10 ft. fls. lilac.
- ✓364
- ✓365 Half shrub, branches long & straggling, up to 10 ft. fls. bluish.
- ✓366 3-5 ft. fls. yellow.
- ✓367 Creeping vine; fls. salmon-orange.
- ✓368 Shrub 6 ft. fls. blue.
- ✓369 Herb. single stem up to 12 ft.
- ✓370 Rocky slope in moist place Vine 30 ft.
- ✓371 4 ft. fls. blue.

- ✓20372 6 ft. shrubby, fls. orange yellow.
373
✓374 Half shrub fls. white.
✓375 " " 6 ft. fls. white.
376 Lasiacis
✓377 Rocky, shrubby moist slope. Small tree or shrub up to 20
ft.; juice orange even in
trunk.
378 " " " " in shade.
✓379 Fleshy stem, 1 ft.; fls. orange-
yellow tinged with brown.
✓380 Herb 3 ft. straggling branches.
✓381 4 ft.
✓382 Sperobolus
✓383 Shrub 8-15 ft. fls. lilac.
✓344 Bog
✓385 " 8-15 ft. fls. white.
✓386 Small tree or shrub 15 ft.
✓387 " " " " " "
✓388 " " 20 ft. mostly in fruit.
Common.
✓389 5 ft. fls. orange-yellow.

- ✓ 20390 Shrub, 16 ft. fls. lilac. (All
leaves with fungus)
- ✓391 Shrub, 6 ft.
- ✓392 " 8-15 ft.
- ✓ 393 Floating on water in bog
- ✓394 Bog Fls. white.
- 395 "
- ✓396 "
- 397 "
- ✓398 " Fls. pale yell w.
- 399 " Muhlenbergia
- 400 " 3 ft. fls. orange-yellow.
- ✓401 Floating in water of bog.

Province of Guayas. Teresita, (a banana plantation) July 5
3 km west of Bucay. Very rainy place, rains usually every day.

- 20402 On tree trunk
- ✓403 " " "
- ✓404 Open ground
- ✓405 Small tree, 10 ft., fls. white,
pendulous.

- 20406✓ On tree; bracts scarlet, fls. scarlet below, white at apex.
- 407 On tree, fruiting raceme decurved
- 408✓ " " trunk.
- 409✓ " " "
- 410 " " "
- 411✓ " " "
- 412 Terrestrial, frond 4-5 ft.
- 413✓ Open ground Paspalum
- 414✓ Tree 15 ft. fls. white.
- 415 Common in woods Bamboo, spiny, as much as 6-7 in. diam., 60 ft. tall; feathery looking in distance like *Phyllost. mitis*. Young shoots rather stout, rather blunt pointed; sheaths strongly hirsute with black hairs, the young shoot appearing dark.
- 416✓ Scrub 3-8 ft; fls. greenish, fruit globose, whitish-green, 5 mm. diam.

20417✓

Tree, 15 ft. few branches;
leaves clustered at end of
stem & branches; fls. scarlet,
very deciduous, on slender bran-
ches from trunk; fruit globose,
1-seeded. (20545)

418✓

Tree similar to 20417; single
leaves trunk, leaves clustered
at summit; fls. scarlet, very
deciduous on fls. slender
branches from lower part of
trunk; fruit 6 in. long.

✓419

4 ft. fls. yellow.

420

On tree trunk.

✓421

Stout erect stems 3-5 ft.; fls.
purplish.

✓422

On branch of tree.

423 On moist ground

424 Moist open ground Panicum

✓425

Ichnanthus tangled mass, edge of thicket;
sheaths hirsute.

426✓ Moist ground edge of thicket, fls. white.

- ✓20427 Moist ground herb 8 ft., single stem with short branches
fls. yellow.
- ✓428 " " " greenish.
- ✓429 " " Oplismenus Tangled 3-4 ft. long, fl.
branches erect.
- ✓430 Branched herb, 6-8 ft. fls. white.
- ✓431 3-4 ft. stinging nettle.
- 432 Clambering in thicket Lasiacis
- ✓433 Open moist ground Panicum
- ✓434 " " " Paspalum Weed in field

Teresite forest between house and station. Collections
in forest and along edge. July 6.

- 20435 Trunk 6 ft. up to inflorescence;
infl. creamy white, 4 ft. pen-
dulous; leaves about 15 ft.
- ✓436 On small tree 3 ft.
- 437 Forest Lasiacis
- ✓438 " "
- 439 On tree
- ✓440 Terrestrial, mostly acaulescent,
petiole 2-3 ft. fls. white.
- ✓441 On tree branch.
- ✓442 High climbing herbaceous vine;
leaflets 3; disk yellow,
rays red.

- 20443 Shrub 3 ft.; tip of leaf scarlet;
fls. greenish with dark purple
streaks; blades similarly
colored along midrib and veins
beneath.
- 444✓ Shrub 6-8 ft. corolla white calyx
pink.
- 445✓ Forest in shade. Ichnanthus probably 20446
- 446✓ Edge of forest in open Ichnanthus
- 447 Shrub single stem, fls. white.
- 448 About 4 ft. fls. creamy.
- 449✓ Shrub 4-8 ft. fruit (unripe)
dark green.
- ✓450 Erect from decumbent base.
- ✓451 Shrub 4-8 ft. fls. white.
- 452 On tree
- ✓453 Forest Petioles 3-6 ft. Infl. 2-4 ft.
from ground; fls. creamy, 1
petal pink.
- 454 On branch of tree.
- 455 On tree.
- ✓456 Climbing high, woody, fruit only.
- 457 On tree.
- ✓458 On branch of tree.
- ✓459 " " " " (20454?)

- 20460 Shrub 4 ft. fl. white.
- ✓461 " 3-6 fr., fls. pale yellow,
bracts or calyx orange
red; tips of leaves red-
brown.
- 462 On tree
- 463✓ Shrub 4 ft. fls. reddish yellow.
- 464✓ Open ground, clearing. Vine.
- 465 On tree branch.
- ✓466 Shrub, single stem; leaves spi-
ral; bracts red, fls. orange
red.
- ✓467 Panicum
- ✓468 Open ground edge of timber. Ichnanthus low growing
of 20446
- ✓469 Weed along road. Flowers blue.
- ✓470 Axonopus "Camalote", good forage; 6 ft.
common, indigenous.
- ✓471 Open ground.
- ✓472 " " Ch. etochloa
- ✓473 " " Fls. yellow.
- ✓474 Moist open place.

- 20475 ✓ Tree 20 ft. fls. pink, rose tinged.
- 476 ✓ U₁ to 12 ft.; inflorescence 4 ft. from ground; fls. pale yellow.
- 477 Shrub 3 ft. fruit scarlet.
- 478 Shrub 8 ft.
- 479 On tree
- ✓480 Vine, fls. white.
- ✓481 Shrub 6-8 ft. fls. white.
- ✓482 Leafy stem 3 ft., calyx red, corolla white-cream.
- ✓483 Tree 20 ft. fruit orange to red.
- 484 Floor of forest erect.
- 485 On tree.
- ✓486 On floor of forest herb
- 487 Terrestrial, 3 ft.
- ✓488 Acaulescent.
- 489 Climbing.
- ✓490 Woody vine, fls. greenish white.
- 491 of 20450
- ✓492 Shrub 6-10 ft. fls. purplish blue.
- 493 Woody vine, high climbing, fls. yellow with brown streaks, calyx green; pedicels & base of calyx purplish.

- 20494 ✓
495 ✓
✓496 Low moist place
✓497
✓498
✓499 Opening in forest Imperata
500
✓501
✓502
✓503 Moist open ground,
504
✓505
- Shrub, wide spreading; heads yellow.
Woody vine, high climbing; fls.
racemose, corolla green outside,
dark purplish blue inside.
Shrub, wide-spreading, 10 ft. fls.
white.
High climbing woody vine; fls.
orange, spotted with dark red
or nearly all red.
Shrub, wide-spreading, 6-10 ft. fls.
yellow.
2-3 ft. fls. scarlet-rose.
Shrub 6-8 ft. fls. rather dark blue.
Creeping and rooting in mats; fls.
blue-lilac.
3 ft. fls. yellow (cf 20419)
High climbing, fls. white.

Trisetia, Road through forest and along Ry. west of station.

July 7

- ✓20506
✓507
- Herbaceous vine, 3-4 ft.
Erect herb 3 ft. fls. yellow.

- 20508 herb. vine fls. scarlet.
✓509 " " " yellow.
510 Along Ry. small tree, fls. white.
✓511 Shrub or nearly herbaceous, 8-15
ft. fls. white.
✓512 8 ft. leaves in spiral, single termi-
nal cone.
✓513 Single stem 8 ft; leaves clustered
at summit, fruit ovoid scarlet.
✓514 Shrub 5 ft. fruit globose, some-
what depressed, orange.
✓515 Vine, herbaceous, fls. white, no
leaves on part accessible.
✓516 Woody vine, fls. white, standard
with a showy purple center, other
parts purplish at tip.
517 Gynurium Common along river
518 4 ft. fls. scarlet, dark-tipped.
519 Terrestrial; fls. white
✓520 fls. white.
521 Axonopus
522 Terrestrial

- 20523 Lesiacis Clambering, much branched.
524 "
525 Acaulescent or nearly so.
526 " " "
527 ✓ Shrub or tree up to 20 ft. fls. white.
528 Climbing.
529
530 Shrub 6 ft. fls. on bare stem.
531 ✓ Shrub 4-8 ft. fls rose.
532 ✓ Herb 4 ft.
533 ✓ Tree or shrub, 15 ft. fls. white.
534 ✓ Forest Isachne
535 ✓ " Panicum
536 ✓ Open place along trail in forest Panicum
537 ✓ Climbing
538 ✓ Edge of forest Chaetochloa, 6 ft.

Road through forest to Sucey July 7

- 20539 ✓ Vine, probably woody, but accessible
 portion herbaceous.
540 ✓ Shrub, 6 ft.; fls. white, fading
 pink, fruit black.
541 Basal stem 1 ft. fruit scarlet.
542 ✓ 15 ft. blade 4 ft. long, 14 in. wide
 bracts scarlet above, 10 in
 cluster.

- 20543 ✓ 12-15 ft., leaves in spiral, fls.
4 in. long, pale lilac, or white
tinged with lilac.
- 544 ✓ Shrub 8 ft; fls. scarlet.
- 545 Fruit of 20417
- 546 Terrestrial, fronds 10 ft.
- 547 " " 6 ft.
- ✓548 Herb. vine.
- ✓549 " "
- ✓550 Moist vertical face of rock; fls.
white.
- ✓551 Woody vine, climbing high; fruit
3-angled or with thick wings.
- 552 20551, more mature fruit.
- 553 Leaves 5 ft., spathe white.
- ✓554 Shrub 10-15 ft., fls. yellow fruit
scarlet.

Province Quezaz. Panigón Plantation 3 miles south of Milagro.

July 11.

- 20555 Monopus, from Colombia, being tested by Mr.
Rorer as forage plant.
- 556 ✓ on along river Cynerium called "Cana veral".
- 557 ✓ Cut-over land Herb. vine; fls. blue.
- 558 Tree 40 ft. fls. yellowish green.
"Guermo" firewood, fairly hard.

20559✓

Eriochloa

560^o

Imperata

Com on, bad weed.

561✓

Tree, furnishes the wood
'neguito" soft, easily
worked, for inside timbers
and frame work of houses.
Trunk mostly straight
and escurrent; fls. white.

✓562

Eriochloa

Common along river and in low
land; looks like Para grass
but finer. Called Janeiro
merado. Cult. as forage.
Nodes hirsute.

July 12

✓20563

Herb. vine; fls. rose-purple.

✓564 Old field

3-4 ft. herb. fls. white.

✓565 Weed in old field Rytilix

✓566 Edge of field

Andropogon

Large masses.

✓567

Tree 20 ft. fls. yellowish
green called "Jobo".

568

Lesiacis

✓569

"

- ✓20570 Eragrostis Annual, 4 ft. bunches of 8-10 culms.
✓571 Damp place Panicum
✓572 Shrub 6-10 ft.
✓573 Edge of woods Oplismenus
✓574 Straggling rather delicate herb,
stems up to 6 ft. long but low;
fls. white.
✓575 Herb. vine, fls. white.
576 Lasiacis
577 Ehragmites? "Cariza", gregarious, not in flower.
✓578 In old field
✓579 In water Looks like our water hyacinth, fls.
white, upper petal with blue
patch at base and orange-yellow
spot at top of blue.
✓580 Moist place Panicum Large clump.
✓581 Cheetochloa Among Cynerium and shrubs.

July 13

- 20582 Used as shade for coffee & cacao also
wild; fls. white. "Gusbo de
Bejuco"
583✓ Tree 30 ft., fls. green. "Sapan de
Paloma"

20584	Lasiacis	Note open panicle and small spikelets.
585		The common large bamboo; shows vigorous leaves of young shoots.
586 ✓		Herb 8 ft.; fls. yellow.
587 ✓		Woody vine.
588 ✓		Herb. vine, fls. rose-purple.
589 ✓		Woody vine, fls. white.
590 ✓		Herb. vine, fls. rose purple.
591 ✓		"Palo prieto", used as shade for cacao; fls. standard salmon-yellow, wings red on upper half, base very pale yellow tinged with red; tree up to 40 ft; trunk and branches with short prickles.
✓592		Shrub 8 ft.; fls. white.
✓593		Vine, flowering part at least herbaceous, fls. yellow.
✓594		"Physic nut" "Pinon". Used for live fence posts in dry land; will not endure water.

- 20595 Herb. vine, fls. white.
596 Cenchrus Annual, 2 ft. large clumps.
597 Common in sandy dry river channel, fls. yellow.
598 Axonopus "Gematote" runners as much as 12
ft., on new soil along river.
599 Cynopodium Forming long slender runners as much
as 4 ft., along river on new
soil.
600 ✓ Cut-over land Herb. vine.
601 Panicum
602 Pennisetum Among brush & tall shrubs.

Province Chimborazo, Huigra July 16

Dry bushy slope, hill north of Huigra.

- 20603 ✓ Herb vine, thickly covering brush
near waterfall.
604 ✓ Same.
605 Rocky bank
606 ✓ Shady bank
607 Lesiecia Among shrubs
608 Chaetochloa Slender, branched, straggling among
shrubs, perennial.
609 Valota? Among shrubs
610 ✓ Dry hill tips

- 20611 ✓ Dry slope Bulbs; fls. rose-salmon except green lobes with white margins.
- 612 ✓ 3 ft.; fls. purple.
- 613 ✓ Eragrostis
- 614 ✓ Fls. rose-purple.
- 615 ✓ Long straggling vinelike; fls. rose to blue or purplish.
- ✓ 616 Andropogon
- ✓ 617 Shrub 3 ft.; fls. yellowish.
- ✓ 618 Herb. vine; fls. yellow with orange veins on the 2 large petals.
- ✓ 619 Shrub 1 ft.; fls. white.
- ✓ 620 Herb ⁴ 4 ft.
- 621 Heteropogon (probably 20329)
- 622 Fls. white.
- ✓ 623 Annual; some plants with hard woody base, others delicate.
- ✓ 624 Shrub 2-4 ft; fls. rose-magenta.
- ✓ 625 " 4-10 ft; fls. rose-scarlet.
- ✓ 626 Andropogon Large bunches on dry slope.
- ✓ 627 Dry slope Muhlenbergia Large bunches.
- ✓ 628 " " Heteropogon
- 629 " " Bouteloua

- 20630 Dry slope 3-6 ft.; fls. yellow.
- 631✓ " " Vine, seems to be herbaceous; fls. brilliant scarlet.
- 632✓ " " 3-6 ft.; fls. yellow.
- 633✓ " " Large cluster of leaves at base; inflorescence 3-6 ft, bracts and calyx scarlet, corolla white.
- 634 ✓ Somewhat shrubby, much branched, 4-6 ft.; fls. yellow.
- 635 Shady bank Peruvia Common.

Prov. Chimborazo Huigra to Naranjapata along railway.

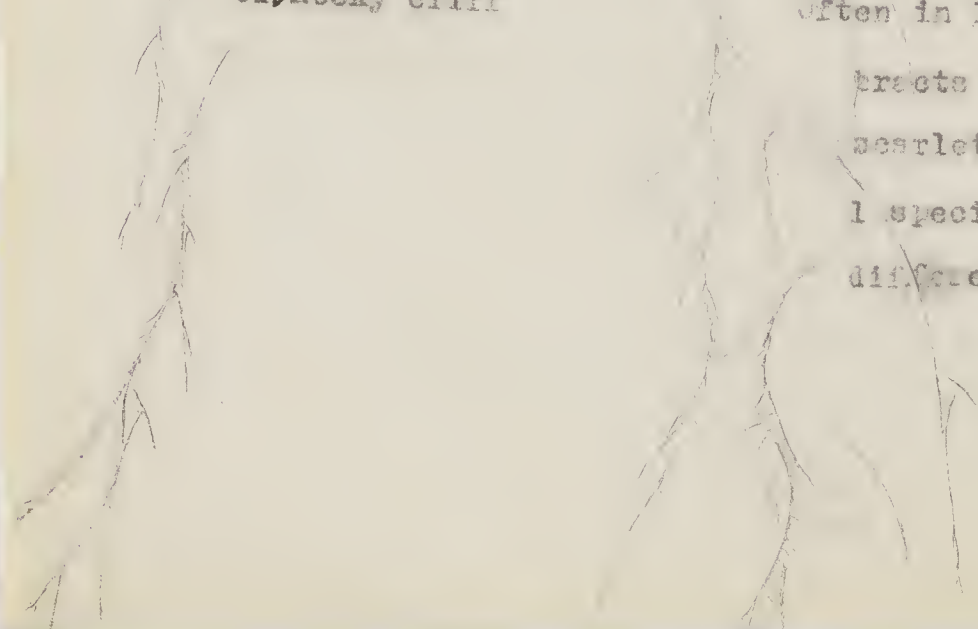
July 17

- 20636 Herb.vine; corolla lilac, filaments of crown crossbarred with lilac and purple.
- 637 ✓ Moist slope near Naranjapata Herb. vine, fls. white; fruit very spiny, spines rather soft, hirsute-lanate but point rigid.
- 638 ✓ Dry bank bulb soft, fls. yellow.

- 20639 ✓ Wet cliff, Waranajapata Erect, caulex scarcely above
soil; fls. white.
- 40 ✓ probably 20639
- 41 ✓ Rocky cliff Fls. rose-purple.
- ✓ 42 Leaves of preceding flowering
Begonia with stem 1 ft.
high.
- ✓ 43 Partly shady slope Tripsacum, large bunches, 4-6 ft.
- 44 Fungus on 20643
- ✓ 45 Tree or shrub, 10-15; fls.
(stigmas?) purple
- ✓ 46 Woody? vine; Infl. pendulous,
fls. orange-yellow, standard
and wings blotched with
purple.
- 47 Moist cliff
- ✓ 48 Cliff and dry banks Fls. red, tinged with orange.
- ✓ 49 Straggling herb. 3 ft, fls.
lilac-purple.
- ✓ 50 Herb. 2-3 ft. fls. pale purple.
- ✓ 51 " 4-6 ft. fls. greenish yellow.
- ✓ 52 Moist bank Caspolum
- 53 Stony bank Andropogon, probably 20616 but less pubes-
cent.

- ✓20654 Moist place Chaetochloa Straggling among shrubs.
- ✓55 Stony bank Andropogon Panicle looser branches spreading (cf 20653)
- 56 " slope Paspalum Among shrubs.
- ✓57 Herb 3-8 ft.; fls. pale yellow or creamy, greenish outside; stems & foliage densely covered with prickle-like hairs fls. not open in forenoon.
- ✓58 Along track
- ✓59 Stony bank Pennisetum Heads brown-purple.
- ✓60 Dry slope Andropogon
- ✓61 Aristida Annual.
- 52 Fls. of a preceding no., fls. scarce fruiting season.
- ✓63 Stony hill Small tree 10-20 ft., no leaves, branches and trunk with short prickles; fls. scarlet.
- ✓64 Small gnarled tree or shrub 5-10 ft. rose-scarlet-pale rose fading to dark rose.
- ✓65 Along Ry. Prestrete mats.

- 20666 ✓ Fls. to go with 20642
- 67 ✓ Shrub 6-8 ft.; fls. yellow-green.
- 68 ✓ Among brush Lemniscatum Up to 10 ft.
- 69 ✓ stony slope " 5-6 ft, or taller, much branched above.
- 70 ✓ Straggling half-shrub, 3-4 ft.; fls. creamy white.
- 71 Hanging from wet cliff.
- 72 ✓ Moist place in shade Lanicum
- 73 ✓ Near Maranjapata. Herb. vine.
- 74 ✓ Moist woods " " pods explosive.
- 75 Wet cliff Fls. yellow.
- 76 Rocky slope Terrestrial, blades splashed with purple.
- 77 ✓ " " Andropogon
- 78 ✓ Fls. white.
- 79 " cliff Terrestrial.
- 80 ✓ Moist slope Lereilema
- 81 ✓ Rocky cliff Often in large bunches of prickly bracts with a few flowers. Fls. scarlet. No large leaves (except 1 specimen), probably come at different season.



20682 ✓ Among brush rather moist place Chaetochloa

83 ✓ Shrub 8-15 ft.; fls. whitish green.

84 3 ft.; fls. white.

85 ✓ Shrub or small tree 6-15 ft.; fls. scarlet, fruit black.

Prov. Chimborazo, Alausí

July 19

20686 ✓ Grassy slope Nassella Common

87 ✓ Open cut Aristida Annual

88 Ry. "

89 ✓ Open ground along Ry. Bromus

90 ✓ " " " " Eragrostis (not pilosa

91 Open grassland Nassella

92 ✓ Branched, 3-4 ft.

93 ✓ 2-4 ft.; fls. green.

94 ✓ " " scarlet.

95 Along Ry. Chloris

96 ✓ Open grass land Bouteloua Common

97 ✓ " " " 2-4 ft.; fls. rose-purple.

98 " " " Stipa Common

99 ✓ " " " Shrub 8 ft. fls. green.

20700 ✓ " " Cortaderia Large bunches on hillsides, basal cluster 3 ft. infl. 6 ft. head rose-tinted.

20701	✓Open grass land	Stipa	
02	✓Along arroyo		Straggling, much-branched, 4-8 ft.; fls. magenta-purple, sticky.
03	✓		Similar to 20702 but less sticky.
04	✓Open grassland		Half shrub 1-2 ft. rays white.
05	✓Along bank		1-2 ft.; fls. lavender.
06	✓		Shrub 4-8 ft, forming close leafy mass. fls. white.
07	Open cut	Festuca	Common but too old.
08	✓	Stipa	
09	✓Grassland	Sporobolus	Common
10	✓Along Ry.		4-6 ft.
11	✓Hillside		Fls. rose-purple.
12	✓Grassland	Stipa	Common.
13	✓Hillside	Eragrostis	"
14	On bank		prostrate.
15	✓Open cut		Fls. pale rose.
16	" grassland	Aristida	Common but too old; all blades curly.
17	" "	Bouteloua	
18	" "	Eragrostis	Common
19	✓		Shrubby fls. lavender
20	✓		2-4 ft.; fls. rose & blue.

*

-50-

- | | | | |
|-------|--------------------|-----------|-----------------------------------|
| 20721 | Open grassland | Stipa | Common |
| 22 | ✓ " " among cactus | Agropyron | |
| 23 | Along cut | Paspalum | |
| ✓24 | | | Shrub 3-4 ft.; fls. rose-purple. |
| ✓25 | | | 2-4 ft.; fls. scarlet. |
| ✓26 | | | 3-6 ft. |
| ✓27 | Grassland | Stipa | Common |
| ✓28 | | | Shrub 4-6 ft.; fls. brown-purple. |

Prov. Chimborazo, Huigra, road toward Cuenca, up hill to
south. July 20.

- | | | | |
|-------|-------------------------|--------|---|
| 20729 | ✓ Dry hill | | Woody vine, fls. white. |
| ✓30 | Along irrigation stream | | Fls. yellow. |
| ✓31 | Dry hill | | 2-3 ft.; fls. yellow. |
| ✓32 | Moist shady place, | | Fls. white with reddish throat. |
| ✓33 | Dry slope | | Shrub 8-15 ft.; fls. white. |
| ✓34 | " " | | Straggling 8-15 ft.; fls. lilac. |
| ✓35 | " " | | Tree 20 ft.; fls. yellow. |
| ✓36 | " thicket | | Shrub 10-15 ft.; fls. white
turning pinkish. |
| ✓37 | " " | | Shrub 8-12 ft.; fls. white. |
| 38 | Bushy slope | Melica | |
| ✓39 | On tree | | Numerous leaves in basal cluster;
infl. single spike 2 ft.,
fruit only. |

- 20740 ✓ Shady place 2 ft.; fls. yellow.
- 41 Dry brushy slope Chusquea Sterile, straggling, 8-15 ft.
- ✓42 Dry slope Small tree or shrub 10 ft.; fls. green.
- ✓43 " gressy " Stipa
- ✓44 " thicket L. siacis Aspect of *L. divaricata* with zigzag shoots, but panicle branches pubescent, & pubescent at throat of sheaths; ligule visible, clambering among shrubs.
- ✓45 Dry slope Shrub 2-3 ft.; fls. deep violet-purple.
- 46 " thicket Festuca
- ✓47 " " Herb. vine; fls. creamy white inside, base of crown purplish, outside greenish with purplish veins; fruit rose-purple on angles & base, finally throughout.
- ✓48 " " On tree.
- 49 " base of tree, fls. brownish-orange, center little darker

20750 ✓

10-15 ft, large shrub or tree,
fls. greenish white.

51 ✓

Shrub straggling up to 12 ft.,
branches spiny at base of
branchlets, spines slender
in pairs or clusters (on
older parts); rays scarlet.

Hillside north of Huigra, along old Ry. grade July 27

✓ 20752 Grassy hillside

Elyonurus

Bunch

53 " "

Andropogon

54 Moist thicket

Lesiacis

Clambering

55 " "

15 ft.; stems devoid
of leaves, rather
woody, but fragile,
much pith; infl.
terminal; fls.
white, pink-tinged.

✓ 56 " "

On tree, no bulb; fls.
orange-salmon.

57 Grassy bank

Stipa

58 ✓ " "

Eragrostis

59 " "

Trisetum

60 " "

Bromus

- ✓ 20761 Grassy hill Aristida Old blades flat & flexuous.
62 Dirt cut Festuca
63 ✓ Moist thicket In tree, fls. yellow with
brown-red spots.
✓ 64 Dry hill Shrub 3 ft.; fls. yellow.
65 Grassy hill Aristida
66 " " Andropogon
67 Side of Cut "
68 " " " Muhlenbergia
✓ 69 Dry hillside Tree 20 ft.; fls. yellow.
✓ 70 " hill Shrub 10 ft.; fls. white.
71 " " Stipa

Prov. Chimborazo Alausí July 27

Dry slopes

- 20772 Chaetochloa Common in dry regions of interior.
73 Eragrostis

20774 Cotapaxi Sta-
tion Kilo-
meter 414 Stipa July 27

Prov. Carchí, La Rinconada, a ranch between Ibarra and

Tulcán

Aug. 10

- 20775 ✓ Shrub
76 Ravine
77 "
78 ✓ " or small tree; calyx red,
corolla yellowish.

✓20779		Tree
80	Ravine	
81		
82	Grassland	Paspalum
83	Shady ravine	
84	" "	
✓85	Open slopes	Fls. yellow.
✓86		Large shrub or small tree; fls. white.
✓87		
✓88	Open ground	
✓89		Shrub.
✓90		Somewhat shrubby.
✓91		Shrub fls. white.
✓92		Shrub.
✓93		" fls. red.
94		
✓95		" " purple.
96		Fls. white.
97		Calamagrostis
✓98		Festuca
99		Bromus
20800✓		Agrostis
01✓		Fruit orange-red.
02✓		Fls. yellow.
03✓		20790?

- 20804 Fls. orange red
805 Thick spike, nearly leafless stem.
✓ 806 Small tree.
✓ 807
✓ 808
809 Ibarra, along adobe wall

Provinces Imbabura & Pichincha, Olavalo to Malchingui

Aug. 12

shrubby roadside

- ✓ 20810 Shrub; fls. orange-yellow.
811 " " " red.
✓ 812 Small tree; fls. white.
813 " "
✓ 814 " " " pink.
815 Vine; fls. scarlet.
✓ 816 Small shrub fls. blue.
817 Dry cliff
818 Agropyron
✓ 819 Dry bank Aegopogon
✓ 820 Tree 25 ft.
✓ 821 Shrub; fls. lilac
✓ 822 Tree 25 ft.
✓ 823 Fls. orange-red.
✓ 824 " white.
✓ 825 Chusquea Straggling or clambering.

- ✓20826 Shrub; fls. scarlet.
827 Calamagrostis
828 Agrostis
✓829 Bromus
✓830 Damp shady place Chaetochloa
✓831 Valota
✓832 " " " Paspalum
833 Dry hills Chaetochloa Common
✓834 " slope Sporobolus
✓835 " "
✓836 " "
✓837 " " Small tree; fls. yellow.
✓838 Dry valley On trees.
✓839 " slope Shrub 10 ft.
840 Small tree.
✓841 Shrub, fls. bluish white.
842 Cactus to represent photo.
✓843 Small tree, fls. yellow &
orange red.
✓844 Shrub.

Prov. Pichincha, Malachingui to Pomasqui wooded hillsides

Aug. 13

- 20845 Shrub
✓846 " fls. yellow.
✓847 " white
✓848 Small tree; fls. scarlet.

20849	Rocky slope		3570 M.
850	"	"	" "
✓ 851	"	"	
✓ 852	"	"	" "
853	"	"	" "
854	"	"	" "
855	"	"	" "
		Cortaderia	
✓ 856	Bank	Agropyron	Rhizomes.
✓ 857	Open places	Agrostis	Small tufts.
✓ 858			Shrub rays white.
✓ 859	Rocky slope		Fls. pale yellow.
✓ 860			Aspect of pie-plant; blades 2-3 ft. in diam., circular in outline, but lobed & cleft. Infl. 18 inches long.
✓ 861			Small tree.
✓ 862		Cortaderia	5-8 ft.
✓ 863		Neurolepis?	5-8 ft. loose clumps or patches.
864		Bromus	
✓ 865		Festuca	
866			
✓ 867			Depending from bank.
✓ 868			Prickly shrub, fls. light purple.

- ✓20869 Shrub
870
871
872
✓873 Small tree
✓874 Rocky bank
✓875 Calamagrostis
✓876 Cliff
877 "
✓878 Small shrub
✓879 Shrub, fls. red with yellow
tip.
880 Vine, fls. white.
✓881 8 ft.
✓882 Fls. lilac-blue.
883 Cliff
✓884 Shrub, fls. red.
✓885 "
✓886 Stipa
887 "
✓888 Small tree.
✓889 Shrub, fls. blue.
890 " " " lilac.
891
✓892 Shady place
✓893 Fls. blue.

- ✓20894 Shrub; fls. pink purple.
✓895 " " white.
✓896 On herbs and shrubs, fls. and
infl. shining white.
- 897 Eragrostis
898 Stipa
899 Polypogon
900 "
901 Stipa
902 Eragrostis
903 Andropogon
904 Eragrostis
905 Notholcus Common escape from cult.

20906-908 blank

Prov. Carchi, Paramos, 12 miles west of Tulcán Aug. 10.

- 20909 ✓ Among bunches of grass Fls. yellowish-green.
20910 ✓ Bush 2-4 ft.
911 ✓ Eastern edge of paramo. No trunk, cottony white, fls.
exceeding leaves.

- ✓ 20912 Covering large areas, miles in extent, the dominant plant; forms trunk as much as 15 ft. tall, the old leaves in a mass below the terminal tuft; flowers shorter than leaves & in their axils; rays yellow, disk dark brownish yellow. (See photo). Spanish name "Freilijón", applied also to 20911.
- ✓ 20913 Among 20912, boggy place.
- ✓ 914 " " Calamagrostis Large tufts
- ✓ 915 " " Mostly scattered; inflorescence 8-12 ft., woolly, covered with spiny bracts; fls. blue-indigo in round heads that make up the columnar spike-like inflorescence (see photo) blades 3-5 ft. Spanish name Achupalla.
- ✓ 916 Calamagrostis Large bunch grass. Common among 20912.
- ✓ 917 Among bunches of grass with 20912.
- ✓ 918 Calamagrostis Large bunches among 20912.
- 919 Poa, " " " "
- ✓ 920 Agrostis " " " "

✓20921

Calanag-Agrost? Culms few or single, among
20912.

✓922 *Bromus* Panicle drooping among 20912.

✓923 Mats on sides of bunches of grass among 20912

✓924 Mats on base of bunches of grass; fls. yellow " "

✓925 Scattered among bunches of grass in 20912.

✓926 " " " " " " "

✓927 Bog in cover of 20912; infl. whitish, only flowering portion
above ground. At base is one branch, the infl., and
another with leaves.

✓928 Small shrub scattered among bunches of grass in 20912. fls.
yellow.

✓929 Boggy place in 20912 Fls. orange-yellow.

✓930 Bog in 20912 Fls. purplish white.

✓931 " " " " greenish white.

✓932 Mats among bunches of grass in 20912.

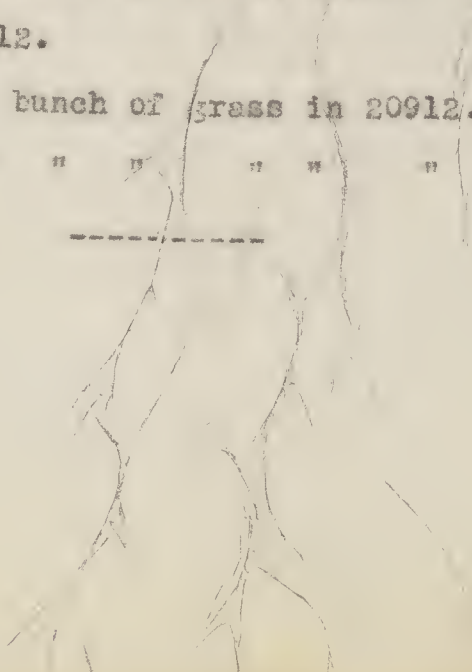
✓933 Bog in 20912

✓934 Among bunches of grass in 20912.

935 Bog in 20912.

936 On base of bunch of grass in 20912.

937 " " " " " " " fls. pink.



Prov. Carchi, La Rinconada, ranch between Ibarra and Tulcán.

Aug. 11.

20938 Weed in yards Festuca

939✓ Small tree, common along fences and ditches, apparently not indigenous; fls. pendulous, dull orange red toward mouth, sometimes yellow or orange (see photo).

940✓ Thickets Shrub; fls. white.

941 On trees. Fls. pink spotted with dark purple (photo).

942✓ Bog in mts. 2-3 ft.; fls. blue (Collected by Sr. Tamaya's men) (see photo).

943✓ Straggling 8-10 ft.; fls. and 1 or more leaves white.

944 Fungus on 20943

945✓ On tree Leaves mostly purple.

946✓ Shrub 15 ft; fls. yellow.

947✓ Tree 20 ft.; fls. blue.

948✓ Herb 10-12 ft.; fls. yellow.

949✓ Shrub 12-15 ft.

950✓ Bog in mts. (Brought in by Sr. Tamaya's men); fls. red outside, yellow within.

951✓ Shrub 5-10 ft.; fls. and heads light salmon.

✓20952

Shrub or tree up to 20 ft., long
upright branches; fls. pale
yellow.

Prov. Carchi, wooded hills south of Tulcán Aug. 10

20953 ✓

954 ✓

955 ✓

Fls. blue.

956

957 ✓

958

Trisetum

✓959

Woody vine.

960

✓961

✓962

✓963

Straggling shrub or vine, fruit
purple.

✓964

Shrub; fls. light purple.

✓965

966 ✓

967

Paspalum

✓968

969

✓970

✓971

972

Calamagrostis

973 ✓

20974	Bromus	
✓975	Stipa	
✓976		Mats.
✓977		
✓978		
✓979		Acaulescent; fls. white.
✓980		Shrub.
✓981		Mats.
✓982		
✓983		Shrub.
✓984		
✓985		
✓986		
✓987		Fls. pink.
988		
✓989	Paspalum	
990 ✓		
991		Tansy-like mats
992 ✓		Shrub
993 ✓		"
994	Stipa	
995 ✓		"
996		
997 ✓		
998		
999		

- 21000 ✓ Vine; fls. salmon-pink.
001 ✓ Shrub; fls. yellow.
✓002 " "
003 ✓ " "
004 ✓ " fls. blue.
005 ✓
006 ✓
007 ✓
008 ✓ Polypogon
009 ✓ Brachypodium
010 ✓
011 ✓ ~~Trisetum~~ *Calamagrostis*
012 ✓ Prickly shrub; fls. pink-purple.
013 ✓
014 ✓
015
016 ✓
✓017
018 Bromus
019 Torresia
✓020 Fls. yellow.
021 ✓ Agrostis
022 ✓
023 ✓

- 21024 ✓
025 ✓
026 ✓ Aegopogon
027 ✓ Bromus
028 ✓ "
029 Creeping
030 ✓
031 ✓ Celamagrostis
032 ✓
033
034
035 ✓
036 Poa
037 Stipa
038 Bromus
039 ✓ "
040 ✓ Trisetum
041 ✓ Briza
042 Grass
043
044 ✓ Small shrub; fls. white.
045 Agrostis
-

Prov. Pichincha, Mt. Pichincha near Quito. Alpine region
(3900-4500 M) Aug. 17, 1923.

- | | | |
|-------|-------------------------------------|--|
| 21046 | | Fls. yellow |
| ✓047 | | |
| 048 ✓ | Calamagrostis <i>Poa</i> | |
| 049 ✓ | | |
| 050 ✓ | | Fls. pink. |
| ✓051 | | Fls. blue. |
| 052 ✓ | | Small shrub; fls. white. |
| 053 ✓ | <i>Agrostis</i> | |
| 054 ✓ | | |
| 055 ✓ | | Head drooping. |
| 056 ✓ | | Fls. blue. |
| 057 ✓ | | |
| 058 ✓ | " | |
| 059 ✓ | <i>Trisetum</i> | |
| 060 ✓ | | Fls. white. |
| 061 ✓ | | Mats. |
| 062 ✓ | | |
| 063 ✓ | <i>Calamagrostis</i> ? | |
| 064 ✓ | | |
| 065 ✓ | | Thick spike with rosette on subterranean branches. |

21066 ✓

067 ✓

068 ✓

Acaulescent; fls. yellow.

069 ✓

" " white.

070 ✓

" " "

071 ✓

Shrub, 3-6 ft.

072 ✓

073 ✓

Large cushions.

074 ✓

075 ✓

076 ✓

077 ✓

078 ✓

" "

079 ✓

" "

080 ✓

081 ✓

082

Agrostis

083

Poa

Bunch grass

084

085 ✓

Calamagrostis

086 ✓

087 ✓

Shrub, 3-5 ft.

Prov. Carchi, wooded hills south of Tulcán Aug. 10

- 21088 ✓
- 089
- 090 Shrub
- 091
- 092 Stipa
- 093 Agropyron
- 094 Festuca
- 095 ✓
- 096 ✓
- 097 ✓
- 098 ✓ Twining vine; fls. scarlet.
- 099 ✓

Guayaquil Aug. 25

- 21099 $\frac{1}{2}$ Phragmites

Prov. Oro, between Machala and Puerto Bolívar
Aug. 26, 1923.

- 21100 Swamp near P. Bolivar. Rhizophora.
- 101 Border of Swamp Sporobolus
near P. Bolivar.
- 102 (Cotton) Well established and rather abundant in the low brush.
- 103 Along track Sporobolus
- 104 ✓ Brackish swamp

21105 ✓ On shrubs near swamp

- | | | |
|-------|---------|---|
| 106 ✓ | " " " " | Inflorescence pale or whitish. |
| 107 | Cactus | Climbing, not common. |
| 108 | " | Common. |
| 109 | Opuntia | " fruit reddish |
| 110 ✓ | | Shrub 5-10 ft; fls. yellowish
white. |
| 111 ✓ | | " 5-8 ft. |
| 112 | | " with vine like branches. |
| 113 ✓ | | " 3-5 ft. |
| 114 ✓ | | Common back of swamp. |

Prov. Oro Between Santa Rosa & La Chorita Aug. 27

Along trail

- | | | |
|---------|----------|--|
| 21115 ✓ | | 5 ft.; fls. red. |
| 116 ✓ | | Erect, 3 ft.; fls. scarlet. |
| ✓117 | | " " " " |
| 118 | | Fls. white, berries red. |
| ✓119 | | 4-8 ft.; bracts red. |
| ✓120 | On trees | |
| ✓121 | | Shrub; fls. scarlet. |
| ✓122 | | 10 ft.; fls. pale olive-green or
yellowish. |
| ✓123 | | 8 ft.; fls. scarlet. |
| ✓124 | | 6 ft.; fls. pink. |

21125 ✓		herb. vine; fls. scarlet.
126 Camp woods	Olyra	Branching.
127 ✓		Shrub; fls. pale-scarlet.
✓128		Herb 5-8 ft, stinging hairs, viscous; fls. white with salmon eye.
✓129		Vine; fls. salmon-scarlet.
130	Lasiacis	
131	"	
132 On trees		
✓133 Wet woods		
134	Olyra	
135 On tree		
136 Moist bank	Ichnanthus	
137	Chaetochloa	
138	Paspalum	
✓139		Fls. orange-salmon-yellow.
✓140		6 ft. fls. greenish
✓141		Straggling shrub up to 15 ft., fls. scarlet.
✓142		Herb 5-10 ft.; fls. scarlet.
✓143		Shrub or tree 4-15 ft.; fls. white.
144 Dry brushy land,		Herb 10 ft.; fls. white.
✓145		8-10 ft.; fls. lilac.
146	Lasiacis	

- ✓21147 Straight, stiff leafless trunks,
with pink-scarlet infl.
- ✓148 Shrub 8 ft.
- ✓149 " 12 ft.; fls. magenta with
pale eye.
- ✓150 " 8 ft.; fls. yellow.
- 151
- ✓152 Vine; fls. white.
- ✓153 Shrub, 10 ft.; fls. white.
- ✓154 " " " magenta.

Prov. Oro. Between La Chorita & Portovelo Gold mine Aug. 28,
1923.

- ✓21155 Along stream Tree 30 ft. fruiting infl. red
Fernán Sánchez.
- 156 Bank along road Pennisetum
- 157 Dry open grassland Arundinella
- ✓ 158 5-8 ft.; fls. white.
- 159
- ✓160 Tree, fls. white.
- ✓161 Vine, climbing tree trunk by
rootlets.
- ✓162 On log
- 163 Climbing, fls. white.

- 21164 ✓ Shrub; fls. white.
165 ✓ Tree; fls. red.
166 ✓ " calyx and pedicel red,
corolla pink-salmon, tip
whitish.
167 Tree or shrub with vinelike
branches.
168 Erect, partly shrubby; fls.
scarlet.
169 ✓ " partly shrubby; fls.
scarlet.
170 ✓ Leaf 3-5 ft; infl. basal,
calyx scarlet, corolla
white.
171 ✓ Shrub 8 ft.; fls. white.
172 ✓ " " " "
173 ✓ " 6 ft. " yellow.
174 ✓ Twining, climbing high, a
single drooping infl. at
end; calyx crimson-scarlet;
corolla white with dark
purple spots.
175 Shrub, mostly without leaves.
176 ✓ " corolla white.
177
178 " 6 ft.

Oplismenus

- 21179 ✓ On tree Inflorescence 2 ft. bracts scar-
let with green tips; fls.
white.
- 180 Lasiacis
- 181 ✓ Moist bank Axonopus
- 182 ✓ Tree; fls. whitish.
- 183 ✓ Shrub 10-15 ft.; fls. purple.
- 184 Lasiacis
- 185 ✓ " 4 ft.; fls. purple-blue.
- 186 ✓ " 15 ft.; fls. pink.
- 187 ✓ "
- 188 ✓ " 10-15 ft.
- 189 ✓ Moist open ground Paspalum
- 190 On tree trunk Fls. scarlet (same as Huigra
plant on rocks).
- 191 Open moist grassland Panicum
- 192 Moist cliff Calamagrostis
- 193 " bank Axonopus
- 194 ✓ Tree; fls. scarlet, corolla
cream.
- 195 ✓ Small shrub; fls. blue.
- 196 Lasiacis
- 197 Shrub
- 198 Tree; fls. scarlet.
- 199 ✓ Moist bank Ichnanthus

✓21200	Moist bank	Panicum	
201			Erect shrub; 3 ft.; fls. pale red.
202✓		Ichnanthus	
203✓			Shrub 6-15 ft.; fls. purple-blue.
✓204	Moist bank	Paspalum	
205		Isachne	
206		Paspalum	
✓207			"
208			" fls. yellow.
✓209			" 8 ft.; fls. white.
210		"	
✓211	Moist bank	Panicum	Much branched.
✓212	" "	"	
✓213	" "	Ichnanthus	
✓214			Shrub 5 ft.; fls. purple-blue

Prov. Oro Portovelo Gold Mine Aug.30 River valley.

21215✓	Near stream		Woody vine; fls. rose.
216✓	" " tree 40 ft. (a) fls (b) fruit		
217✓	On tree along river		Woody vine; fruit scarlet.
218✓	" " " " panicle about 1 1/2 ft. long		
219✓	" " " "		
220✓	" " " "		

- 21221 On tree, dry hill
222✓ " "
- 223 ✓ Dry hill Tree 30-40 ft. no leaves.
224 ✓ On tree, dry hill; Fls brilliant rose, the lip
darker with white border.
- 225 (burned)
✓226 Dry hill Tree 20-30 ft.; fruit yellow.
227 (burned)
✓228 Dry hill Large tree leafless, fls. bright
yellow. "Pol -polo"
✓ 229 Small tree, mostly leafless; fls.
lilac with red stripes in
center.
- ✓230 Along river Woody vine, fls. white, fading
cream or yellowish.
- ✓231 Dry slopes Shrub or small tree; fls. white.
✓232 Along river " " " " " blue and
purplish or rose-lilac.
- 233 Dry hill On tree.
✓234 " " Hanging from tree.
235 (burned)
✓236 Dry hill Woody vine, fls. pale scarlet.
237✓ " " Parasite on tree; fls. scarlet
at base; cream above.
238✓ " " Tree 40 ft.
239✓ " " On tree.

✓ 21240	Dry hill			On bark of tree.
241	" "			" tree; fls. greenish white with purple spots, the lip white with yellowish cen- ter.
242	(burned)			
243	✓ Dry hill			Tree 20 ft. with stubby branches; no leaves.
244	✓ (burned)			
245	✓ Dry hill			On tree
246	✓ " "			" "
247	" "			" "
248	" "			" "
249	" "			" "
250	" "			" "
251	✓ On hill at mine	Andropogon	Introduced?	
252	" " " "	Leptochloa		
253	" " " "	Panicum		
254	" " " "	Axonopus		

Along river below Portovelo. Aug. 31.

21255				On tree.
256	Boggy place	Panicum		
257	" "	Paspalum		
258	✓ Surface of pools			
259	✓ Dry hill			On tree.
260	" "	Andropogon	Common	

21261	Dry hill	Andropogon	Common.
262	" "	Imperata	
263	" "	Andropogon	
264	✓ Common along river; fls. white.		

hillside at mine

Sept. 1

21265	✓		Tree 40 ft. or more, fruit only. "Amarillo" a good mine timber.
266		Chaetochloa	
267		Axonopus	
268		Eragrostis	
269		Paspalum	
270		Trachypogon	
271		Andropogon	
272	✓		Small tree; fls. yellow.
273	✓	Chaetochloa	
274		Andropogon	

The trip from Portovelo to Loja (nos. 21275 to 21439) 3 days on horses with 2 cargo animals and 2 helpers. No drying till Loja was reached. Prov. Oro Portovelo to El Tambo. Sept. 2.

21275	Dry wooded slopes	Terrestrial; fls. rose.
276	✓	Tree, leafless; fls. scarlet.

21277 ✓		On tree, fls. pale salmon.
278	Andropogon	
279 ✓		Fls. white.
280	Olyra	
281 ✓		Shrub; fls. white.
282 ✓		Tree; fls. yellow with brown stripes.
283 ✓		
284	Arundinella	
285 ✓		Shrub; fls. white.
286		
287 ✓		Tree; fls. white.
288 ✓	Imperata	
289		" " " or greenish.
290 ✓		Shrub, leafless; fls. yellow.
291 ✓		Tree; fls. yellow.
292 ✓		(21235)
293	Aristida	
294	"	
295		Woody vine; fls. blue.
✓296		1-3 ft.; fls. rose.
✓297		Fls. greenish white, fruit bright red; "Fernan Sanchez"

21298 ✓		(21225)
299 ✓		On tree
300	Panicum	
301		(cf 21279)
302	"	
303	Ichnanthus	
304		On tree
305	Aristida	Perennial, old blades curled.
306	Paspalum	
✓307		Shrub; fls. white.
308		Tree; fls. yellow-green.
309	Panicum	
310	Pennisetum	
✓311		" " white.
✓312		
313	Andropogon	
314 Dry hills	"	
✓315		Small tree 20 ft; fls. white.
316	Panicum	
✓317		4 ft.; fls. orange-yellow
✓318		Shrub; fls. white.
✓319		Tree; fls. rose.
320	"	
✓321		" " white.

Prov. Loja El tambo to La Tona, Sept. 3.

- 21322 River bottom Shrub 6 ft.
323 ✓ On tree; fls. purple.
324 ✓ Small tree; fls. purple.
325 ✓ On tree.
326 Cactus common at lower desert
altitudes; fls. crimson.
327 ✓ Tree 10-20 ft., mostly without
leaves or with young leaves;
very profusely flowering; fls.
pink, conspicuous on the hill-
sides at 1200-1800 M., but
very scattering, 3 or 4
trees to square mile.
328 ✓ On tree
329 ✓ " " fls. rose.
✓330 Small tree, common in river
bottom; fls. (stamens) white;
calyx & corolla dull brown.
331 River bottom Small tree or shrub, leafless,
fls. yellow.
✓332 " " Shrub 3-5 ft. young leaves; fls.
scarlet-vermilion.

- ✓21333 Small tree; fls. white.
- ✓334 On tree; fls. lilac blue.
- ✓335 Side of cliff Andropogon
- ✓336 Grassy slope Axonopus
- ✓337 Tree
- ✓338 Shrub; fls. white, rose tinged
"Cucharilla".
- ✓339 Large shrub; fls. white with
few brown spots.
- ✓340 Leafless tree; fls. scarlet.
- ✓341 Shrub 8 ft.; fls. lilac-blue.
- ✓342 Tree; fls. crimson.
- ✓343 Shrub, single stem or with few
stubby branches, leafless;
fls. brownish yellow.
- ✓344 On tree, large basal cluster;
fls. bright rose.
- ✓345 Tree; fls. red.
- ✓346 Shrub; fls. white.
- ✓347 2-4 ft.; fls. dark violet.
- ✓348
- 349 Fls. salmon-vermillion.
- ✓350 Field in small valley Fls. canary yellow.

- 21351 ✓ On tree Infl. lilac; fls. white, upper
half of livid purple, fragrant.
- 352 ✓ Hedges and borders of fields Fls. white.
- 353 Grassy slope Aristida
- 354 ✓ Shrub 2-6 ft.; fls. salmon-orange.
- 355 ✓ Tree, standard green, other
petals white.
- 356 On tree Bracts red or yellow.
- ✓357 " " Infl. reddish; fls. white.
- ✓358 " "
- ✓359 Tree; fls. white
- ✓360 " " Fls. purple.
- ✓361 Tree; fls. violet-blue.
- ✓362 Large shrub; fls. white.
- ✓363 Tree; fls. white.
- ✓364 On tree Fls. cream.
- ✓365 Tree.
- ✓366 " fls. white.

Prov. Loja. Between La Toma and Loja Sept. 4

21367 ✓ Moist bank.

✓368 On tree

Tips of bracts red.

369 Moist bank Poa

- 21370 Stinging; fls. red.
✓371 Shrub 6 ft.; fls. green.
372 Fls. rose.
✓373 Small tree; fls. red.
✓374 Tree; leaves leathery.
✓375 Large shrub; fls. white.
✓376 Shrub; fls. scarlet.
✓377 Small shrub; fls. white.
✓378 Terrestrial.
379 Moist bank
380 " " Agrostis
381 " " Stipa
382 " "
383 On tree
384 Moist bank Poa
385 Trisetum
386 " ", cluster of basal leaves,
spikes axillary.
387 On tree
388 Chusquea
✓389 " trees and terrestrial 3 outer petals olive-brown, lip
and 2 narrow petals greenish
yellow.

- ✓21390 Shrub; fls. orange-yellow.
391 " 6 ft.; fls. salmon.
✓392 Tree; fls. violet blue.
✓393 Shrub; fls. white.
✓394 On tree Parasite.
✓395 Along road, probably planted, native? Tree
396
397 Dry sandy slope Bouteloua
398 " " Aristida
399 " " Bouteloua
400 " brushy hill Trichloris
401 " " " Eragrostis
402 " " " Panicum
403 " " " Chloris
404 arroyo Aristida
✓405 Tree; fls. yellow with brownish
eye.
✓406 Clay slope
407 Dry hill Eragrostis
408 " slope Aristida
409 " " Chloris
410 " hill Eragrostis
✓411 " " Shrub
✓412 On tree Inflorescence red; fl. purplish.
413 Shrub; fls. white.
✓414 " " " inside, pinkish
outside.

- 21415 Shrub 3-4 ft.
416 ✓ "
417 ✓ " 1-4 ft.; fls. white.
418 Dry hill Sporobolus
419 " slope Megalogen
420 Moist slope Panicum
421 ✓ Grassy slope Axonopus
422 ✓ Shrub; fls. crimson.
423 " pricely, fls. orange-red.
424 (of preceding number)
425 ✓ Climbing 1-2 ft.; spathe greenish
white, spadix brownish.
426 ✓ On tree Parasite, yellowish green, berries
white.
427 ✓ Shrub; fls. red.
428 ✓ "
429 ✓ " " white.
430 Moist bank Poa
✓ 431 Shrub; fls. yellow.
✓ 432 On tree Fls. pale yellow. (Is this
21389?)
433
434 ✓ 1-2 ft.
435 ✓ Shrub; fls. white.
436 ✓ " " pink.
437 ✓ " 2-6 ft.; fls. orange red..

21438 ✓ Shrub; fls. scarlet
 439 ✓ Dry slope Cortaderia

 Prov. Loja, between Loja and San Lucas. Sept. 6

21440. Shrub 3-6 ft.; fls. scarlet.
 21441 ✓ On tree Infl. 3 ft., red, fls. purple.
 442 " only; fls. red. (of another number).
 443 ✓ " " " 2 ft.
 444 ✓ Grassy bank in open woods. Trinichloa
 445 Moist bank
 446 ✓ Tree; fls. greenish.
 447 ✓ Bank of river "
 448 ✓ On tree
 449 ✓ Terrestrial Fls. green.
 450 " blue.
 451 " orange.
 ✓452 Moist bank " yellow.
 ✓453 " " " lilac.
 454 Brushy bank Isachne
 455 Shady bank Poa
 ✓456 Tree; fls. green, rose-tinted.
 457 Rocky open place Agrostis
 458 ✓ Shrub or small tree; fls. white.

- 459 ✓ Tree 30 ft. along road, may
be cult.
- 460 ✓ Tree; fls. creamy white.
- 461 Dry slope Epicampes
- 462 Moist bank Poa
- 463 Dry slope Sporobolus
- 464 Paspalum
- 465 Anonopus
- 466 Agrostis
- ✓467 Moist bank Herb; fls. white.
- 468 Erosus
- 469 Dry slope Trachypogon
- ✓470 Vine; fls. dull red.
- 471 ✓ Shrub; fls. green & rose.
- 472 Moist bank
- 473
- 474 ✓ " 8 ft.; fls. white.
- 475 " "
- 476 Open ground " "
- 477 ✓ Grassy hillside Pennisetum
- 478 Dry slope Cortaderia Large clumps.
- 479 ✓ Terrestrial fls. green.
- ✓480

21481	Grassy slope	Andropogon	
482	" "	Pennisetum	
483	" "	Axonopus	
484		Eragrostis	
485	Open clay slope		
486	" " "	Chenopodium	
487	" " "		grass
488		Bromus	
489		Andropogon	
✓490	Terrestrial		Fls. red, lip orange red.
491	Grassy slope	Paspalum	
✓492			Rays orange.
✓493	Along Agave hedge		Fls. orange-red.
✓494	" " "		" dull red.
495	" " "	Paspalum	
✓496	" " "		5 ft. straggling; fls. blue.
✓497	" " "		Shrubby vine; fls. lilac.
✓498	Along road & in fields		3-4 ft.; fls. white.
✓499			3-5 ft.; fls. pale scarlet.

Prov. Loja, between San Lucas & Ona. Sept. 17

Mostly on the paramos

✓21500	Moist slope		Fls. white.
501	Rich moist woods		No trunk, frond 5 ft. base brown woolly.
✓502	Rich woods		Shrub; fls. white.
503	Moist bank		

- 504 Moist slope
505 Climbing high; fls. scarlet.
506 Cortaderia
507 ✓ Straggling or climbing, much
branches; fls. yellow with
brown veins.
508 ✓
509 Wet woods
510 Fls. red.
511 Terrestrial " green.
512 Festuca
513 ✓ Small tree; fls. white.
514 Shrub 8 ft.; fls. purple.
515 Shady bank
516 ✓ Shrub 3-6 ft.; fls. pale purple.
517 Brushy bank Large clumps.
518 Shrub or tree; fls. white.
519 ✓ Terrestrial Fls yellow; lip & inside of
outer petals brownish.
520 Same as 21519? blades shorter
521
522 ✓ Herb 10 ft.; fls. greenish
yellow.
523 Open ground Stipa
524 Grassy paramo Danthonia
✓ 525 Shrub 10 ft.; fls. white.
✓ 526 Bank Low shrub

- ✓51527 Shrub 3-6 ft., fls. yellow to
pale red.
- 528 Bank Paspalum
- ✓529 Shrub 6-10 ft.; fls. scarlet
to crimson.
- 530 Paramo Lanthonia
- 531 " Poe
- 532 " Calamagrostis
- 533 " "
- 534 " Agrostis
- 535 " Calamagrostis
- 536 " Paspalum
- ✓537 " Tree, 20-40 ft.
- ✓538 " Shrub 4 ft.
- ✓539 " Fls. greenish-yellow.
- ✓540 Small shrub; fls. white.
- ✓541
- ✓542 Paramo Fls. yellow-green.
- 543 ✓ " " white.
- 544 ✓ " Shrub 3-4 ft.
- 545 ✓ Camp woods Tall herb; fls. pale yellow.
- 546 ✓ Paramo Shrub 4-8 ft.; fls. white.

✓21847	Paramo		Shrub 2-5 ft.; fls. pink.
✓548	"		" 3-5 ft.; fls. dull red.
✓549	"		" " " " "
✓550	"		" " " " "
551	"		
✓552			
✓553	Rich woods		8-12 ft.; fls. canary yellow.
✓554	" "		10 ft.
✓555			" " fls. yellow.
556	Wet places		
✓557	" "	Poa	
✓558			Shrub, 5 ft; fls. green, some upper leaves white.
559	✓Open ground		Fls. white.
560			3 ft.; fls. scarlet.
✓561			Tree 30 ft.; fls. scarlet.
✓562	On tree		Fls. blue.
✓563			Shrub 10 ft; fls. white.
✓564	Paramo		Rays yellow
565	Moist bank		
✓566			Shrub 5 ft.
✓567	Paramo		
✓568	"	Terrestrial	Fls. greenish-white.
569			Shrub
570	✓		" 8-10 ft.
571	✓On tree		tuft red; fls. creamy white.
572	Bank, paramo		

- ✓21573 Paramo Shrub 3-6 ft.; fls. white,
pink-tinged.
- 574 Terrestrial Fls. yellowish-green, tip yellow.
- ✓575 Paramo Shrub, 5 ft.; fls. bright rose.
- ✓576 Fls. white.
- ✓577 Shrub, 6 ft.
- ✓578 Field at Una Fls. white.

Prov. Azuay Una to Cuence collections mostly on paramo
and woods just below. Sept. 9

- ✓21579 Open moist bank Rays purple.
- ✓580 Shrub 10-15 ft. with erect bran-
ches; fls. limb white, tube
creamy.
- ✓581 Shrub or small tree; fls. dark
purple almost black.
- ✓582 Much branched shrub, 2-4 ft.
Common on dry slopes in the
hot river valleys, often dom-
inant.
- ✓583 Shrub or small tree; fls. white.
- ✓584 Small tree.
- 585 On tree; fls. blue (a pre-
ceding number)
- ✓586 On tree
- ✓587 Shrub 4 ft.; fls. vermilion.
- ✓588 " much branched 4-6 ft.; fls.
white.

- 11889 ✓
Lucca branched prickly shrub,
4-6 ft.; silvery white.
- 590 Paramo Stipa
- 591 Helagrostis
- 592 ✓ Very ground Shrub 2-4 ft.; fls. yellow.
- 593 Paramo Agrostis
- 594 ✓ " 2 ft. or less; fls. white
- 595 ✓ " 1-2 ft.; fls. white.
- 596 ✓ " creeping or spreading; fls.
white.
- 597 ✓ On tree Infl. 3 ft., red; large cluster
of basal leaves.
- ✓ 598 Paramo Fls. white.
- ✓ 599 " woody ravine 4-5 ft.; fls. white.
- ✓ 600 " " " 5-6 ft. " yellow.
- ✓ 601 " moist place Fls. yellow with brown veins.
- 602 " " " Lolium
- 603 Shrub 3-5 ft.; fls. scarlet pen-
dulous.
- 604 ✓ Paramo Fls. yellow, lobes edged with
brown-orange.
- 605 " Nastella
- 606 ✓ Shrub 8 ft.; fls. dark blue.
- 607 ✓ " 3-6 ft. " orange-yellow.

6108

Clambering or vine like, much branched.

✓609

2-3 ft.; fls. yellow.

Barro and woods just below

Sept. 10

6110 ✓ Side of rocky cliff

Fls. pink-purple.

611 Along Agave hedge

Small tree; fls. white, pendulous.

✓612

Vine; fls. magenta, tube lilac-purple. (Observed some north of Lito, high altitudes above Chalsingue)

✓613 Rich woods Terrestrial

Fls. yellow, spotted with brown, 3 narrow petals unspotted.

✓614

3 ft.; fls. yellow.

✓615

Shrub 8 ft.; fls. white, clusters more or less pendulous.

616

Shrub 7 ft.; fls. orange red.

✓617

Large shrub; fls. orange red.

✓618

Shrub 6 ft.; fls. red, yellow-tipped.

619 Open bank in woods Cortaderia.

✓620

Shrub 3-6 ft. with few upright branches; fls. orange-red.

✓621

Shrub with few branches; fls. white.

622

" 5 ft.

- 21533 ✓ Shrub or small tree 8-15 ft.;
Fls. red-brown.
- 634 ✓ " 6 ft. much branched and
implicata; fls. rose and white.
- 635 ✓ Moist bank
- 636 Fls. blue.
- 637 Paramo, among grass.
- 638 Paramo Poa
- 639 ✓ Rich woods 3-5 ft.; fls. white.
- 640 Moist woods Poa
- 641 " " Agrostis
- 642 " " Stipe
- ✓643 Shrub, 10-15 ft.; fls. white.
- ✓644 " 8 ft.
- 645 Paramo Spreading
- ✓646 Tree 40 ft.; fls. orange-red
(cf 21617)
- 647 Paramo, bank.
- 648 " among grass
- 649 " Poa
- 640 " " grass
- 641 " Fls. yellow.
- 642 " Agrostis
- 643 Calamagrostis
- 644 " terrestris Fls. greenish.

- ✓ 662 Barro Colorado Shrub 3 ft.; fls. whitish.
- ✓ 663 Woods " 8 ft. " white.
- ✓ 664 " " 6 ft.
- ✓ 665 " " fls. pink-purple.
- ✓ 666 " Vine; fls. pinkish.
- 667 " Shrub 4 ft.; fls. scarlet.
- 668 " 10-15 ft.; fls. pale yellow
or greenish yellow.
- ✓ 669 " Tree; fls. greenish yellow.
- ✓ 670 Seed at Siblián 3-4 ft. fls. white.

Barro Colorado & woods of upper slopes. Sept. 13.

- 21671 ✓ On tree Fls. pink.
- 672 ✓ " " Infl. 3 ft. unbranched, fls.
light purple.
- 673 ✓ Climbing several feet, fls.
rose scarlet, green tipped.
- 674 Moist shady ravine.
- 675 ✓ Fl. stem 4 ft; cluster of
leaves at base; fls.
bluish green.
- 676 ✓ On tree. Infl. 3 ft. dull
red; fls. lilac specimen
is one of about a dozen
spreading branches.

- ✓ 21677 Tree, 40 ft.; fls. light lilac-purple.
- 678 Herb.vine, stinging, fls. vermilion.
- 679 ✓ Climbing several feet; fls. dark scarlet.
- 680 ✓ Climbing several feet; outer petals light vermilion, inner yellow with brown spots.
- 681 ✓ Simple stems, 4-6 ft., fls. scarlet to crimson.
- 682 Moist bank Festuca
- ✓ 683 Tree, 30 ft.; fls. rose-crimson.
- 684 Vine Fls. red.
- ✓ 685 2-3 ft. stinging; fls. orange-red.
- 686 On tree
- 687 " " Inflorescence unbranched; fls. lilac, purple.
- 688 Shrub 4-6 ft.; fls. scarlet.
- 689 Paramo Calamagrostis
- * 690 " Cortaderia
- 691 " agrostis
- ✓ 692 " Fls. blue.

- ✓ 21893 Paramo Shrub 1-2 ft.; fls. red.
✓ 694 " 1 ft.; fls. yellowish becoming
purplish.
✓ 695 Shrub 3-5 ft.; fls. orange red.
✓ 696 4-6 ft.; fls. purplish.
697 Tree 12 ft.; fls. rose with
darker stripes (Cult. at
Tambo).
698 ✓ Shrub or tree 8-15 ft.; fls.
orange-yellow.
699 Woods Bamboo, cane as much as 1 in.
thick, 20 ft. tall; common
in woods not in fl.
700 Terrestrial; fls. yellow; tip
pearly white in center & dark
purple.
701 ✓ Rather dry hillside Shrub 3-4 ft. leafless; fls.
orange-scarlet.
702 ✓ Calyx purple; corolla white.

Prov. Tungurahua, Ambato, along Ry. to Riobamba Sept. 21.

- 703 ✓ Dry hill Stem 1 ft.; fls. scarlet.
704 ✓ " slopes *Chaetochloa* Large bunches; common.
705 ✓ Dry slopes and cliffs- terrestrial; large tangled bunch,
old stems 2-3 ft. long; fls. rose to dull scarlet.
706 ✓ Dry slope Shrub 2-4 ft. straggling, much
branched; fls. rose purple &
whitish.

21707 Ry. cut		Fls. yellow.
708 Dry slope		Low shrub; fls. blue.
709 " "	Stipa	
710	Paspalum	Weed in alfalfa field.
✓711 Ry. cut	Bromus	
712 Along irrigation ditch		
713 Ry. cut	Andropogon	
714 Along irrigat. ditch	Agropyron	
✓715 Sandy slope	Cenchrus	
716 Ry. cut	Stipa	
✓717 Dry ground		Shrub 1 ft.; fls. white.
✓718	Bromus	(21711 but smaller)
719 Dry slope	Stipa	
✓720 " "		Shrub 3 ft. com on.
✓721 Springy place		Long runners from lower part of stem; fls. purplish.
✓722 " "		
✓723 " "		Fls. yellow
✓724 Sandy Ry. cut	Eragrostis	Common on walls & open ground.
✓725 Springy place.		
✓726 Moist ground near river		Shrub 4-8 ft.; fls. purple tinged with white.

- 21727 Moist ground near river Shrub 5-8 ft. disagreeable odor;
fls. greenish white.
- 728 Eragrostis (21724) common compact-panicled
form.
- ✓729 Sandy Ry. cut
- ✓730 " " "
- ✓731 " " "
- ✓732 " " "
- ✓733 " " "
- ✓734 " slope
- ✓735 " soil Forms ashy thick mats, 2-3 ft.
across; fls. blue.
- ✓736 " "
- ✓737 " " Mats; fls. white.
- ✓738 " " Fls. yellow.
- ✓739 " " Mats; fls. lilac.
- ✓740 " bank " "
- ✓741 " soil Sporobolus
- 742 Eragrostis Weed in garden.
- ✓743 Base of dry slope
in ravine 3 ft.; fls. yellow.
- 744 Weed in garden.
- ✓745 dry ground Stipa
- ✓746 Tree 20 ft. wild plant growing
in ground of Normal School;
fls. white.
- ✓747 dry slope Shrub 1-2 ft.

21748 Sandy slope

Abundant, probably introduced.

Prov. Tungurahua, Valley of Pastaza River, Banos to Cashurco,

8 hours east of Banos

Sept. 25

- ✓ 21749 Open slope Paspalum
750 Shrub; fls. red.
- ✓ 751 Open slopes Ischaemum Common
- ✓ 752 " " Axonopus
✓ 753 Shrub or tree 15 ft.; fls. white.
- ✓ 754 Terrestrial, cliffs and rather dry banks. 3-5 ft. no bulb,
naked below; fls. lilac & dark lilac.
- 755 Ischaemum
- ✓ 756 Bushy moist bank Ischaemum
- 757 Ischaemum
- 758 Grassy bank
- ✓ 759 Cliffs & dry grassy slopes, terrestrial, 2-4 ft. no bulb
infl. often branching; fls. pink-purple.
- ✓ 760 Tree, 20 ft.; fls. lilac.
- 761 Grassy slope in moist place, Paspalum
- 762 Moist slopes Pennisetum Common
- 763 " woods
- 764 " "
- 765 " "
- 766 " "
- 767 " "

- 21768 Herb. vine; fls. scarlet, green
tipped.
- 769 On prostrate log Fls. salmon.
- ✓770 Shrub 5 ft.; flowers in glo-
bose masses with red bracts,
the fls. creamy yellow; mass
gelatinous.
- ✓771 Open gravelly banks Arundinella
- ✓772 Vine; fl. rose-red.
- ✓773 2-3 ft.; fls. red-vermilion.
- ✓774 Moist woods Fls. orange-salmon.
- 775 " " Lasiacis
- ✓776 Cliffs 2-3 ft.; fls. white.
- 777 Herb. stout erect, 8 ft., simple;
fls. white; infl. large (3
specimens from one)
- ✓778 Shrub; fls. light purple.
- ✓779 Moist woods Fls. pink.
- ✓780 2-3 ft. fls. purple.
- 781 5 ft.; fls. scarlet.
- ✓782 (21777 probably)
- ✓783 Moist cliff
- ✓784 " bank Fls. pink.
- ✓785 Wet bank 5-8 ft.; fls. white.
- ✓786 Moist woods On tree.
- ✓787 Along trail in forest. 4-8 ft.; fls. white purple-tinged;
fruit globose, 2 in. diam., yellow, densely hirsute

with prickling irritating hairs, used to flavor drinks.
Called Maranjilla (little orange); may be introduced,
found around houses and along roads.

- | | | |
|-------|--|---|
| 21788 | Wet woods | Fls. white. |
| ✓ 789 | | Shrub 1-2 ft.; fls. pale lilac |
| ✓ 790 | | Fls. re.-vermilion |
| 791 | Along road | |
| 792 | Moist woods | Frond 3 ft. |
| ✓ 793 | | Scarcely shrubby; 6-12 ft.; fls.
yellow. |
| 794 | Along trail | Fls. white. |
| ✓ 795 | Open ground | " yellow. |
| ✓ 796 | Banks and open ground | 2-3 ft.; fls. white. |
| ✓ 797 | Clay slope in moist woods | Fls. light purple. |
| ✓ 798 | | Herb. vine; fls. greenish white |
| 799 | Panicum | |
| ✓ 800 | Moist bank | |
| ✓ 801 | ^{800 1/2} <i>Regonia</i>
" woods | 5 ft.; fls. pale yellow, bracts
dark red. |
| ✓ 802 | Wet woods | Leaves 10 ft. blades 3 ft.;
infl. terminal drooping;
bracts scarlet; fls. pale
yellow. |

- ✓ 21803 Wet woods Shrub 8 ft.; fls. white.
804 Terrestrial Fls. white.
805 Shrub 10 ft.; fls. dark purple.
806 Edge of woods Lesiacis
807 Grassy bank Axonopus
808 Edge of woods Lesiacis
809 Grassy bank Panicum
810 " " Axonopus
✓ 811 Shrub, 10 ft.; fls. lilac.
812 " 3 ft.
813 On tree Fls. creamy at base, white
above & on inside, lip
purple brown spotted or
lined.
✓ 814 Edge of woods
✓ 815 Open shrubby clay ground
✓ 816 On tree Bracts scarlet.
✓ 817 Open ground along trail
✓ 818 Edge of woods Straggling weed, vinelike bran-
ches; fls. white.
✓ 819 Mats on open ground.
820 Moist shady place

- ✓ 21821 Open ground 2-5 ft.; fls. white.
- 822 Shrubby bank Pennisetum 5-8 ft.
- ✓ 823 Among shrubs Fls. white.
- ✓ 824 Tree 15 ft.; fls white.
- ✓ 825 On old stump
- ✓ 826 Grassy bank Axonopus
- ✓ 827 Moist open ground Fls. light salmon.
- 828 On log
- 829 In woods
- ✓ 830 Edge of woods Fls. magenta.
- ✓ 831 Along trail,
open ground Fls. white with purple eye.
- ✓ 832 Open ground by woods 2-4 ft.; fls. white.
- ✓ 833 Shrub 6-8 ft.; fls. yellow,
bracts dark red.
- 834
- 835 Moist woods 3 ft. blades purple at tip;
fls. yellow.
- 836 Shrub 6 ft.; fls. red, borne
on old wood.
- ✓ 837 Moist shady place Fls. salmon pink.
- 838 Woods
- 839 On trees " dull red.

- 21840 Moist bank Fls. white.
✓ 841 Moist rich bank " "
842 Grassy moist bank Paspalum
✓ 843 Open bank 3-6 ft.; fls. yellow.
✓ 844 Wet bank
845 ✓ Shrub; fls. white.
846 Woods "
✓ 847 " 8-10 ft.; fls. white.
✓ 848 " fl. white.
✓ 849 Wet woods " " yellow.
850 " bank Fls. yellow.
✓ 851 Vine, fls. white.
✓ 852 Wet shady bank Fls. vermilion.
✓ 853 " " " Echinolaena
✓ 854 Vine; fls. salmon-vermilion
855 Woods
856 Lasiacis
✓ 857 Moist open ground Fls. white.
858 Shady bank Ichnanthus
✓ 859 " "
✓ 860 Moist " Vine; fls. greenish.
✓ 861 On tree Fls. yellow.
✓ 862 Open moist bank Panicum
863 Lasiacis
864 Moist bank
865 ✓ " "

- ✓21866 Moist shady bank Fls. scarlet.
867 " ground Panicum
✓868 Shrub; fls. white.
869 Moist ground
✓870 Wet shady place Fls. vermilion.
871 " bank Ichnanthus
✓872 Open ground " white.
✓873 Shrub; fls. white.
✓874 Wet woods Fls. yellow.
✓875 Vine; fls. white.
✓876 10 ft.; fls. pink.
877 Fls. white.
✓878 Moist bank Ichnanthus
879 " shady ground Panicum
✓880 3-5 ft.; fls. white.
✓881 Along trail Fls. white.
✓882 10 ft. fls. white.
✓883 Moist woods 15 ft.; fls. white.
✓884 Shrub; fls. yellow.
✓885 Shady place Inflorescence red.
✓886 On log
887 Wet woods
✓888 Fls. yellowish white.
889 Moist bank
✓890 Shrub 10 ft.; fls. white.
✓891 Open ground Fls. white.

- ✓21892 Moist ground Creeping; fls. green.
893 " bank
✓894 Lasiacis
895 Open ground Chloris
896 On tree Fls. yellow with brown spots,
 lip yellow.
897 Moist bank
898 ✓ 8-12 ft.

Prov. Tangarabue, Banos Sept. 26

21899

- ✓900 On adobe wall Stipa
✓901 " " " Eragrostis
✓902 " " " Chaetochloa
903 " " " Eragrostis
904 " " " Fls. greenish white.
✓905 " " "
✓906 Dry hills (between Banos and
 Ambato) " yellow-green.
✓907 Dry bank " rose.
908 Grassy hill Axonopus
909 " " Poa
910 Dry hills " sea let.
✓911 Grassy hill Andropogon a few inches to 1 ft. or slightly
 more.
✓912 " " Paspalum
913 " " Stipa

- ✓ 914 Grassy hill Eragrostis
915 " " Andropogon
916 " " Oplismenus
917 Dry hill on
rocks
918 Rock cliff
✓ 919 Rocky hill Andropogon
✓ 920 Stone wall Stipa
✓ 921 Rocky cliff Muhlenbergia
922 " " Aegopogon
923 " " Festuca
924 " "
✓ 925 " hill 2-4 ft. shrubby; fls. blue &
violet.
✓ 926 Grassy hill Festuca
✓ 927 Dry hill Shrub 2-6 ft.
✓ 928 Along roads & fences probably planted. Tree 15-25 ft.
✓ 929 " fences (planted?) near Ambato
✓ 930 Among century plants near Ambato Vine.

Prov. Pichincha. Quito Oct. 1.

- 931 Open ground along street. Eragrostis
932 " " " " "
✓ 933 Given by Mr. Soderstrom from his garden; 2 petals bistre;
2 yellow, lip purple & white.

- ✓21934 Same Petals yellow with brown spots.
- 935 " The large petal yellow with brown spots.
- ✓936 " Fls. yellow - brown.
- 937 " Petals nearly black, lip white.



Prov. Chimborazo, between Urbina & Mt. Chimborazo Oct. 4.

- 21938 ✓ 4240 M Fls. yellowish-orange, tinged
 and veined with red.
- 939 4240 M Fls. light rose.
- 940 3780 M " yellow.
- 941 3780 M " "
- 942 ✓ " " white, dense head level
 with ground.
- 943 " "
- ✓944 Festuca Very common 3700-3900 M
- 945 " "
- ✓946 " "
- ✓947 " "
- 948 " Poa
- ✓949 " Calamagrostis Common 3700-3900 M
- 950 " " "
- 951 " Festuca "
- ✓952 " Along irrigation ditch Fls. creamy white.
- ✓953 " " " " " yellow.
- ✓954 4390 M " "

21955 ✓ 4390 M	Calamagrostis	
956 4545 M	Poa	
957 4390 M		
958 4545 M	Bromus	
959 ✓ "		Large cushions; fls. green.
960 "		
961 ✓ "		
962 / "		Fls. dark blue.
963 ✓ "		Forms large cushions.
964 ✓ "		Plant salmon-red.
965 ✓ "		Upper limit of vegetation.
966 ✓ "		Preillejón, heads in infl. 1, sometimes 2, rarely 3.
967 ✓ "	Poa	Culms mostly single.
968 ✓ "	Calamagrostis?	
969 "		
970 "		
971 "		
972 ✓ "		Forms small cushions.
973 ✓ "		Aspect of conifer.
974 ✓ "		Fls. white.
975 ✓ "		" blue.
976 ✓ "		Forms cushions, fls. greenish white.
✓ 976 1/2		
✓ 977 "		Small cushions " white.
978 ✓ 4240 M	Festuca	Bunchgrass, common.

21979	4240 M	Bromus	Aspect of <i>B. porteri</i> , culms mostly single.
980 ✓	"	Calamagrostis	Bunchgrass common from 3000-4400 M.
981	"	Agrostis	
982 ✓	"	"	
983 ✓	"	Danthonia	Bunches 1 ft. diam. radiating only seen in one locality.
984 ✓	"	Poa	Culms mostly single.
985 ✓	"	Calamagrostis	
986	"	Poa	Bunchgrass common.
987 ✓	"		Mats; fls. lilac.
988 ✓	"		
989	"		Fls. white.
990 ✓	"		" "
991 ✓	4090 M		" lilac-mauve.
992 ✓	"		" yellow.
993 ✓	"	Agrostis	
994	"	Festuca	Bunchgrass.
995 ✓	"		Small tufts, level surface; fls. yellow.
996 ✓	"		
997 ✓	"		Rays lilac to nearly white.

21998 ✓		Fls. lilac.
999 ✓	Agrostis	
22000		Mats.
001 ✓		Small cushions (appears to be mixture).
002 ✓	"	Rather common.
003 ✓	By irrigation ditch 3940 M Bromus	(21979)
004	" " Poa	Bunchgrass common.

Prov. Chimborazo, Urbina, paramo on east flank of Mt. Chimborazo, collections along Ry. Oct. 5. on banks of cuts or ditches.

22005		
006 ✓	Patch along bank.	
007 ✓	Side of cut Agrostis	
008		
009		Fls. yellow.
✓010		" scarlet.
011	Poa	
012		
013		
014 ✓	Agrostis	(cf 21999)

22015	Agrostis	
016✓	"	
017	Poa	
018✓ Along cut	Stipa	Bunches
019✓	Trisetum?	
020✓		
021✓		Large bunches or cushions.
022✓		Hanging in masses from top of hill.
023✓		Hanging in cushions on level ground. Common.
024✓		
025✓		Fls. white or pink.
026✓	Festuca	
027✓		" " " " tinged.
028	"	
029	Trisetum	
030✓	Festuca	Bunch grass common.
031✓		
032✓		Mats, roots deep.
033✓		
034✓		
035✓ Along cut		On level ground forms cushions or mats.
036✓		
037		

22038

- | | | |
|-------|-----------------|--|
| 039 ✓ | Open ground | Prostrate with deep tap root. |
| 040 ✓ | " " | Annual prostrate. |
| 041 ✓ | " " | Mats. |
| 042 | | Fls. rose with purple spots. |
| 043 ✓ | | Mats. |
| 044 | | " perennial; fls. purplish. |
| 045 ✓ | <i>Agrostis</i> | |
| 046 ✓ | Open ground | |
| 047 ✓ | | " |
| 048 ✓ | Edge of cut | Hanging. |
| 049 ✓ | | Fls. blue-purple. |
| 050 ✓ | | Heads level with surface; fls.
white; leaves 2-ranked, often,
especially in sterile plants,
lying sidewise on the ground. |

o = Not at Gray Herb.

LIST OF DETERMINATIONS OF PLANTS COLLECTED IN ECUADOR BY
A. S. HITCHCOCK.

- o 19069. *Rumex cuneifolius* Campd.
- ✓ 19928. *Portulaca elatior* Mast.
- ✓ 19970. *Iresine diffusa* Willd.?
- ✓ 19971. *Gomphrena perennis* L.
- ✓ 19978. *Philoxerus vermicularis* (L.) R. Br.
- ✓ 20004. *Psittacanthus obovatus* Benth.
- ✓ 20009. *Boerhaavia caribaea* Jacq.
- ✓ 20017. *Passiflora hispida* DC.
- ✓ 20052. *Celosia virgata* Jacq.
- ✓ 20079. *Achyranthes aspera* L.
- ✓ 20095. *Castalia ampla* Salisb.
- ✓ 20106. *Alternanthera halimifolia* (Lam.).
- ✓ 20118. *Iresine diffusa* Willd.?
- ✓ 20149. *Passiflora reflexiflora* Cav.
- ✓ 20164. *Alternanthera sessilis* (L.).
- ✓ 20183. *Hemistylis boehmerioides* Benth.
- ✓ 20192. *Adenaria floribunda* H. B. K.
- ✓ 20208. *Boerhaavia caribaea* Jacq.
- ✓ 20211. *Talinum paniculatum* (Jacq.) Gaertn.
- ✓ 20229. *Adenaria floribunda* H. B. K.
- ✓ 20280. *Radicula nasturtium-aquaticum* (L.) Britten & Rendle.
- ✓ 20282. *Microtea debilis* Sw.
- ✓ 20293. *Chamissoa altissima* (Jacq.) H. B. K.
- ✓ 20309. *Lepidium bipinnatifidum* Desv.
- ✓ 20312. *Allionia prostrata* (R. & P.) Kuntze.
- ✓ 20314. *Alternanthera paniculata* H. B. K.
- ✓ 20332. *Clematis sericea* H. B. K.
- ✓ 20370. *Myriocarpa stipitata* Benth.
- ✓ 20373. *Allionia prostrata* (R. & P.) Kuntze.
- ✓ 20377. *Bocconia integrifolia* H. & B.
- ✓ 20380. *Rumex conglomeratus* Murray.
- ✓ 20392. *Phenax laevigatus* Wedd.
- ✓ 20404. *Pilea hyalina* Fenzl.
- ✓ 20431. *Urera baccifera* (L.) Gaud.
- ✓ 20532. *Hemistylis boehmerioides* Benth.
- ✓ 20583. *Trema micranthum* (L.) Blume.
- ✓ 20631. *Passiflora manicata* (Juss.) Pers.
- o 20636. " *sprucei* Mast.
- ✓ 20650. *Allionia bracteosa* Griseb.
- o 20662. *Clematis sericea* H. B. K.
- ✓ 20673. *Valeriana candolleana* Gardn.
- ✓ 20683. *Tovaria pendula* R. & P.
- ✓ 20702. *Allionia prostrata* (R. & P.) Kuntze.
- ✓ 20703. " " " "
- ✓ 20715. *Erodium cicutarium* (L.) L'Hér.
- ✓ 20747. *Passiflora rubra* L.
- ✓ 20788. *Cerastium willdenovii* H. B. K.
- ✓ 20790. *Pilea arguta* (H. B. K.) Wedd.
- ✓ 20803. " " " "

- ✓20813. *Phrygilanthus destructor* (H. B. K.) Eichl.
- ✓20815. *Passiflora manicata* (Juss.) Pers.
- ✓20820. *Alnus ferruginea* H. B. K.
- ✓20848. *Phrygilanthus corymbosus* (Dietr.) Eichl.
- ✓20866. *Lepidium bipinnatifidum* Desv.
- ✓20870. *Cremolobus peruvianus* DC.
- ✓20911. *Culcitium rufescens* H. & B.
- ✓20934. *Ranunculus praemorsus* DC.
- ✓20937. *Geranium cucullatum* H. B. K.
- ✓20950. *Ranunculus guzmanni* Humb.
- ✓20959. *Muhlenbeckia tamnifolia* (H. B. K.) Meisn.
- ✓20966. *Geranium quinquelobum* Wedd.
- ✓20979. *Hypochaeris sessiliflora* H. B. K.
- ✓21000. *Passiflora mixta* L. f.
- ✓21025. *Acaena elongata* L.
- ✓21044. *Valeriana alophis* Graebn.
- ✓21046. *Werneria pumila* H. B. K.
- ✓21049. *Cerastium floccosum* Benth.
- ✓21052. *Valeriana bonplandiana* Wedd.
- ✓21054. *Culcitium rufescens* H. & B.
- ✓21064. *Eudema nubigena* H. & B.
- ✓21068. *Hypochaeris setosa* (Wedd.).
- ✓21070. " " "
- ✓21084. *Cerastium imbricatum* H. B. K.
- ✓21112. *Cryptocarpus pyriformis* H. B. K.
- ✓21237. *Psittacanthus cupulifer* (H. B. K.) Eichl.
- ✓21333. *Cyathostegia pachanoi* Rose.
- ✓21377. *Valeriana hieronymi* Graebn.
- ✓21405. *Libidibia corymbosa* (Benth.) Rose.
- ✓21406. *Drymaria stellarioides* Willd.
- ✓21413. *Escallonia floribunda* H. B. K.
- ✓21445. *Pilea thymifolia* (H. B. K.) Blume.
- ✓21447. *Juglans honorei* Dode.
- ✓21460. *Phrygilanthus punctatus* (R. & P.) Eichl.
- ✓21467. *Valeriana urticaefolia* H. B. K.
- ✓21470. *Passiflora sanguinolenta* Mast.
- ✓21494. " " "
- ✓21540. *Valeriana hieronymi* Graebn.
- ✓21541. " " "
- ✓21589. *Chuquiraga argentea* (H. B. K.) Hieron.
- ✓21596. *Muhlenbeckia tamnifolia* (H. B. K.) Meisn.
- ✓21598. *Valeriana rigida* (Pers.) R. & P.
- ✓21607. *Berberis conferta* H. B. K.
- ✓21612. *Passiflora glaberrima* (Juss.) Poir.
- ✓21624. *Berberis conferta* H. B. K.
- ✓21633. *Valeriana hirtella* H. B. K.
- ✓21648. *Muhlenbeckia tamnifolia* (H. B. K.) Meisn.
- ✓21674. *Thalictrum podocarpum* H. B. K.
- ✓21698. *Berberis multiflora* Benth.?
- ✓21744. *Fumaria officinalis* L.
- ✓21748. *Mesembrianthemum crystallinum* L.

- ✓ 21825. *Pilea hitchcockii* Killip. Type
- ✓ 21882. *Boehmeria elongata* Blume?
- ✓ 21910. *Sisymbrium hispidulum* (DC.) Tr. & Pl.
- ✓ 21942. *Valeriana rigida* (Pers.) R. & P.
- ✓ 21947. *Ranunculus peruvianus* Pers.
- ✓ 21966. *Culcitium rufescens* H. & B.
- ✓ 21965. *Cerastium floccosum* Benth.
- ✓ 21970. *Culcitium ferrugineum* Klatt.
- ✓ 21972. *Hypochaeris setosa* (Wedd.).
- ✓ 21976. *Eudema remyana* (Wedd.) O. E. Schulz.
- ✓ 21988. *Geranium acaule* Willd.
- ✓ 21990. *Cerastium glutinosum* H. B. K.
- ✓ 21992. *Ranunculus peruvianus* Pers.
- ✓ 21996. *Cerastium glutinosum* H. B. K.
- ✓ 22022. *Muhlenbeckia vulcanica* Endl.
- ✓ 22025. *Geranium acaule* Willd.
- ✓ 22032. *Arenaria serpens* H. B. K.
- ✓ 22033. *Lepidium bipinnatifidum* Desv.
- 22358. *Mesembrianthemum* sp.
- 22359. " "
- 22363. *Chenopodium bolivianum* Murr.
- 22372. *Gomphrena perennis* L.

November 22, 1924.

Hitchcock's Plants from Ecuador

Identified by H. A. Gleason, except some followed by the initials N.L.B.

- ✓19918 Ipomoea crassicaulis (Benth.) Robins.
- ✓ 921 Malachra alceifolia Jacq.
- ✓~~933~~ Plumbago scandens L.
- ✓~~942~~ Aeschynomene americana L.
- ✓ 945 Dolicholus minimus (L.) Medic.
- ✓958 Quamoclit coccinea (L.) Moench.
- ✓965 Pithecolobium candidum Benth.
- ✓972 Jacquemontia nodiflora (Desv.) G. Don
- ✓980 Cyperus oxylepis Nees (NLB)
- ✓981 Mimosa acanthiloba Poir.
- ✓986 Leucaena canescens Benth.
- ✓20023 Cassia picta Don. (NLB)
- ✓ 025 Ipomoea purpurea (L.) Lam.
- ✓ 026 " aegyptia L.
- ✓033 " Nil (L.) Roth.
- ✓ 044 Melochia lupulina Sw.
- ✓049 Justicia comata (L.) Lam.
- ✓060 Physalodes physalodes (L.) Britton
- ✓089 Thalia geniculata ~~(L.) L.~~ L.
- ✓090 Eleocharis geniculata (L.) R & S (NLB)
- ✓099 Pistia stratiotes L.
- ✓116 Sida rhombifolia L. - In Hb. as *S. salviaefolia* Presl.
- ✓122 Dolicholus minimus (L.) Medic.
- ✓138 Pithecolobium candidum Benth.
- ✓146 Dolicholus precatorius (Humb.) Rose
- ✓173 Fimbristylis meliacea (L.) Vahl (NLB)
- ✓187 Asclepias curassavica L.
- ✓195 Justicia comata (L.) Lam.
- ✓205 Mimosa pigra L.
- ✓218 Chamaecrista stenocarpa (Vogel) Standl. (NLB)
- ✓225 Ipomoea Meyeri (Spreng.) D. Don
- ✓249 Mimosa pigra L.
- ✓270 Ipomoea aegyptia L.
- ✓282 Microtea debilis Sw.
- ✓296 Calopogonium coeryleum DC.
- ✓298 Adipera Hitchcockii B. & R. (Cassia) (NLB)
- ✓340 Chamaesyce lasiocarpa (Kl.) Arthur (NLB) - In Hb. as *Euphorbia lasiocarpa* Kl.
- ✓351 Kyllinga brevifolia Rottb. (NLB)
- ✓371 Physalodes physalodes (L.) Britton
- ✓426 Tradescantia geniculata Jacq.
- ✓453 Pleiostachya Morlaei (Eggers) K. Schum.
- ✓464 Ipomoea tiliacea (Willd.) Choisy
- ✓471 Euphorbia adiantoides Lam. (NLB)
- ✓~~476~~ 476 Galathea insignis Peters.
- ✓506 Potomorpha peltata (L.) Miq.
- ✓516 Bradburya Plumieri (Turp.) Kuntze
- ✓557 Calopogonium mucunoides Desv.
- ✓563 Ipomoea Meyeri (Spreng.) D. Don
- ✓583 Trema micranthum (L.) Blume
- ✓588 Bradburya pubescens (Benth.) Kuntze
- ✓590 Ipomoea Meyeri (Spreng.) D. Don
- ✓600 Ipomoea polyanthes R & P
- ✓664 Anneslia subnervosa (Benth.) Rose
- 714 Chamaesyce orbiculata (HBK) (NLB) *Euphorbia orbiculata* HBK. In Hb.
- ✓730 Hypericum uliginosum HBK

Hitchcock
20523. *Tobouchina hospita* (DC.) Cogn. (Det. Gleason)
21295. *Dioclea lehmanni* Diels (Under *D. elegans*?)

LIST OF DETERMINATIONS OF DR. A. S. HITCHCOCK'S PLANTS FROM
ECUADOR.

- ✓19918. *Ipomoea crassicaulis* (Benth.) Robinson.
- ✓19926. *Crinum cartwrightianum* Rose.
- ✓19928. *Tecoma gaudichaudii* DC. *In Hb. Geomora*
- ✓19930. *Ipomoea abutiloides* (H. B. K.) Don.
- ✓19933. *Plumbago scandens* L.
- ✓19936. *Ipomoea purpurea* (L.) Lam.
- ✓19938. *Cordia lutea* Lam. *Cordia*
- ✓19944. *Ipomoea meyeri* (Spreng) G. Don.
- ✓19950. *Momordica charantia* L.
- ✓19958. *Quamoclit coccinea* (L.) Moench.
- ✓19974. *Solanum nigrum* L.
- ✓19972. *Jacquemontia nodiflora* (Desv.) G. Don.
- ✓19979. " *corymbulosa* Benth.
- ✓19996. Mixture of *Salicornia peruviana* and *Ratis maritima*.
- ✓20014. *Clerodendron molle* H. B. K.
- ✓20026. *Ipomoea aegyptia* L.
- ✓20027. " *dumetorum* (H. B. K.) Willd.
- ✓20033. " *nil* (L.) Roth.
- ✓20037. *Ipomoea* (*Operculina*?) *setosa* Ker.
- ✓20053. *Mentzelia aspera* L.
- ✓20045. *Luffa cylindrica* (L.) Roem.
- ✓20072. " *operculata* (L.) Cogn.
- ✓20084. *Echinodorus bracteatus* Micheli.
- ✓20088. *Rotala ramosior* (L.) Koehne.
- ✓20099. *Pistia stratiotis* L.
- ✓20119. *Lycopersicum cerasiforme* Dunal.
- ✓20155. *Operculina codonantha* (Benth.).
- ✓20187. *Asclepias curassavica* L.
- ✓20196. *Momordica charantia* L.
- ✓20222. *Ipomoea quinquefolia* L.
- ✓20225. " *meyeri* (Spreng.) G. Don.
- ✓20235. *Heteranthera reniformis* R. & P.
- ✓20269. *Ipomoea polyanthes* R. & S.
- ✓20270. " *aegyptia* L.
- ✓20276. *Cynoctomum mitreola* (L.) Britton.
- ✓20286. *Hydrolea spinosa* L.
- ✓20307. *Acnistus arborescens* (L.) Schlecht.
- ✓20314. *Altemanthera paniculata* H. B. K.
- ✓20331. *Quamoclit coccinea* (L.) Moench.
- ✓20337. *Lycopersicum cerasiforme* Dunal.
- ✓20357. *Solanum nigrum* L.
- ✓20371. *Nicandra physalodes* (L.) Pers. *In Hb. as Physalodes physalodes L. Britton*
- ✓20396. *Anagallis pumila* Sw.
- ✓20421. *Campelia zanonii* (L.) H. B. K.
- ✓20428. *Aneilema ovato-oblongum* Beauv.
- ✓20464. *Ipomoea tiliacea* (Willd.) Choisy.
- ✓20469. *Browallia americana* L.

- ✓ 20486. *Spigelia anthelmia* L.
- ~~20488. *Vincetia ensifolia* Boeckl.~~
- ✓ 20563. *Ipomoea meyeri* (Spreng.) G. Don.
- ✓ 20579. *Piaropus azureus* (Sw.) Raf.
- ✓ 20590. *Ipomoea meyeri* (Spreng.) G. Don.
- ✓ 20593. *Prestonia glabrata* H. B. K.
- ✓ 20600. *Ipomoea polyanthes* R. & S.
- ✓ 20611. *Phaedranassa tricolor* Rose & Killip.
- ✓ 20638. *Eucrosia Morleyana* Rose.
- ✓ 20657. *Wigandia crispa* (R. & P.) H. B. K.
- ✓ 20667. *Buddleia americana* L.
- ✓ 20728. *Ioichroma loxensis* Miers.
- ✓ 20735. *Tecoma azaleaeiflora* H. B. K.
- ✓ 20769. " " "
- ✓ 20770. *Tournefortia undulata* R. & P.
- 20781. *Gentiana sedifolia* H. B. K.
- ✓ 20787. *Satureia nubigena* (Kunth) Briq.
- ✓ 20793. " *microphylla* (Kunth) Briq.
- 20804. *Stenomesson hartwegii* Lindl.
- ✓ 20823. " *aurantiacum* Herb.
- ✓ 20839. *Sphacele conferta* Benth.
- 20840. *Buddleia americana* L.
- ✓ 20846. *Columellia sericea* H. B. K.
- 20849. *Plantago linearis* H. B. K.
- ✓ 20939. *Datura rossi* Safford.
- ✓ 20940. *Viburnum glabratum* H. B. K.
- ✓ 21072. *Plantago sericea* R. & P.
- ✓ 21075. *Gentiana sedifolia* H. B. K.
- ✓ 21104. *Avicennia nitida* Jacq.
- 21118. *Xiphidium coeruleum* Aubl.
- ✓ 21126. *Dombeya lappacea* L'Hér.
- ✓ 21133. *Maranta arundinacea* L.
- ✓ 21152. *Jacquemontia nodiflora* (Desv.) G. Don.
- ✓ 21158. *Cantua quercifolia* Juss.
- ✓ 21231. *Solanum mandonis* Huerok. & Muell. Arg.
- ✓ 21243. *Urera baccifera* (L.) Gaud.
- ✓ 21286. *Idacorea guyanensis* Aubl.
- ✓ 21327. *Maypea pubescens* (H. B. K.).
- ✓ 21392. *Ioichroma grandiflora*.
- ✓ 21437. *Satureia taxifolia* (Kunth.) Briq.
- 21442. *Dombeya lappacea* L'Hér.
- ✓ 21496. *Plumbago ocerulea* H. B. K.
- ✓ 21498. *Solanum sisymbriifolium* Lam.
- ✓ 21500. *Tofieldia falcata* (R. & P.) Pers.
- ✓ 21527. *Satureia taxifolia* (Kunth) Briq.
- ✓ 21577. *Sphacele radula* Benth.
- ✓ 21578. *Sambucus peruviana* H. B. K.
- ✓ 21618. *Desfontainea spinosa* R. & P.
- 21635. *Satureia nubigena* (Kunth) Briq.
- ✓ 21636. *Buddleia incana* R. & P.

- ✓21670. *Solanum marginatum* L. f.
✓21693. *Satureia jamesoni* (Benth.) Briq.
✓21729. *Plantago psyllium* L.
✓21772. *Dombeya lappacea* L'Hér.
○21788. *Campelia zanonii* (L.) H. B. K.
✓21854. *Gurania*
✓21930. *Cynanchum quitense* K. Sch.
○21943. *Plantago cumingiana* F. & M.
○21945. *Plantago linearis* H. B. K.
○21960. *Lysipoma montioides* H. B. K.
✓21987. *Satureia nubigena* (Kunth) Briq.
✓22034. *Plantago linearis* H. B. K.
22365. *Nothoscordum andicolum* Kunth.
22366. *Specularia perfoliata* DC.
22367. *Sisyrinchium chilense* Hook.
22371. *Nicotiana paniculata* L.
22373. *Solanum radicans* L. f.
22377. *Cordia peruviana* R. & S.
22369. *Pasithea caerulea* Don.
22404. *Orthocarpus australis* Benth.
22407. *Ipomoea dumetorum* (H. B. K.) Willd.
22419. *Verbena clavata* R. & P.?
✓20513. *Carica heterophylla* Poepp. & Endl.
○22411. *Gnaphalium purpureum* L. (or ally).

May 22, 1926.

Hitchcock (Ecuador)

Halimolobos

20909. *H. meyeri*-Johannis Gilg (Compared with type at Berlin).
✓21539. *H. weddelliana* Gilg (Compared with type at Berlin).

DETERMINATIONS OF PLANTS COLLECTED BY A. S. HITCHCOCK
IN ECUADOR.

- 19921. *Malachra alceifolia* Jacq.
- 19928. *Tecoma* (not *Portulaca elatior* of preceding report.)
- 19934. *Melochia lupulina* Sw.
- 19942. *Aeschynomene americana* L.
- 19945. *Dolicholus minimus* (L.) Medic.
- 19951. *Abutilon reflexum* (Cav.) Sweet.
- 19954. *Buettneria parvifolia* Benth.
- 19956. *Indigofera subulata* Vahl.
- 19983. *Melochia pyramidata* L.
- 19985. *Jussiaea erecta* L.
- 20003. *Ammannia auriculata* Willd.
- 20013. *Muntingia calabura* L.
- 20021. *Canavalia leptophylla* Piper?
- 20028. *Malachra fasciata* Jacq.
- 20042. *Buettneria parvifolia* Benth.
- 20044. *Melochia lupulina* Sw.
- 20046. *Sida rhombifolia* L.
- 20070. *Cochlospermum hibiscoides* (Willd.) Kunth.
- 20075. *Cuscuta americana spectabilis*. (Det. T. G. Yuncker.)
- 20086. " " *congesta*. " " "
- 20094. *Cardiospermum grandiflorum* Sw.
- 20113. *Hibiscus brasiliensis* L.
- 20116. *Sida salviaefolia* Presl.
- 20120. *Parosela barbata* (Oerst.) Rydb.?
- 20123. *Dalechampia scandens* L.
- 20131. *Abutilon cordatum* Garcke & Schwm.
- 20141. *Cuscuta prismatica* Pav. (Det. T. G. Yuncker.)
- 20150. *Chamaesyce lasiocarpa* (Kl.).
- 20167. *Phyllanthus carolinensis* Walt.
- 20181. *Pavonia sepium* St. Hil.
- 20191. *Melochia lupulina* Sw.
- 20203. *Dalechampia scandens* L.
- 20204. *Chamaesyce thymifolia* (L.).
- 20210. *Teucrium vesicarium* Miller.
- 20212. *Acalypha subcastrata* Aresch.
- 20221. *Triumfetta lappula* L.
- 20239. " "
- 20248. *Pavonia paniculata* Cav.
- 20267. *Euphorbia heterophylla* L.
- 20277. *Jussiaea suffruticosa* L.
- 20296. *Calopogonium coeruleum* DC.
- 20302. *Parosela astragalina* (H. B. K.).
- 20320. *Cuscuta odorata* R. & P. (Det. T. G. Yuncker.)
- 20338. *Buettneria parvifolia* Benth.
- 20340. *Chamaesyce lorentzii* (Muell.)?
- 20345. *Cardiospermum grandiflorum* Sw.
- 20368. *Parosela astragalina* (H. B. K.).
- 20372. *Pavonia sepium* St. Hil.

- 20483. *Allophylus*
- 20501. *Centropogon cornutus* (L.) Druce. (Det. H. A. Gleason)
- 20507. *Pseudabutilon spicatum* (H. B. K.) Fries.
- 20551. *Gouania polygama* (Jacq.) Urban.
- 20552. " " " "
- 20561. *Muntingia calabura* L.
- 20623. *Chamaesyce lasiocarpa* (Kl.).
- 20645. *Acalypha padifolia* H. B. K.
- 20658. " *poiretii* Spreng.
- 20665. *Chamaesyce serpens* (H. B. K.).
- 20714. " " "
- 20745. *Parosela astragalina* (H. B. K.).
- 20779. *Vallea stipularis* Mutis.
- 20785. *Bidens humilis* (not 20875 of preceding report).
- 20816. *Parosela astragalina* (H. B. K.).
- 20844. *Coursetia dubia* H. B. K.
- 20852. *Juncoides racemosum* (Desv.) Kuntze.
- 20854. " *giganteum* (Desv.).
- 20896. *Cuscuta foetida* H. B. K. (Det. T. G. Yuncker.)
- 20917. *Alchemilla galioides* Benth.
- 20952. *Siphocampylus umbellatus* (H. B. K.) G. Don. (Det. H. A. Gleason)
- 20963. *Coriaria thymifolia* H. & B.
- 20971. *Alchemilla tripartita* R. & P.
- 20976. " *orbiculata* R. & P.
- 20998. *Oenothera multicaulis tarquensis* (H. B. K.) Munz & Johnston.
- 21017. *Geum chilense*.
- 21032. *Viola tricolor* L.
- 21047. *Juncoides peruvianum* (Desv.) Kuntze.
- 21067. *Astragalus geminiflorus* H. B. K.
- 21078. *Azorella pedunculata* (Spreng.) Wedd.
- 21095. *Geum chilense*.
- 21096. *Cuscuta grandiflora* H. B. K. (Det. T. G. Yuncker.)
- 21141. *Malvaviscus*
- 21154. *Hibiscus brasiliensis* L.
- 21169. *Centropogon planchonii* Zahbr. (probably). (Det. H. A. Gleason)
- 21174. *Bomarea pardina* Herb.
- 21217. *Paullinia fuscescens* H. B. K.
- 21317. *Siparuna*
- 21350. *Oenothera fusiformis* Munz & Johnston (type).
- 21365. *Weinmannia reticulata* R. & P.
- 21376. *Centropogon erianthus* (Benth.) B. & H. (Det. H. A. Gleason)
- 21435. *Weinmannia macrophylla* H. B. K.
- 21446. *Siparuna*
- 21471. *Phyllanthus salviaefolius* H. B. K.
- 21474. *Abutilon sylvaticum* (Cav.) Schum.
- 21476. *Fragaria vesca* L.
- 21505. *Bomarea setacea* (R. & P.) Herb.
- 21518 1/2. *Weinmannia microphylla* H. B. K.
- 21559. *Fragaria vesca* L.

- 21545. *Centropogon comosus* Gleason (type).
○21616. " *longifolius* Wimmer. (Det. H. A. Gleason)
○21668. *Siphocampylus umbellatus* (H. B. K.) G. Don. (Det. H. A. Gleason)
•21669. *Abatia parviflora* R. & P.
•21679. *Bomarea porphyrophila* Kränzl.
•21681. *Centropogon hitchcockii* Gleason.
•21683. *Vallea stipularis* Mutis.
○21684. *Tropaeolum tuberosum* R. & P.
○21688. *Fuchsia umbrosa* Benth. (Det. I. M. Johnston.)
○21697. *Lavatera assurgentiflora* Kell.
•21702. *Cuscuta odorata* R. & P. (Det. T. G. Yuncker.)
•21706. *Coursetia dubia* H. B. K.
•21707. *Melilotus indica* (L.) All.
•21721. *Epilobium denticulatum* R. & P.
•21723. *Jussiaea repens* L.
•21779. *Pavonia nemoralis* St. Hil.
•21780. *Anoda cristata* (L.) Schl.
•21959. *Azorella pedunculata* (Spreng.) Wedd.
○21989. *Stellaria cuspidata* Willd.
•22006. *Acaena argentea* R. & P.
•22023. *Alchemilla orbiculata* R. & P.
•22031. *Stellaria cuspidata* Willd.
•22035. *Azorella biloba* Wedd.
•22046. *Stellaria cuspidata* Willd.
○22239. *Vicia bidentata* Hook. Arn.
○22354. *Cristaria*
○22390. *Bowlesia palmata lacerata* Kuntze.
○22403. *Oenothera arequipensis* Munz & Johnston (type).

Label written
Vallea

February 24, 1925.

- 19924 *Heliotropium indicum* L.
 19927 *Piqueria densiflora* Benth.
 19931 *Brickellia diffusa* (Vahl) Gray
 19939 *Corchorus pilolobus* Link.
 19967 *Eupatorium iresinoides* HBK.
 19976 *Isocarpha divaricata* Benth.
 20019 *Eupatorium Roseorum* Robinson
 20070 *Cochlospermum hibiscoides* (Willd.) Kunth.
 20127 *Eupatorium odoratum* L.
 20139 " *iresinoides* HBK.
 20142 " *Roseorum* Robinson
 20145 *Dalechampia scandens* L.
 20165 *Lippia reptans* HBK.
 20170 *Heliotropium inundatum* Sw.
 20182 *Lantana trifolia* L.
 20189 *Eupatorium Roseorum* Robinson
 20203 *Dalechampia scandens* L.
 20206 *Lippia geminata* HBK. [Hieron.
 20228 *Eupatorium inulaefolium* HBK., f. *suaveolens* (HBK.)
 20231 " *laevigatum* Lam.
 20242 *Adenostemma Lavenia* (L.) Ktze.
 20310 *Eupatorium solidaginoides* HBK.
 20317 *Mentzelia soratensis* Urb. & Gilg
 20338 *Buettneria*
 20346 *Piqueria peruviana* (Gmel.) Robinson
 20355 *Mikania cordifolia* (L. f.) Willd.
 20363 *Eupatorium odoratum* L.
 20377 *Bocconia integrifolia* (Humb. & Bonpl.) DC.
 20390 *Eupatorium odoratum* L.
 20511 " *obtusisquamosum* Hieron.
 20515 *Mikania cordifolia* (L. f.) Willd.
 20594 *Jatropha Curcas* L.
 20649 *Eupatorium huigrense* Robinson
 20651 " *solidaginoides* HBK.
 20724 *Malvastrum peruvianum* L.
 20734 *Eupatorium odoratum* L.
 20821 *Duranta triacantha* Juss.
 20847 *Eupatorium glechonophyllum* Less.
 20860 *Gunnera pilosa* Kunth.
 20861 *Cleome glandulosa* R. & P.
 20882 *Eupatorium lamiifolium* HBK.
 20890 *Duranta triacantha* Juss.
 20980 *Eupatorium cotacachense* Hieron.
 20993 " *salicinum* Lam.
 21002 " *organoides* HBK.
 21051 *Nototriche pichinchensis* (H.&B.) Hill.
 21090 *Eupatorium salicinum* Lam.
 21122 *Cleome gigantea* L.
 21124 *Eupatorium vitalbae* DC. [Gilg
 21128 *Loasa triphylla* Juss., var. *aequatoriana* Urb. &
 21145 *Eupatorium Roseorum* Robinson
 21158 *Cantua quercifolia* Juss.
 21198 *Norantea anomala* HBK.
 21207 *Eupatorium laevigatum* Lam. [Hieron.
 21209 " *inulaefolium* HBK., f. *suaveolens* (HBK.)
 21228 *Cochlospermum hibiscoides* (Willd.) Kunth.
 21296 *Eupatorium amygdalinum* Lam.
 21311 *Euplassa occidentalis* Johnston, n. sp.
 21322 *Jatropha Curcas* L.
 21330 *Capparis scabrida* HBK. (= *C. gaudichaudiana* Eichl.
 21331 *Cercidium praecox* (R. & P.) Harms
 21332 *Jatropha nudicaulis* Benth.?
 21338 *Embothrium grandiflorum* Lam.
 21341 *Eupatorium buddleaefolium* HBK.
 21348 " *longipetiolatum* Sch.-Bip.,
 var. *arbusculare* Robinson
 21395 *Escallonia pendula* (R.&P.) Pers.
 21411 *Dodonaea viscosa* Jacq.
 21537 *Escallonia tortuosa* HBK.
 21538 *Eupatorium exserto-venosum* Klatt,
 var. *pseudofastigiatum* (Hieron.) Robinson
 21580 *Cantua pirifolia* Juss.
 21582 *Dodonaea viscosa* Jacq.
 21599 *Eupatorium pichinchense* HBK.
 21615 " *Pachanoi* Robinson
 21664 " *pseudoriganoides* Hieron.
 21678 *Cajophora aequatoriana* Urb. & Gilg
 21683 *Vallea*
 21696 *Mikania chimborazensis* Hieron.
 21720 *Dodonaea viscosa* Jacq.
 21731 *Xanthium spinosum* L.
 21738 *Argemone mexicana* L.
 21740 *Tribulus cistoides* L.
 21796 *Klaprothia mentzelioides* HBK.
 21814 *Eupatorium bullatissimum* Robinson, spec. nov.
 21872 " *lloense* Hieron.
 21875 *Mikania pastazae* Robinson, spec. nov.
 21876 *Eupatorium Hitchcockii* Robinson, spec. nov.
 21880 " *nemorosum* Klatt
 21905 *Malvastrum peruvianum* (L.) Gray
 22010 *Castilleja fissifolia* L.
 22084 *Eupatorium ivaefolium* L.
 22107 " *morifolium* Mill.
 22129 *Mikania Ruiziana* Poepp.
 22468 *Eupatorium Volkensii* Hieron.
 21374 *Oreopanax Andreanum* Marchal cf. *O. sessiliflorum*
 (Benth.) Decne. & Planch.
 21375 " *avicenniaefolia* (HBK.) Decne. & Planch.

Supplementary list of determinations made at the Gray Herbarium .

- 20558 *Guazuma ulmifolia* Lam.
20822 *Oreopanax ecuadoriense* Seem.
20954 *Viola Humboldtii* Trien. & Planch.
21168 *Fuchsia spectabilis* Hook.
21440 " *hypoleuca* Johnston n. sp.
21560 *Viola arguta* HBK.
21603 *Fuchsia Hitchcockii* Johnston n. sp.
21667 " *apiculata* Johnston n. sp.
21750 " *glaberrima* Johnston n. sp.
21781 " *scabriuscula* Benth.
21818 *Mikania Hitchcockii* Robinson n. sp.

Copy of this list
sent Dr. Mason
Dec. 6, 1924 by D. M. J.

o = not at Gray Herb.

PLANTS COLLECTED IN ECUADOR BY A. S. HITCHCOCK,
DETERMINED BY S. F. BLAKE, NOVEMBER, 1924.

- ✓19940. *Spilanthes ocymifolia* (Lam.) A. H. Moore.
- ✓20022. *Nocca mollis* Cav.
- ✓20151. *Schizoptera peduncularis* (Benth.) Blake.
- ✓20156. *Melanthera aspera* (Jacq.) Steud.
- ✓20159. *Verbesina minuticeps* Blake. (Type)
- ✓20162. *Spilanthes ocymifolia* (Lam.) A. H. Moore.
- ✓20217. *Garcilassa rivularis* P. & E.
- ✓20227. *Baccharis trinervis* (Lam.) Pers.
- ✓20259. *Clibadium surinamense* L.
- ✓20261. " " "
- ✓20268. *Meibomia*
- ✓20292. " *infracta* (DC.) Blake.
- ✓20318. *Siegesbeckia orientalis* L. (?)
- ✓20321. *Helianthus hypargyreus* Blake.
- ✓20334. " " "
- ✓20342. *Vernonia canescens* H. B. K.
- ✓20366. *Helianthus hypargyreus* Blake.
- ✓20374. *Vernonia canescens* H. B. K.
- ✓20383. *Tessaria integrifolia* R. & P.
- ✓20384. *Jaegeria hirta* (Lag.) Less.
- ✓20389. *Viguiera aurea* (H. B. K.) Hieron.
- ✓20400. " " " "
- ✓20427. *Schistocarpha paniculata* Klatt.
- ✓20442. *Hidalgia ternata* Llav. & Les.
- ✓20494. *Wulffia baccata* (L. f.) Kuntze.
- ✓20520. *Meibomia uncinata* (Jacq.) Kuntze (aff.).
- ✓20527. *Vernonia baccharoides* H. B. K.
- ✓20564. *Baccharis trinervis* (Lam.) Pers.
- ✓20578. *Porophyllum ruderales* (Jacq.) Cass.
- ✓20586. *Milleria quinqueflora* L.
- ✓20614. *Onoseris speciosa* H. B. K.
- ✓20615. *Meibomia uncinata* (Jacq.) Ktze.
- ✓20617. *Calea huigrensis* Blake.
- ✓20622. *Polygala paniculata* L. f. *leucoptera* Blake.
- ✓20624. *Onoseris salicifolia* H. B. K.
- ✓20630. *Perymenium ecuadoricum* Blake.
- ✓20632. *Viguiera aurea* (H. B. K.) Hieron.
- ✓20634. *Helianthus hypargyreus* Blake.
- ✓20670. *Baccharis trinervis* (Lam.) Pers.
- ✓20684. *Schistocarpha paniculata* Klatt.
- ✓20688. *Cotula australis* (Sieb.) Hook. f.
- ✓20704. *Tagetes graveolens* L'Hér.
- ✓20706. *Baccharis floribunda* H. B. K.
- ✓20720. *Meibomia uncinata* (Jacq.) Ktze. (aff.).
- ✓20726. *Franseria artemisioides* Willd.
- ✓20731. *Calea huigrensis* Blake.
- ✓20736. *Baccharis floribunda* H. B. K.
- ✓20775. *Gynoxys buxifolia* (H.B.K.) Cass.

- 20875. *Bidens humilis* H. B. K.
- ✓ 20845. *Verbesina arborea* H. B. K. exchar. & loc.
- ✓ 20851. *Baccharis genistelloides* (Lam.) Pers.
- ✓ 20869. *Verbesina arborea* H. B. K. exchar. & loc.
- ✓ 20910. *Loricaria thuyoides* (Lam.) Sch. Bip.
- ✓ 20926. *Leontopodium gnaphalioides* (H. B. K.) Hieron.
- ✓ 20930. *Erigeron pellitus* (H. B. K.) Wedd.
- ✓ 20991. *Plagiocheilus prostratus* Benth.
- ✓ 20951. *Chuquiragua microphylla* H. B. K.
- ✓ 20953. *Siegesbeckia mandoni* Sch. Bip.
- ✓ 20977? *Baccharis floribunda* H. B. K.
- ✓ 20993. " *teindalensis* H. B. K.
- ✓ 20995. " " "
- ✓ 20999. *Bidens humilis* H. B. K.
- ✓ 21012. *Barnadesia spinosa* L. f.
- ✓ 21020. *Bidens humilis* H. B. K.
- ✓ 21035. *Erigeron bonariensis* L.
- ✓ 21055. *Culcitium nivale* H. & B.
- ✓ 21061. *Baccharis caespitosa* (R. & P.) Pers.
- ✓ 21069. *Werneria nubigena* H. B. K.
- ✓ 21071. *Chuquiragua insignis* H. B. K.
- ✓ 21077. *Culcitium reflexum* H. & B.
- ✓ 21086. *Baccharis caespitosa* (R. & P.) Pers.
- ✓ 21087. *Diplostegium rupestre* (H. B. K.) Wedd.
- ✓ 21089. *Baccharis floribunda* H. B. K.
- ✓ 21140. *Trixis divaricata* Spreng.
- ✓ 21144. *Verbesina pentantha* Blake (Type).
- ✓ 21151. *Vernonia scorpioides* (Lam.) Pers.
- ✓ 21208. *Liabum hastifolium* P. & E.
- ✓ 21453. *Onoseris speciosa* H.B.K.
- ✓ 21480. *Polygala paniculata* f. *leucoptera* Blake.
- ✓ 21526. *Diplostegium empetrifolium* Blake.
- ✓ 21549. *Baccharis genistelloides* (Lam.) Pers.
- ✓ 21564. *Coreopsis venusta* H.B.K.
- ✓ 21569. *Cacosmia rugosa* H. B. K.
- ✓ 21570. *Gynoxys buxifolia* (H.B.K.) Cass.
- ✓ 21579. *Onoseris integrifolia* Less.
- ✓ 21595. *Baccharis genistelloides* (Lam.) Pers.
- ✓ 21656. *Erigeron crocifolius* (H.B.K.) Wedd.
- ✓ 21658. *Baccharis genistelloides* (Lam.) Pers.
- ✓ 21662. " *microphylla* H. B. K.
- ✓ 21731. *Xanthium spinosum* L.
- ✓ 21747. *Artemisia sodiroi* Hieron.
- ✓ 21760. *Tessaria integrifolia* R. & P.
- ✓ 21795. *Jaegeria hirta* (Lag.) Less.
- ✓ 21898. *Liabum hastifolium* P. & E.
- ✓ 21946. *Bidens humilis* H. B. K.
- ✓ 21954. *Culcitium reflexum* H. & B.
- ✓ 21969. " *nivale* H. & B.
- ✓ 21973. *Loricaria thuyoides* (Lam.) Sch. Bip.
- ✓ 21974. *Baccharis caespitosa* (R. & P.) Pers.
- ✓ 21997. *Erigeron pellitus* (H.B.K.) Wedd.

- ° 22060. *Baccharis caespitosa* (R. & P.) Pers.
- ✓ 22043. *Aphanactis jamesoniana* Wedd.
- ✓ 22048. *Bidens humilis* H. B. K.
- ✓ 22050. *Werneria nubigena* H. B. K.

Data for these no. (in this folder) not added to labels:-
Mr. Weatherly did not know about it at time of
writing determinations and labels in summer.

ECUADOR FERNS COLLECTED BY A. S. HITCHCOCK IN 1923.

Identified at U. S. National Herbarium by W. R. Maxon.

- ✓ 20097. *Salvinia auriculata* Aubl.
- 20262. *Ceratopteris thalictroides* (L.) Brongn.
- ✓ 20327. *Adiantum concinnum* H. & B.
- 20339. *Pellaea flexuosa* (Cav.) Link.
- 20354. *Notholaena sinuata* (Sw.) Kaulf.
- ✓ 20378. *Adiantum concinnum* H. & B.
- ✓ 20410. *Polypodium (Campyloneurum) sp.*
- ✓ 20412. *Didymochlaena truncatula* (Sw.) J. Sm.
- ✓ 20420. *Eschatogramme furcata* (L.) Trev.
- ✓ 20423. *Selaginella sp.*
- 20439. *Polypodium loriceum* L.?
- ✓ 20452. *Asplenium serratum* L.
- ✓ 20455. *Eschatogramme furcata* (L.) Trev.
- ✓ 20457. *Asplenium auritum* Swartz.
- 20462. *Polypodium fraxinifolium* Jacq. (sens. lat.).
- ✓ 20465. " *piloselloides* L.
- ✓ 20479. *Nephrolepis pendula* (Raddi) J. Sm.
- ✓ 20484. *Selaginella sp.*
- ✓ 20522. *Dryopteris oligophylla* Maxon var. *aequatorialis* C. Chr.
- ✓ 20529. *Nephrolepis biserrata* (Sw.) Schott. (The Gray Herbarium sheet,
reported as Polypodium sp., indicates a mixture.)
- ✓ 20546. *Diplazium sp.*
- ✓ 20547. *Diplazium sp.*
- ✓ 20605. *Adiantum concinnum* H. & B.
- ✓ 20671. *Polypodium angustifolium* Swartz.
- ✓ 20776. *Dryopteris sp.* Same as 20780.
- ✓ 20780. *Dryopteris sp.* Same as 20776.
- ✓ 20783. *Asplenium monanthes* L. var.
- ✓ 20784. *Asplenium monanthes* L.
- ✓ 20817. *Cyclophorus americanus* (Hook.) C. Chr.
- ✓ 20850. *Polystichum Sodiroi* Christ.
- ✓ 20877. *Lycopodium sp.*
- ✓ 20883. *Elaphoglossum tectum* (H. & B.) Moore.
- ✓ 20969. *Polystichum boboense* Hieron.
- ✓ 21033. *Equisetum bogotense* H. B. K.
- ✓ 21050. *Lycopodium crassum* Willd.
- ✓ 21312. " *cernuum* L.
- ✓ 21428. " *clavatum* L.
- ✓ 21433. " *complanatum* L., var.
- ✓ 21501. *Alsophila quadripinnata* (Gmel.) C. Chr.
- ✓ 21503. *Lycopodium contiguum* Kl. (Our specimen is clearly this.)
- ✓ 21504. " *herbaceum* (Spring.) Hieron.
- 21515. *Psilogramme elongata* (Hook. & Grev.) Kuhn.
- ✓ 21517. *Struthiopteris Buchtienii* (Rosenst.) Maxon.
- 21551. *Psilogramme*, n. sp.

- o 21572. *Lycopodium complanatum* L., var.
- o 21627. *Polypodium moniliforme* Lag.
- ✓ 21637. *Dicranopteris simplex* (Hook.) Maxon.
- ✓ 21638. *Jamesonia imbricata* (Cav.) Hook. & Grev.
- o 21763. *Pteris coriacea* Desv.
- ✓ 21764. *Dennstaedtia obtusifolia* (Willd.) Moore.
- ✓ 21765. *Pteris Kunzeana* Ag.
- ✓ 21766. *Dryopteris submarginalis* (L. & F.) C. Chr.
- ✓ 21767. *Polypodium fraxinifolium* Jacq. (sens. lat.)
- ✓ 21792. *Diplazium* sp.
- ✓ 21828. *Polypodium fusco-punctatum* Hook.
- ✓ 21829. *Hemidictyum marginatum* (L.) Presl.
- ✓ 21838. *Pteris reticulato-venosa* Hieron.
- ✓ 21855. *Dryopteris* sp.
- ✓ 21869. *Selaginella* sp.
- ✓ 21897. *Selaginella* sp.
- ✓ 21918. *Cheilanthes myriophylla* Desv.
- ✓ 21924. *Notholaena bonariensis* (Willd.) C. Chr.
- ✓ 21964. *Lycopodium crassum* Willd.
- ✓ 21971. *Jamesonia brunnea* Maxon.

Aug. 22, 1927.

A. S. Hitchcock Ecuador

- ✓ 19989. *Coccoloba ruiziana* Lindau
- ✓ 19991. *Maytenus uliginosus* H. B. K.
- ✓ 20060. *Nicandra physalodes* (L.) Pers. --- *Physalodes*
- ✓ 20069. *Haemadictyon pallidum* DC.
- ✓ 20177. *Utricularia foliosa* L.
- ✓ 20089. *Thalia geniculata* L.
- ✓ 20166. *Physalis angulata* L.
- ✓ 20207. *Bradburya virginiana* (L.) Kuntze
- o 20219. *Gliricidia sepium* (Jacq.) Steud.
- ✓ 20258. *Echites acuminata* R. & P.
- ✓ 20268. *Meibomia purpurea* (Mill.) Vail (Det. Schindler)
- ✓ 20303. *Gnaphalium elegans* H. B. K.
- ✓ 20304. *Minthostachys mollis* (H. B. K.) Epl.
- ✓ 20365. *Hyptis lacinosphaeria* Epl. (Type)
- ✓ 20375. *Minthostachys mollis* (H. B. K.) Epl.
- ✓ 20453. *Pleistachya morlaei* (Eggers) K. Sch.
- o 20460. *Tabernaemontana poeppigii* Muell. Arg.
- ✓ 20539. *Echites trifida* Jacq.
- ✓ 20574. *Solanum suaveolens* Kunth & Bouché
- ✓ 20595. *Echites trifida* Jacq.
- ✓ 20710. *Brassica nigra* (L.) Koch
- ✓ 20843. *Caesalpinia pectinata* Cav.
- ✓ 20881. *Neonelsonia acuminata* (Benth.) C. & R.
- ✓ 20962. *Gnaphalium graveolens* H. B. K.
- ✓ 20973. *Satureia brownei* (Benth.) Briq.
- ✓ 20990. *Minthostachys tomentosa* (Benth.) Epl.
- ✓ 20997. *Achyrocline trianae* Klatt
- ✓ 21007. *Pentstemon gentianoides* Don
- ✓ 21074. *Geranium multipartitum* Benth.
- ✓ 21087 1/2. *Lucilia pusilla* H. B. K.
- ✓ 21215. *Securidaca coriacea* Bonpl.
- ✓ 21319. " " "
- ✓ 21485. *Daucus montanus* Willd.
- ✓ 21561. *Viburnum triphyllum* Benth.
- ✓ 21725. *Celeri graveolens* (L.) Benth.
- ✓ 21736. *Diplotaxis muralis micrantha* O. E. Schulz

not found in bundle

found in bundle

not found in bundle

Determined at the Gray Herbarium by Mr. C. A. Weatherby

	<u>Hitchcock</u>	<u>Escudor</u>	<u>1923</u>
20410	in part, Polypodium	Phyllitidis L.	
20410	" "	Polypodium	
20412	Tidymochlaena	truncatula (Sw.) J. Sm.	
20455	Ischetogramme	furcata (L.) C. Chr.	
20479	Nephrolepis		
20522	Dryopteris	cloanei (Baker) Ktze., var. pallescens (C. Chr.)	
20529	Polypodium		
20546	Diplazium	obtusum Desv.	
20547	"	"	
20671	Polypodium	angustifolium Sw.	
20776	Dryopteris		
20817	Cyclophorus	americanus (Hook.) C. Chr.	
20823	Elaphoglossum	crassipes (Hier.) Diels	
20969	Polystichum		
21501	Alsophila	quadripinnata (Gmel.) C. Chr.	
21503	Isoetes	clavatum L.	
21504	"	"	
21565	Polypodium	moniliforme Lag.	
21623	Jamesonia		
21764	Demetaxidia	obtusifolia (Willd.) Moore ?	
21765	Pteris	Kunzeana Ag.	
21766	Alsophila		
21767	Polypodium		
21792	Diplazium		
21826	Polypodium		
21829	Diplazium	marginatum (L.) Diels	

	<u>Hitchcock</u>	<u>Escudor</u>	<u>1923.</u>
21106	Tillandsia	multiflora Benth.	
21244	"	"	
21318	Cordia	alliodora R. & P.	

ECUADOR PLANTS COLLECTED BY PROF. A. S. HITCHCOCK.

Identified at U. S. National Herbarium.

- ✓20164. *Alternanthera sessilis* (L.) Standl.
- ✓20496. *Peperomia hispidula*
- ✓20506. *Piper peltatum* = L.H. as *Potamogeton peltata*
- ✓20572. " *pseudomarginatum*
- ✓20681. *Pitcairnea exscapa* Hook.
- ✓20838. *Tillandsia recurvata* L.
- ✓20968. *Vicia graminea* Sims.
- ✓21017. *Geum peruvianum* Focke. (Perhaps not distinct from *G. chiloense* Balb.) = In G.H. as *Geum chilense*
- ✓21095. *Geum peruvianum* Focke. (= 21017) " " "
- ✓21150. *Oxalis loxensis* R. Knuth.
- 21162. *Peperomia choritana* Trel. Type.
- 21163. *Mikania lanceolata* Hieron. (Det. B. L. Robinson)
- ✓21178. *Piper zarumanum* Trel. Type.
- ✓21190. *Pitcairnia exscapa* Hook.
- ✓21203. *Tibouchina oroensis* Gleason. Type.
- ✓21240. *Peperomia nummularifolia pubescens* C. DC.
- ✓21325. *Tillandsia usneoides* L.
- ✓21434. *Peperomia jamesoni* Regel
- 21514. *Eupatorium atrescens* Robinson, sp. nov.
- ✓21529. *Siphocampylus bonplandianus* Benth. (Det. H.A. Gleason)
- ✓21617. *Buddleia incana* R. & P. (Compare with type collections at Geneva and Berlin)
- ✓21621. *Buddleia jamesoni* Benth.
- ✓21636. " *rugosa* H. B. K., rather than *B. incana*.
- 21686. *Peperomia subconca* Trel.
- ✓21768. *Tropaeolum pubescens* H. B. K.
- ✓21886. *Peperomia stelecophila glabrata* Trel. Type.
- 22357. *Cryptantha granulosa* (R. & P.) Johnston. (Det. I. M. Johnston)
- 22368. *Stevia dodecachaeta* DC. (Det. B. L. Robinson)
- 22384. *Cryptantha macbridei* Johnston (Det. I. M. Johnston)
- 22406. *Nama dichotomum* (R. & P.) Chdsy. (Det. I. M. Johnston)
- 22524. *Tillandsia recurvata* L.

L.B.S. has it.

In G.H.

Where are these numbers?

September 28, 1926.

In Hitchcock 21539. *Halimolobos* *asclepiadea* (HBK.) Don det. Miss C.K. Allen
Ms. Bot. Gard.