

Acc. 12-053

Killip, Field Notes #14000-17290.

1926-27

I

I

K. S. Colombia
1450 - 15645

II

K. S. Colombia
15646 - 17290

252
263
252

EXPLORATION IN COLOMBIA
EASTERN CORDILLERA

Dept. Santander: Vicinity of California; alt. meters.

No. E. P. KILLIP } Collectors. Jan. 11-27, 1927
ALBERT C. SMITH }

Collected under the auspices of the New York Botanical Garden,
Gray Herbarium of Harvard University, United States
National Museum, and the Arnold Arboretum.



herb	H.	red	r.
tree	T.	orange	o.
shrub	S.	yellow	y.
fern	F.	blue	b.
flower	F.	green	g.
fruit	Fr.	violet	v.
		purple	pur.
		pink	pi.
plenty	u	brown	b.
photographed	P.	white	w.

Smithsonian Inst.
Washington, D.C.

14001 Mimosa
 14002 Mimosa
 14003 Mimosa
 14004 Cakile
 14005 Rauwolfia Tabernmontana
 14006 Adenocalymna
 14007 Valerianodes
 14008 Balbergia
 14009 Wissadula
 14010 Fimbristilys miliacea
 14011 Rhyzophora mangle
 14012
 14013 Rauwolfia
 14014
 14015 Balbergia
 14016 Solichos
 14017 Sterculia
 14018 Amerimura
 14019 Wissadula
 14020
 14021 comp
 14022 Torchocarpus
 14023 Alternanthera lehmannii
 14024 "Clemat"
 14025 Ricinus communis
 14026 Cordia alba
 14027 Cassia ligustrina
 14028 Cassia tora
 14029 Stenodia durantifolia
 14030 Amerimura
 14031 Calliandra
 14032 Jatropha
 14033 Cissus
 14034 Ipomoea hederacea
 14035 (verb.) erinbergii

habit

semi-prostr. s. 2-3' l.
 T. 20' spread. plant. crown yellow
 semi-prostr. 2-3' l.
 creep; shrub. 1-2' h.
 S. 10-12' S. white
 woody vine F. w. and deep purple
 coarse h. 2-3' F. d. pale purple
 slender s. 4-5' F. rich purple
 h. F. white
 h. F.
 shrub 6-10'
 shrub 2-4' F. white
 tree 15-20' flowering branches drooping
 shrub 7-10' fruit green
 woody vine flowers white
 shrub 10-12' F. deep lavender
 tree 15-20' F. yellow
 h. F. yellow
 woody vine F. green
 H. semi-scandent F. orange
 T. 20'
 H. scandent F. w.
 T. 20-30 spread. crown
 H. coarse 10' F. red.
 T. 15-20' F. w.
 T. 15-20'
 S. 5-15' F. y.
 H. 2-3' F. w.
 T. low
 T. 20-30'
 S. 10-15' F. yellow-g. sepals
 vine F. greenish
 vine F. cor. W.-P.
 H. F. l.

date

Oct. 31 coastal flats
 " " " "
 " " " "
 beach
 coastal ~~shrub~~ thicket
 cor. deep purp. / paler at center
 beach
 mangrove swamp
 coastal thicket
 coastal thicket
 sandy roadside
 coastal thicket
 sandy roadside
~~coastal thicket~~
 roadside
 coastal thicket
 coastal flat
 in garden
 roadside clay soil base - La Popa
 Nov. 2

location

alt.

no. spec.

photo

P. 1

P. 2

P. 3

P. 4

P. 5

P. 6

P. 7

P. 8

P. 9

P. 10

P. 11

P. 12

P. 13

P. 14

P. 15

P. 16

P. 17

P. 18

P. 19

P. 20

P. 21

P. 22

P. 23

P. 24

P. 25

P. 26

P. 27

P. 28

P. 29

P. 30

P. 31

P. 32

P. 33

P. 34

P. 35

P. 36

P. 37

P. 38

P. 39

P. 40

P. 41

P. 42

P. 43

P. 44

P. 45

P. 46

P. 47

P. 48

P. 49

P. 50

14071	<i>Cassia ligustrina</i>	T. 12-15'	
14072	(<i>Rutaceae</i>) " <i>tortuoso cimarón</i> "	T. 10-15'	Fr. ovoid ± 9" l. Fr. green.
14073	<i>Euphorbia brasiliensis</i>	H.	F. w.
14074	<i>Panicum</i>	H.	
14075	<i>Acalypha</i>	A.	
14076		H. 2-4'	F. w. greenish, F. cream w.
14077	<i>Petiveria alliacea</i>	H.	
14078	<i>Mimosa</i>	T. 10-15'	
14079	(<i>Bignoniaceae</i>)	vine W.	F. pur.
14080	<i>Solanum</i>	H.	F. cor. w. F. sta. y.
14081	<i>Euphorbia lasiocarpa</i>	H.	F. w.
14082	Lasiacis	vine	
14083		S. 8-12'	Fr. red.
14084	<i>Mimosa mangrove</i>	S. 8-12' S. 4-6'	F. stamens p.
14085	<i>Bauhinia</i>	S. 10-15'	F. w.
14086		vine W.	F. y.
14087	(<i>Bignoniaceae</i>)	H.	F. y.
14088	<i>Cracca</i>	vine W.	F. p. to pur
14089	<i>Cassia</i>	T. 10-15'	F. y.
14090	Mimosa <i>Acacia</i>	T. 8-15'	F. y.
14091	Le <i>Meibomia</i>	H.	F. pinkish
14092	<i>Coccolobis uvifera</i>	S. 5-10'	F. w.
14093	<i>Jacquinia</i>	S. low.	F. w. pet. w.
14094	<i>Platyphra</i>	S. 5-15'	F. sep. y.
14095	Sida	S. or small T.	F. y.
14096	<i>Cenchrus</i>	H.	
14097	<i>Eragrostis</i>	H. proleferous grass.	
14098	At <i>Fimbristylis spatulacea</i>	H.	
14099	<i>Fimbristylis castanea</i>	H.	
14100	<i>Cracca cinerea</i>	H. 1-2'	F. pur.
14101	<i>Cocuo</i>	T. 20-70' leaves 10-20'	
14102	<i>Cyperus nutisii</i>	H.	
14103	<i>Eragrostis</i>	H.	
14104	<i>Cucumis</i>	H.	F. y. Fr. obovate
14105	<i>Cyperus</i>	H.	

Nov. 2 Woods, etc. La Popa
halves of fruit used for carrying water

300m	u	15041
150-175m	u	P. 15, 16
	2	15042
	u	15043
	u	15044
	u	15045
	u	15046
	u	15047
	u	15048
	u	15049
	u	15050
	u	15051
	u	15052
	u	15053
	u	15054
	u	15055
	u	15056
	u	15057
	u	15058
	u	15059
	u	15060
	u	15061
	u	15062
	u	15063
	u	15064
	u	15065
	u	15066
	u	15067
	u	15068
	u	15069
	u	15070
	u	15071
	u	15072
	u	15073
	u	15074
	u	15075
	u	15076
	u	15077
	u	15078
	u	15079
	u	15080
	u	15081
	u	15082
	u	15083
	u	15084
	u	15085
	u	15086
	u	15087
	u	15088
	u	15089
	u	15090
	u	15091
	u	15092
	u	15093
	u	15094
	u	15095
	u	15096
	u	15097
	u	15098
	u	15099
	u	15100
	u	15101
	u	15102
	u	15103
	u	15104
	u	15105

Nov. 3. sandy coastal strip "Boca Grande"

P. 17

P. 18, 19

14141	Munira	H. subpubescent	1-4'	F.p.
14142	Scyos	vine		
14143	Phaseolus	vine		F.p.
14144		H. succulent		
14145	Hibiscus	S.		F. act. p.
14146	Spigelia	H.		F. w.
14147		algae - sub. salt water		
14148	Justicia carthaginensis	H. often woody below		F. b.
14149	comp.	H. 2-4'		F. w.
14150	Securidaca	S. 8'		
14151	Euphorbia hirta	H.		F. greenish w.
14152		T. 15'		
14153	Illex	S. 2-6'		Fr. w.
14154	" Illex Mayaguilla" Nipponense	T. 15-20' spreading crown		
14155	Sida	H.		F. w.
14156	Portulaca filosa	Succulent herb		F. y
14157	"Oleracea "bordo largo"			F. y
14158	Cyperus laevigatus	H. in tufts	1.5-3'	
14159	Sterculia	Suffrutescent herb		F. rich pi
14160	Crotalaria "campana amarilla"	H. 2-3'		F. y
14161	"beduinito"	low s. ± 2'		F. y; fr. red
14162	Momordica charantia	vine		F. y. Fr. o. seeds
14163	Lycium	S. semi-scand.		Fr. deep pur.
14164	Passiflora suberosa	vine I woody		Fr. by lustrous
14165	Lycium	S. semi-scand.		
14166	Tournefortia	S. ± 8' branches often		F. w.
14167	Hemelia patens	S. ± 5'		Fr. Fr. deep r.
14168	Passiflora suberosa	vine		F. gr. w.
14169	Melastoma	H. coarse		F. y.
14170	Tropis	vine slender		F. g.
14171	Lisocrea Guacablanco	vine I w.		F. gr. w.
14172	Borreria	H.		F. w.
14173	(Lg.)	vine w		
14174	Acalypha	S. ± 3'		F. gr.
14175	Anoda	H. 1-2'		F. b.

Nov. 3	coastal thicket	Tierrabombas	S.	h.
Nov. 4				2
Nov. 5	edge of mangrove swamp			h
Nov. 6	coastal thicket			h
Nov. 7	beach-submerged			h
Nov. 8	coastal thicket			h
Nov. 9				h
Nov. 10				h
Nov. 11				h
Nov. 12				h
Nov. 13				h
Nov. 14				h
Nov. 15				h
Nov. 16				h
Nov. 17				h
Nov. 18				h
Nov. 19				h
Nov. 20				h
Nov. 21				h
Nov. 22				h
Nov. 23				h
Nov. 24				h
Nov. 25				h
Nov. 26				h
Nov. 27				h
Nov. 28				h
Nov. 29				h
Nov. 30				h
Nov. 31				h
Nov. 32				h
Nov. 33				h
Nov. 34				h
Nov. 35				h
Nov. 36				h
Nov. 37				h
Nov. 38				h
Nov. 39				h
Nov. 40				h
Nov. 41				h
Nov. 42				h
Nov. 43				h
Nov. 44				h
Nov. 45				h
Nov. 46				h
Nov. 47				h
Nov. 48				h
Nov. 49				h
Nov. 50				h
Nov. 51				h
Nov. 52				h
Nov. 53				h
Nov. 54				h
Nov. 55				h
Nov. 56				h
Nov. 57				h
Nov. 58				h
Nov. 59				h
Nov. 60				h
Nov. 61				h
Nov. 62				h
Nov. 63				h
Nov. 64				h
Nov. 65				h
Nov. 66				h
Nov. 67				h
Nov. 68				h
Nov. 69				h
Nov. 70				h
Nov. 71				h
Nov. 72				h
Nov. 73				h
Nov. 74				h
Nov. 75				h
Nov. 76				h
Nov. 77				h
Nov. 78				h
Nov. 79				h
Nov. 80				h
Nov. 81				h
Nov. 82				h
Nov. 83				h
Nov. 84				h
Nov. 85				h
Nov. 86				h
Nov. 87				h
Nov. 88				h
Nov. 89				h
Nov. 90				h
Nov. 91				h
Nov. 92				h
Nov. 93				h
Nov. 94				h
Nov. 95				h
Nov. 96				h
Nov. 97				h
Nov. 98				h
Nov. 99				h
Nov. 100				h

City wall, Cartagena

Nov 56 thicket

R.R. tracks east of Turbaco

400-600 ft. 1150 ft.

1961

14176	<i>Clatium cartaginense</i>	vine, H.	F. y.
14177	<i>Waltheria</i>	H.	F. y.
14178	<i>Cordia sebestena</i>	T. 10-15'	F. w.
14179	<i>Panicum tricaanthum</i>	H.	
14180	<i>Boraria</i>	H. semi pro.	F. w.
14181	<i>Acalypha</i>	H.	
14182	<i>Croton</i> "arbol de nieve"	H. woody at base 2-3'	F. pale y.
14183	<i>Rivina humilis</i>	H.	F. w.
14184	<i>Paspalum</i>	H. dense clumps root. at nodes	
14185	<i>Pectus</i> Evol.	H.	
14186	<i>Elytraria</i>	H.	F. lar.
14187	<i>Hibiscus</i>	S.	F. r.
14188	<i>Cassia</i>	H. erect ample 2-3'	F. y.
14189	<i>Cyperus</i>	H.	
14190	<i>Syntherisma</i>	H.	
14191	<i>Rauwolfia</i>	S. 15'	F. r.
14192	<i>Celtis</i>	T. 15-20'	
14193	<i>Piper nutida</i>	S. 6'	Spikes w.
14194	<i>Piper occidentale</i>	S. 6'	Spikes w.
14195	<i>Cassia</i>	H.	F. y.
14196	<i>Valeriodes</i>	H. 2-3'	F. deep pur. paler at center
14197	<i>Wissadula</i>	H. erect, few- branched	F. gr. w.
14198	<i>madragola</i>	S. 10-12'	F. cor. w. ant. ob. cal. tube g.
14199	<i>Adeocalymna</i> bynic daluikuma	woody vine S. 16'	F. w. cor. lobes purple
14200	<i>Salbergia</i>		F. pur.
14201	Cardiospermum Serjania	woody vine	F. w.
14202	<i>Mimosa</i>	H. subfrutescent 2-2½'	
14203	<i>Stipa</i>	H.	
14204	<i>Cassia</i>	H.	F. y.
14205	<i>Soliches lablat</i> arroy cocoa	vine w. T. 10-12'	F. w. F. p.
14206	<i>Calliandra</i>		F. w.
14207	<i>Gouania tomentosa</i>	vine w.	
14208	<i>Opuntia</i>	± 1' tall	
14209	<i>Cambretum</i>	S. 8-12'	F. y.
14210	<i>Serjania</i>	woody vine	F. w.

Nov. 6 thickets along R.R. east of Turbaco

edge of thicket

Handwritten notes and numbers in the right margin, including a vertical column of numbers (1-10) and some faint text.

14211	Acacia	S. ± 6'	F. lar. p.
14212	Ruellia	H. 1½-2½'	F. y.
14213	Abutilon	H. 2-2½'	F. y.
14214	Panicum "cebollita"	H. 3-5'	F. pet. y. sta. w.
14215	Catesetum "sebolleta"	E. H.	F. pet. w. & pump. spotted within
14216	Alzine volvulus		F. pale-p.b.
14217		vine H.	
14218	Bauhinia	S. 12-15'	F. w.
14219	Heliotropium indicum	H. 1½-2'	F. y.
14220		T. 12-15' branches pendulous	F. cor. w. ant. y.
14221	Euphorbia	H. 1½-2' semi-succulent	F. w.
14222	Tillandsia	EN	F. y.
14223	Securidaca	H. 3-4'	F. cor. w. ant. y.
14224	Solanum	S. sub-acan.	F. w.
14225	Croton	H. 3½-4' woody at base	F. (note)
14226	(leg.)	S. 10-15'	F. sta. w.
14227	Calliandra	S. 3-6'	F. w. prox.
14228	Ipomoea "campanita"	vine	F. p. dist.
14229	Cassia occidentalis "bichofargo"	H. 2'	F. y.
14230	Ipomoea	vine	F. cor. p. prox paler dist.
14231	Calliandra "beranero"	S. 4-10'	F. ant. w.
14232	Ipomoea meyeri	vine	F. cor. no prox. pur. dist.
14233	Indigofera "añil"	H. 2-3'	F. p.
14234	Talium "berdolaga"	H. succulent	F. light p.
14235	Bauhinia "bejuco cañena"	(T.) 12-20'	F. w.
14236	Southanthus "cagapajarito"	S. parasitic	
14237	Mimosa pudica "senateputa"	H. semi-pro. leaves sensitive	F. p.
14238	Alternanthera "mano de dios"	S. spreading 8-12'	F. w. sta. w.
14239	Mimosa "beranero"	T. 9-12'	F. cor. vio. sta. y.
14240	Solanum "oja de luna"	S. 7-10'	F.
14241	Lythra "ayama"	vine	F. y.
14242	Securidaca? "botardeoro"	H. 2-3'	F. y.
14243	Cecropia "guarumo"	T. 10-20' ants in trunk	
14244	Ipomoea "bulto" lila	vine climbing on tops of trees	F. rich p.
14245	Psychotria (snake antidote)	S. 7'	

Edge of thicket

Nov. 7 R.R. tracks west of Turbaco

Tomecilla.

clearing edge of woods

east of Turbaco

clearing woods

dense woods

P
 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

14246	(Orchid)	E.H.		
14247	Cardiopernum	vine h. w.	F.w.	
14248	Serjania	vine H.	F.w. greenish	
14249	Polynnia	"boton de oro" H. up to 7'	F. rays y	
14250	Meibomia	"amorisco" H. 1 1/2 - 2 1/2'	F. p.	
14251	(rubiceae)	"ray muciado" S. 8-10'	F. pure w.	
14252	Caracha	"cinarron" H. semi-woody 4-5'	F. cor. w. Fr. r.	
14253	Sonovia	"legaña de perro" vine	Fr. w.	
14254	Carica papaya	"papaya" T. 9-20'	F.w.	
14255		"caba" T. 20-50'	F. ^{staminate deep pur.} fr. strongly depressed, globose, 12-ribbed	
14256	Bignonia	"beyuco de agua" vine	F. r. lvs. low, seeds r.	
14257	Erythrina	" vital " "pita" T. 20'		
14258	(euphorb.)	H. slender much branched	F. gr.	
14259	Bignonia	"beyuco de ojo" vine, w.		
14260	Canapana	"contra siempre" vine, h.	F. cal. g. cor. b.	
14261	Tillandsia	"civollete" E.H.		
14262	Psychotria	cibollete S. 7-8'	Fr. r.	
14263	Pellacourea	"coral" T. 8-12 20-30'		
14264	Serjania	vine, w.	F.w.	
14265		"ojo de boey" vine, w.	F. y.	
14266	Acalypha	"flor de tierra" H. coarse		
14267	Calliandra	S. 4-10'		
14268	Piper	"cordoneillo" S. 6-9'		
14269	Acalypha	S. 3-5'		
14270	Anitlochea	"capitans" vine, ^{h. w.} lvs. ^{h.} ^{h.}	F. yellowish g. cor. pale p. prot. F. cor. grass g.	long. striped with br. pur., cup deep pur. outside w. dist. yellowish gr. within
14271	Ipomoea	vine, h.		
14272	Synolobus	"beyuco corriente" vine, h.		
14273	Thevetia	"tomatillo" S. 6-8'	F. y.	
14274	Cassia	S. 4-5'	F. y.	
14275	moss			
14276	Diacorea	Vine		
14277	Ticin	vine, woody?		
14278	Chenipodium ambrosioides	H.	Fig.	
14279	Argemone mexicana	H. 6"-2'	F. y.	
14280	Scoparia dulcis	H. 1-1 1/2'	F. light b.	

edge of woods
roadside
roadside thicket
edge of woods

staminate deep pur. fr. strongly depressed, globose, 12-ribbed

long. striped with br. pur., cup deep pur. outside w. dist. yellowish gr. within
entrous, corona deepo.

Nov. 8 Streets

Turbaco

Handwritten vertical notes on the right margin, including numbers and symbols.

- 14421 *Bactris minor* "lata"
14422 *Bursera*
14423 *Mucuna*
14424 *Stigmaphyllon*
14425 *Abutilon*
14426 *Triumbetta*
14427 *Mimosa*
14428 *Bauhinia*
14429 *Meibomia*
14430 *Sponsea*
14431 *Calliandra*
14432 *Jacquemontia*
14433 *Acrostichum aureum*
14434 *Cissampelos*
14435
14436 *Baccharis trinervis*
14437 *Zinnia*
14438 *Acacia*
14439 *Sesbania*
14440 *Hibiscus*
14441 *Bauhinia*
14442 *Acacia*
14443 *Mikania*
14444
14445 *Acleris*
14446 *Alternanthera*
14447 *Sponsea carnea*
14448 *Craeca*
14449 *Cyperus ligularis*
14450 *Stinus*
14451 *Stemodia*
14452 *Sida*
14453 *Acacia*
14454 *Solanum*
14455 *Capparis*

P. trunk 3-5' fruit "small"
fr. 1 1/2-2 1/2'
T. 10-15' branches droop.
V. herb. F. stan. w. purp.
V. herb. F. base w.
H. 2-4' F. y.
H. 2-3'
H. 2-3' F. sta. p.
S. 7-12' branches droop.
H. semi-scandent. F. stan. + unrip. purp.
H. viscos. F. keel lilac
V. herb. F. w.
S. 8-12'
V. herb. F. light violet
F.
V. herb. much-branched
S. 8-12' becoming scan. ^{blooms w.}
S.
V. herb. F. cor. w. gr. tinted
T. 10-20' F. corona ivory w.
V. herb. F. pet. cream, style pur. l. stig. g.
S. 8-12' F. pet. yellow. tinged at center
S. 4-8'
T. 15-30' F. pet. w. yellow
V. herb. F. ant. grass g.
T. 10-15' F. pet. + fila. purple, ant. pale
H. F. " sometimes w.
H. fr. or. red.
H. 3-4' F. sep. w. ant. y.
V. herb. F. purp.
S. 5-7' F. pet. R. purp.
H.
H. proo, fleshy F. p.
H. coarse 2-3 1/2' F. cor. w.
H. repent F. cor. y. Fr. g.
S. 4-10'
H. woody at base F. cor. w. pink
S. 2-4' much-branched at base ^{white without. cream diet.}

Nov. 12 thicket between Turbaco and Vol. roadside

roadside thicket

in mud Los Volcanos

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

Nov. 21
P.P.J. 6
P. G. L.
D. E. J. 5
Nov. 21

- 14526 *Selenicereus*
- 14527 *Bignonia*
- 14528 *Acacia*
- 14529 *Tillandsia*
- 14530 *Tillandsia*
- 14531 *Metastelma*
- 14532 *Jacquemontia*
- 14533 *Lantana camara*
- 14534 *Saracha "aji picante"*
- 14535 *Scaevola*
- 14536 *Bignonia*
- 14537 *Metastelma*
- 14538 *Turnera*
- 14539 *Carnegiea*
- 14540 *Solanum*
- 14541 *Aristolochia*
- 14542 *Phoradendron*
- 14543 *Bauhinia*
- 14544 *Veronica*
- 14545 *Ipomoea*
- 14546 *Comp.*
- 14547 *Ternstroemia "olla de mono"*
- 14548 *Solanum*
- 14549 *Jacquemontia*
- 14550 *Melastroma*
- 14551 *Comp.*
- 14552 *Bignonia*
- 14553 "
- 14554 "
- 14555 " *simplicifolia*
- 14556 *Bryza nativa*
- 14557 *Solanum*
- 14558 *Paspalum*
- 14559 *Aeschynomene*
- 14560 *Mimosa*

^{subcaudat}

Succulent; on tree trunk

V-woody Fr. green
 T-12-20' ael. part
 greenish-y

H-epiph. F-purple (dry)

H-epiphyt-4' P-gr.-w.

V-herb. C-wh.

V-herb. F-tuber or
 lobes or.

S-2-6' H coarse 2-4' F-Cor. w., anthers purple
 pr. green, papery

H coarse 2-4' S becoming succulent F-st. ok
 wings white

V-woody F-Calyp. tube green, lobes w.

V-herb. F cor. y-g
 corolla ivory-w.

H-woody at base F Pet. y, base purple

succ. cacten 3-20' H coarse, woody
 at base 4-5'

V-herb. Calyx green, pink-tinged
 Plant bright green

Epiphy. S. T-12-15'

H-woody at base 2-3' F-uvol. red-purple
 flower blue-purple

V-twining F-Cor rich pink, pale distal

H-coarse woody at base F Cor. lavender

T Fr. obconic, wood used
 for rafters

H 2-3.5' F-C. w. within, pink within
 anthers y, prox., w. dist. Edge of corn field

V-twining F-Cor. light pink

H-coarse F-P. ex.

H- " 5' odor F Br. light-pink, darker
 striped; anthers gr.

V-woody F-Cor. y

V- " F-Cor. w, pink-tinged out

V- " F-Cor. rich pink (see note)

V- " F Cor. y. anthers gr.

Grass 3' F-Cor. light purp. anthers y

H coarse, woody at base

H-2-3' F (see note)

H erect 2-4' F-Pet. gr, stam. w.

H stem viscous
 1.5-3' woody base

H branched at

Nov. 15 Thicket, northward from Arizona.

Pe-1

anthers y, prox., w. dist. Edge of corn field

In corn field
 Edge of corn field
 In marsh

anthers y.

- 14596 *Ipomea*
 14597 *Utricularia*
 14598 *Lophotocarpus*
 14599 algae
 14600
 14601 *Acacia*
 14602 *Synandropsis*
 14603 *Sicyo*
 14604 *Eragrostis*
 14605 *Cyperus*
 14606
 14607 *Salvinia*
 14608
 14609
 14610
 14611 *Ipomea*
 14612 *Fimbristylis*
 14613 *Castilleja*
 14614 *Cyperus*
 14615 *Sagittaria*
 14616 *Laluna*
 14617 *Jatropha gossypifolia*
 14618 *Leonitis*
 14619 *Alamanda*
 14620 *Solichos*
 14621 *Cassia*
 14622 *Bignonia*
 14623 *Glycerinal*
 14624 *Ipomea*
 14625 *Trapezia*
 14626 (leg.)
 14627 *Cladonia*
 14628 (rub.)
 14629 *Lioscorea*
 14630 *Calliandra*

- H. rooting in mud F. cor. rich p.
 H. 2-4' water
 H. floating F. cor. y.
 H. rooting in mud
 H. 2-4' water
 floating
 floating in algae
 S. 2-4', spreading branches often trailing in water F. bit. p. ant. y.
 H. coarse, branches trailing on surface.
 V. herb. Fr. very dark g. F. cor. y.
 H. on mud.
 H.
 H.
 floating
 T. 30-40' advan. roots from branches 2-10' l.
 floating
 V. herb. stem, purp, prox. w. dist. F. wings w. prox. pur. dist.
 V. herb. F. cor. w. prox. p. dist.
 H. in mud
 H. rooting in mud, leaves floating F. above surface
 H. rooting in mud, 1-2' water
 H. rooting in mud, leaves F. above water F. ant. y. bit. g.
 H. coarse 3-6' F. cor. y.
 H. coarse 3-5' F. cor. deep red, paler. prox.
 H. coarse 3-7' F. cor. o.
 S. 5-10' milky juice F. cor. rich purp.
 V. herb. F. cor. w.
 S. 5-12' F. cor. y.
 S. 5-12' F. cor. y.
 V. woody. F. cor. gr. prox. or. dist.
 V. herb. F. cor. purp, paler dist.
 V. herb. stem succ. Fr. seeds o.
 V. herb. stem. w. to paler. 4-spirally cur. F. style w. 6-8-spirally coiled
 ontuags
 S. branches divaricate
 S. 6-10'
 V. herb. turn. F. greenish w. seeds alternately
 S. 8-12' Fr. elevated in pod.

Nov. 16 swampy pond near Riquie

edges of Riquie
F. cor. w. sta. purp.

muddy pond between Sop. + Arenal
keel. w. thicket

muddy pond

roadside thicket

Nov. 18
thickets
bet. Tur. and Taracilla
200-500'

200-500'

P. d-5

- 14631 Icica
- 14632 Bauhinia
- 14633 Lalechampsia
- 14634 Bignonia
- 14635 Meibomia
- 14636 ~~Sauvegracia~~ Sauvegracia
- 14637 Serjania
- 14638 Opluculina
- 14639 ~~Nyctelia~~ Symplocos
- 14640 Passiflora
- 14641 Meibomia
- 14642 Tripsacum
- 14643 Eclides
- 14644 Quamoclit
- 14645 Sicyos
- 14646 Crechites
- 14647 Solanum
- 14648 Peperomia
- 14649 Cyperus
- 14650 Passiflora biflora
- 14651 Calliandra
- 14652 moss
- 14653 (rub.)
- 14654 Ipomoea
- 14655 Dioscorea
- 14656 Anthurium
- 14657
- 14658 Asplenium
- 14659 ~~Anthurium~~
- 14660 Anthurium
- 14661 Anthurium
- 14662 Bradburia
- 14663 Rhus
- 14664 Acalypha
- 14665 Vernonia

T. 40-70' F. pet. w. 8 cm. w. side.
 S. slender with F. sta. light gr. w.
 S. sub. scan. br. F. pet. w.
 V. herb. F. bracts pale g.
 V. herb. w. F. cal. tube g. lobes w.
 V. herb. F. stan. & unigs purp. dist. w. prox.
 H. coarse, few F. keel. w. plant viscos.
 H. branched F. pet. pinkish w.
 V. woody, climbing F. pet. pure. w.
 V. in tops of trees F. cor. salmon col. dist. pale
 V. herb. F. calyx. gr. prox. salmon dist.
 H. repent. at base
 H. branched at base F. stan. & unigs - pinkish purp.
 H. branches recumbent F. keel. w.
 H.
 V. herb. F. cor. y. g.
 V. herb. F. cor. r.
 V. herb. repent. F. cor. y.
 V. rooting at nodes
 H. coarse F. invol. g. rays light y.
 H. 4-5' F. cor. w. ant. w.
 H. coarse F. cor. w. ant. w.
 H. succ. repent in detritus
 H. in crevices of limestone rocks.
 H.
 V. herb.
 S. 3-6' F. sta. w. (sta. divergent in late afternoon)
 on soil, sides of ditch
 T. 30-40' Fr. mud with milky sap.
 V. herb. prox. F. w.
 V. in grasses F. w.
 V. herb. drooping F. perianth l.
 H. leaves to 4' 1/2' w. F. sta. w. to green and
 H. in crown.
 T. 10-15' trunk 6" diam.
 F. repent at base
 H.
 V. climbing on tree trunks
 V. climbing
 V. herb. low F. stan. w. without w. cor. thin rch purp. at center
 F. unigs w. purp. at apex. keel. w. 19
 T. 20-30' F. pet. w. Nov. 15
 S. 4-6' simple stem F. yellowish g.
 H. 4-7' erect F. invol. deep r. purp. sta. w.
 H. coarse F. purp. cor. pistil purp.

Nov. 17 thickets between Tur. & Torrecillo

w. prox.
 try. prox. outside. inside: dull salmon fruit quarter y. second quarter, lustrous salmon 3rd quarter y. prox.
 roadside
 limestone rocks, edge of woods
 edge of woods.
 thickets
 edge of woods.
 Torrecillo
 limestone rocks in dense woods
 limestone soil " " "
 " rocks " " "
 " soil " " "
 " " " " "
 " " " " "
 field
 edge of woods
 Torrecillo
 thicket

14631
14632
14633
14634
14635
14636
14637
14638
14639
14640
14641
14642
14643
14644
14645
14646
14647
14648
14649
14650
14651
14652
14653
14654
14655
14656
14657
14658
14659
14660
14661
14662
14663
14664
14665
 J-1

- 14666 (Comp.)
- 14667 Solanum
- 14668 Tomnefortia
- 14669 (malpigh)
- 14670 Costus
- 14671 (hepatic)
- 14672 Sterculia
- 14673 (rub.)
- 14674 ~~Lichen~~
- 14675 lichen
- 14676 moss
- 14677 Cyclopettia
- 14678 (apoc.)
- 14679 (euphorb.)
- 14680
- 14681 Jasianis
- 14682 Plumieria
- 14683 Wissadula
- 14684 Hiscorea
- 14685 Solanum
- 14686 Cassia
- 14687 Stachys
- 14688 Leonurus
- 14689 (malpigh.)
- 14690 Pilea bernarioides
- 14691 Ipomea carnea
- 14692 Bauhinia
- 14693 Ipomea
- 14694 Eupatorium
- 14695 Halbergia
- 14696 Amyris
- 14697
- 14698
- 14699 Eupatorium
- 14700 Acacia

"achote de monte"

"baca monte"

H. coarse invol. light g. rays. w. style
 heads w. ~~stamens~~ flor. g. w.
 S. 6-9' F. cor. w. ant. y.
 S. branches ~~to y. l.~~ F. cor. tube g. lobes w.
 S. sub-scandent to y. l. F. pet. y.
 S. 4-8' elongated branches F. Fr. with p. wings
 H. coarse F. lvs. p. prox.
 H. 2-4' F. g. dist. lustrous, coriaceous.
 on tree trunks
 T. 20-40' med. (spec. from cut
 apparently T. size (branches on ground) Fr. r.
~~tree~~ T. 40-60'
 on tree trunks
 on limestone rocks
 F. fronds to 5' l. cor. tube y. g.
 V. herb. turn. F. lobes w.
 T. 30-40' Fr. 3-lobed
 T. or S. (spec. from broken
 branches)
 V. herb.
 S. 4-7' F. cor. pale y.
 H. coarse stem erect. F. pet. + sta. o. y.
 V. herb. ~~dependent~~ dependent fr. branches
 S. 5-8' F. cor. w. ant. y.
 slender, bran. F. 6 1/2 cm. wide
 T. 10-12' at top pet. y.
 H. 1-2' much branched F. upper lip p. lower w.
 H. coarse F. tube + upper lip p.
 H. 2-5' F. lower lip purp.
 S. 4-8' F. Pet. y.
 H. in crevices of limestone rocks
 H. stem filiform. semi-proc.
 V. herb. F. pur.
 S. 5-10' F. 4 pet. pure w.
 F. 5th w. streaked with de sp. p.
 V. herb. F.
 somewhat F. lvs. greenish
 V. woody F. buds greenish
 S. 5-7' F. pur.
 T. 15-20' drooping F. sepals
 F. g. w. g.
 S. 6-10'
 floating
 H. coarse much branched F. invol. light g. dark tips. small pond
 H. woody at base 4-8' F. flowers w. Nov. 23 thickets along river, 22m.
 S. or T. 8-15' lvs. glaucous
 F. pure w.
 Nov. 23

Nov. 19 thickets

Torrecillo

limestone soil in dense woods

Nov. 20 thickets

n. of Turbaco

roadside

Nov. 21 in mud

Los Volcanos

Nov. 22 thickets

n. of Turbaco

reflected

Nov. 23

thickets along river, Calarua

22m.

Vertical column of numbers and symbols on the right margin, including a series of small 'u' characters and some faint numbers.

form ~~is~~ infected with *Braconia imbricata* (detected)
Cissua sicyoides L. *Spondylia tuba aphylla* Presl

- 14701 Solanum H. coarse, woody at base F. cor. w. pinkish
- 14702 Stachys H. coarse, few-bran. F. tinged without.
- 14703 Antidaphne { "murdogs" or H. succulent F. buds g.
- 14704 Vitus triloba { "pigeon" V. herb. F. y.g.
- 14705 Passiflora hispida V. herb. Fr. g.
- 14706 Mimosa "trupilla" S. 8-15' F. pet. gn. w. sta. pi. w.
- 14707 Cordia "urita" S. T. 6-20' F. cor. cream w.
- 14708 Furcraea milky V. herb. sup. F. cor. light g. without
- 14709 Convolvulus V. subhirsute F. cor. w.
- 14710 Milsonia V. herb. F. invol. light g. paler
- 14711 Licliptera H. 2-4' F. dist. flowers w.
- 14712 Craeca H. 2-4' F. cor. pur. paler without
- 14713 Spongia polyanthes V. herb. twin. F. invol. g. y. keel w.
- 14714 (var. w.) H. 4-6' F. cor. y.
- 14715 Juffa V. herb. F. pet. fine w. prophylls
- 14716 (comp.) H. coarse 1-3' F. cor. gr. w. without
- 14717 Paspalum H. much branched F. y. g. dist. within
- 14718 Riandra H. to 3' F. cor. y.
- 14719 Juffa H. 1-3' F. invol. g. flowers w.
- 14720 Petunia V. herb. F. cor. y.
- 14721 Brachia V. herb. twin. F. invol. g. flowers w.
- 14722 Talinum H. T. 20-30' F. cor. p. w.
- 14723 Melia ayederach H. T. 20-30' F. cor. y.
- 14724 Alternanthera ficoidea H. pros. F. cor. w.
- 14725 Ceiba pentandra "ceiba blanca" H. 4-10' leaves F. dist. w. p. ting. without
- 14727 Canina H. to 4' F. pet. w. p. ting. without
- 14728 Bryopsis F. pet. w. ting. with base
- 14729 Aegiphila F. g. to w.
- 14730 Polygodium F. invol. beneath yellowish
- 14731 Gynophea F. in crotch Fr. y.
- 14732 Piper V. herb. coarse H. F. invol. beneath r.
- 14733 Passiflora H. 5-8' F. spikes grayish w.
- 14735 Calathea V. herb. w. leaves H. 4-10' to 5' F. invol. g. to b. beneath y.

aut. y. prox. w. dist. Mar. 23 thickets along River - Calaman

leaves used to scrub pans
 corona w. lustrous

aut. b. upper lip transversely w.-toothed at denture.
 within

sta. y. Nov. 24 thickets - w. of Calaman

5-red-striped pan. corona. g. p.
 in ditch

thickets

wings w. per. tipped keel w.
 Nov. 24 thickets
 column low. to deep pur. bicolor

Cl Banco

Nov. 26 Riverside Zamorra (Magd. Dept.)

Nov. 28 thicket along stream Puerto Wilches 105 m.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

- 14736 *Bilia*
- 14737 *Cestus*
- 14738 *Sida*
- 14739 *Passiflora vitifolia*
- 14740
- 14741 *Solanum*
- 14742 *Ussus?*
- 14743
- 14744
- 14745
- 14746 *Clavija*
- 14747
- 14748 moss
- 14749 *Bactris* "albarica"
- 14750 *Adiantum*
- 14751 *Lycopodium*
- 14752 *Athurium*
- 14753 *Phaseolus*
- 14754 *Nepenthes*
- 14755
- 14756 *Mimosa* "siana"
- 14757 *Jatropha utilisissima* "yucfa"
- 14758 (amarant)
- 14759 *Calliandra*
- 14760 *Meibomia*
- 14761 *Atelaphyllus*
- 14762 *Phyllanthus*
- 14763 *Calathea*
- 14764 *Richardia* rub.
- 14765
- 14766 *Cyperus furax*
- 14767 *Dictyophora*
- 14768 *Milium*
- 14769 *Solanum*
- 14770 *Sestrum*

H. 4-8' leaves to 3' F. invol. g. to r. per. r.
 H. 10-20' F. fr. r. p. l. g. blut.
 Y. herb. F. invol. g. pet. w. p. dist.
 Y. herb. F. tubeg. Fr. dark g.
 Y. herb. F. diller. elsewhere.
 H. H. 1-3' spread. F. cal. g. pet. w. stay.
 Y. herb. F. pedicel, cal. cor. red.
 H. cor. w. fily.
 H. H. 15-20' erect, slender Fr. g. pedicel r.
 T. trunk 2" diam. Fr. g.
 T. 15' Fr. g.
 H. on decaying wood
 P.
 F.
 F. succ. ep. on tree trunk Sp. brownish
 V. succ. ep. on tree trunk F. pet. cream vv.
 H. pros. F. on trunk of 14754
 F. on trunk of 14754
 H. trunk 6-10' leaves 10-15'
 P. coarse
 H. coarse F. per. pale g. streaked faintly with r.
 V. herb. w. F. cor. r. ovary g. with red streaks, style & stig. vv.
 F. pet. w.
 T. semi-pros. F. pet. p. paler pros.
 H. woody F. pet. g. p. ant. b.
 V. woody F. per. g.
 H. erect, 4-6' F. bracts o, per. o.
 H. pros. F. cal. g. pet. w. Fr. b.
 V. woody F. cor. p.
 H. semi-pros. F. cor. p. w.
 H. upto 2' F. bracts g. cor. w. stig. pur.
 V. herb. F. cor. dark p. stig. pur.
 H. coarse + woody at base F. cor. dark p. stig. pur. w. dist.
 S. drop. brach. ant. y. pros.

Nov. 28 thicket along stream P. W.

swampy jungle

thicket along stream

faintly with r. red streaks, style & stig. vv.

banks of stream

u
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50

- 14771 Solanum
- 14772 Cyperus leyzellae
- 14773 ~~Cyperus~~ *Triantha*
- 14774 ~~Cestrum~~
- 14775 Commelina
- 14776 Bradberia
- 14777 Physalis
- 14778 Ipomoea polyarrthes
- 14779 Jussea
- 14780 Passiflora
- 14781 Utricularia
- 14782 Cassia
- 14783 Cyperus diffusus
- 14784 (amarant.)
- 14785 Sacciolepis
- 14786 grass
- 14787 Maranta
- 14788 Mimosa
- 14789 Salicornia
- 14790 Sterculia
- 14791 Ceratopteris
- 14792 Rynchospora corymbosa
- 14793 Utricularia
- 14794 Hyptis
- 14795 Rhynchosia
- 14796 Abutilon
- 14797 Fimbristylis
- 14798 Mimosa
- 14799 Piper
- 14800 Passiflora grayanaefolia
- 14801 Polygonum
- 14802 Hiraea
- 14803 Eupatorium odoratum
- 14804 Acacia
- 14805 Oldenlandia

S. sub-scand.
H. ^{repet. bran. f. ludo gr. w.}
H. erect, succ.
S. scand. Fr. g.
H. ± 2' F. oper. p. w.
V. herb. F. stan. w. without deep p. in pur. stripe near center wings pale p. keel w.
H. F. cor. gr. y. purp. spotted at base in
V. herb. F. cor. y.
H. coarse F. pet. y.
H. floating F. cor. y.
S. 7-10' quick-bran. F. pet. y.
H. damp soil
S. 8-12'
H. 3-4' ^{repet. at base}
H. 6-8'
H. coarse f. cor. bl. p.
H. 4-6' semi-proc. F. sta. w.
H. 1-2' floating on surface
H. 2-3' F. pet. rich p. rooting in mud
H. coarse 3-5'
H. F. cor. light b.
H. sub-proc. F. cor. light b.
H. coarse woody f. pet. pale y.
H. at base in sandy soil
H. somewhat woody 2-8' F. sta. w.
S. 2-3' few-bran. F. spikes w.
V. herb. F. bracts light g. free to base F. all fl. parts w. except g. sepal arm + stig. other descr. on sheet
H. F. w.
S. 3-5' F. pet. y. Fr. bright r.
S. 5-8' F. bracts g. darker dist. cor. red
S. 7-10' F. sta. w.
H. proc. F. cor. light b.

Nov. 28 banks of stream P. W.

thickets along river

in ditch
~~thicket along r.~~ clearing
in ~~marsh~~ marsh
thicket along r.
ditch
thicket along r.
in marsh

clearing
in marsh

~~clearing~~ marsh
clearing

damp thicket
in marshy land
in marshy land
thicket, climbing over low bushes

marshy thicket
along R.R.

14771
14772
14773
14774
14775
14776
14777
14778
14779
14780
14781
14782
14783
14784
14785
14786
14787
14788
14789
14790
14791
14792
14793
14794
14795
14796
14797
14798
14799
14800
14801
14802
14803
14804
14805

14771
14772
14773
14774
14775
14776
14777
14778
14779
14780
14781
14782
14783
14784
14785
14786
14787
14788
14789
14790
14791
14792
14793
14794
14795
14796
14797
14798
14799
14800
14801
14802
14803
14804
14805

14806 *Nyctis*
 14807 *Bidens primatifida*
 14808 palm
 14809 palm
 14810 *Hibiscus*
 14811 *Passiflora curvicolata*
 14812 *Ryncospora globosa*
 14813 grass
 14814 *Urena*
 14815 *Tournefortia*
 14816 leg.
 14817 *Souania*
 14818 amaranth.
 14819 *Pityrogramma calomelepa*
 14820
 14821 *Castilia*
 14822 *Pourouma* "lechero"
 14823 *Passiflora quadrangularis*
 14824 *Cordia*
 14825 *Eragrostis*
 14826 *Urena lobata*
 14827 *Meibomia*
 14828 *Sorua*
 14829 *Cyperus matsii*
 14830 *Sellaginella*
 14831 *Salpichlaena volubilis*
 14832 *Phyllodesandra*
 14833 *Adiantum*
 14834 (velas)
 14835 *Miconia*
 14836 *Alsophila blechnoides*
 14837 *Lindsaya lancea*
 14838 *Trichomanes pinnatum*
 14839 moss.
 14840 (rub.)

H. 3-4' F. cor. bl. vv.
 H. 12' F. rays light y.
 P. trunk 25' 2 1/2" diam. stipe 3-3 1/2'
 P. trunk 12' very spiny. frond: stipe 3'
 blade up to 16" trunk 3-4" diam.
 H. 12' F. light y. next, light
 M. herb.
 H.
 H. rooting in F. cor. p. l.
 H. mud
 S. low, with herb. F. cor. light r.
 branches
 V. herb. high stem red. purp. at center in,
 climbing F. unig. + keel purp.
 V. herb. F. pet. w.
 H. proo. branches F. greenish
 close to ground
 F.
 S. 8-10' F. buds purple
 H. rooting in mud, water 2' deep, F. sta. w.
 leaves floating
 T. 4-12' stem simple, straight
 at summit, 2" diam.
 V. herb. much- | main stem 1 1/2" diam.
 S. 6-8' bran. | F. cal. light g.
 H. coarse, woody F. pet. p. gynoph. r.
 H. at base, 4-8'
 H. proo. F. pet. b.
 H. proo. F. pet. y.
 H.
 F.
 F. twining around
 small trees, etc.
 V. climbing tree, F. spikes light g.
 trunks
 F.
 H. F. pet. + sta. w.
 S. 3-8' F. pet. + sta. w.
 Fr. b.
 F. bands in a crown
 F.
 F.
 on decaying wood
 S. 4-8' F. cor. apparent.

Nov. 28 in marshy land P. W.
 clearing
 jungle
 in upper half. in marshy land
 clearing
 in marshy land
 edge of woods
 , forming dense mass.
 clearing.
 jungle
 small pond
 woods
 Nov. 29 thicket Station "Kilometer 16" 110-115m.
 P. W. to P. Santos
 clearing
 woods
 dense woods
 densely forested stream banks
 dense woods
 stream banks
 dense woods

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 P.L. 6

- 14876 Piper
- 14877 Phyllocladon
- 14878 ~~sedge?~~ - barbatoi
- 14879 moss
- 14880 moss
- 14881 Chelodanthus
- 14882 Eupatorium
- 14883 Anacardium occidentale
- 14884 Moniera
- 14885 Bixa orellana "bija"
- 14886 Cayanus indicus
- 14887 Psychotria
- 14888 Abutilon
- 14889 Bignonia
- 14890 Urena
- 14891 Toranius
- 14892 Cecropia
- 14893 ~~Scutellaria~~ globosa
- 14894 Ficus
- 14895 Miconia
- 14896 palm
- 14897 Cyperus
- 14898 moss
- 14899 Triplaris
- 14900 palm
- 14901 Acalypha
- 14902 Dichromena
- 14903 Cleome
- 14904 ~~(Cleome)~~
- 14905
- 14906 Cleome spinosa
- 14907 ~~Crotalaria~~
- 14908 (rub.)
- 14909 Ipomoea
- 14910 Piper

S. 7-10'
 V. on tree trunks
 H. coarse, in clump.
 as decaying wood
 on decaying wood
 H. coarse F. cor. gr. y. prox. pale y. dist.
 S. 5-10' F. bracts w. bt margin, g. near center, pale bl. p. at mar. ifed within.
 T. 25-40' diam. F. pet. g. - p. tinged, s. - str. broad.
 H. proc. annual F. cor. w. - p. tinged mar. F. ant. y.
 T. ± 15' Fr. seeds r. F. pet. w. sta. y. prox, w. dist.
 S. 7-9' F. stay. + wings y.
 S. 6-12' F. cal. whit. r. cor. bright y, becoming light y.
 H. 3-7' F. ant. dark.
 V. woody F. cor. pur. paler prox. in. F. ant. dark.
 S. 6-12' F. cal. rusty b. F. pet. g. y. lustrous ant. F. pet. deep. b.
 V. herb. F. pet. deep. b.
 T. 30-40' F. stam. spikes w.
 H. 1-2' F. bracts bright pur. cal. w.
 S. 12-15' diam. F. cor. rich p, paler prox. F. sta. w. ant. gr.
 V. herb. P. 50-60' trunk 6-8" diam, green in upper part. prop roots to 4', infl. 20' from stem
 H. on wet boards
 H. slender 2 1/2' F. infl. at base of stem
 P. stipe 2' diam. 3-4' slender trunk
 T. 10-15'
 H. 1 1/2-3' F. pet. w. pub. twig. at base g. at apex. sta. prox. pet. w. infl. g. at center F. ant. light y.
 T. 20-40' F. w. g. tinged prox.
 V. woody
 H. 1-3' F. periant. w. p. ting. in. F. cor. pale r.
 H. 2-4' F. ant. pale y.
 V. herb. F. cor. pale r. F. ant. pale y.
 V. herb. F. cor. pale r. F. ant. pale y.
 S. 3-5'

Nov. 29 dense woods K. 16
 clearing, sandy soil
 thicket
 clearing
 open sandy soil
 clearing
 clearing reddish, lobes greenish at tip
 thicket
 pur. striped dist.
 waste land.
 edge of woods
 thicket
 10' leaves: clustered at summit 8-10' h. edge of woods
 waste land, sandy soil.
 thicket
 waste land, s. v.
 thicket
 dense woods
 clearing
 clearing
 out. prox, fleshy, some deciduous edge of woods P. W.
 clearing marshy land Polonia

P. L. 1.
 P. L. 2.
 P. L. 3
 P. L. 4, 5.

- 14946 (rub.)
- 14947 Cordia ferruginea
- 14948 Tuehea
- 14949 Tournefortia obscura
- 14950 Psychotria
- 14951 Solanobus
- 14952 Lasiacis
- 14953 Eupatorium odoratum
- 14954 Pitcairnia
- 14955 Martynia
- 14956 Stigmaphyllon
- 14957 Bignonia
- 14958 Passiflora maliformis
- 14959 (rub.)
- 14960 Eupatorium
- 14961 Psychotria
- 14962 Piper
- 14963 Passiflora crispida
- 14964 Dioscorea
- 14965 Ipomoea
- 14966 Ipomoea polyantha
- 14967 Eupatorium
- 14968 Waricywicsiana
- 14969 Passiflora seemanui
- 14970 Passiflora coriacea
- 14971 Bauhinia
- 14972 Asangelos
- 14973 Mikania
- 14974 Tindsaya
- 14975 Passiflora pala
- 14976 (melast.)
- 14977 Mikania
- 14978 Paulinia
- 14979 Sanchezia
- 14980 Eclides

S. 4-7' F. cor. w.
 T. F. pet. yellowish w.
 S. 3-4' F. branches of inflo. p. cal. light r. cor. r. pink
 V. herb. F. pet. grades of
 V. herb. F. corolla purplish.
 S. with herb. F. bracts g. tipped.
 S. bran. F. cor. bluish w.
 H. acaulescent F. outer per. sig. - emacens, gr. y.
 H. cor. r.
 V. herb. F. pet. y.
 V. woody F. cor. w.
 V. herb. F.
 T. F. bracts w.
 S. 4-6' bracts tipped with dark
 T. infl. with apices. 9.
 S. few-bran.
 V. herb. F. per. greenish
 V. herb. F. cor. w.
 V. herb. F. cor. y.
 V. herb. F. bracts g. tipped
 H. 2-3' cor. + sta. bl. purp.
 S. 10-15' bracts longish r.
 V. herb. F. cor. y. sta. purp.
 V. herb. F. (dried)
 V. herb. F. sep. g. ant g. y.
 S. low F. pet. y.
 V. herb. F. g. y.
 S. ~~5~~
 F. ~~5~~
 V. herb. F.
 S. 2-3' F.
 V. herb. F. buds gr. w.
 T. 10-15' F. pet. p. prox. paler dist
 S. 5-8' F. elsewhere.
 V. herb. V. milky sep. F. cor. pale y.

Dec. 4. thickets along trail bet. Mar. + El. Tau.

y. dist, becoming r. throughout

emacens, gr. y.

9.

Dec. 5 on rocky banks.
 thickets between Las Palmas + Rio
 Febrija

Dec. 6 Finha

Dec. 9 Parh

Dec. 11 ~~between Pied. + La Cruz~~ - roadside thicket

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

- 15051 Scleria
- 15052 Ischaemum distoma
- 15053 Stenomyruclius
- 15054 Sabicea
- 15055 Miconia rhodifolia
- 15056 Sipouma
- 15057 Polypodium
- 15058 moss
- 15059 moss
- 15060 (rub.)
- 15061 Piper
- 15062 Miconia
- 15063 Tibouchena
- 15064 Psidium arauca
- 15065 moss
- 15066 hepatic
- 15067 Tillandsia
- 15068 Psychotria
- 15069 Psychotria
- 15070 (rub.)
- 15071 Solanum
- 15072 Pterodendron
- 15073 Miconia
- 15074 Cecropia
- 15075 Jussiaea
- 15076 Solanum
- 15077 Monnina
- 15078 lichen
- 15079 lichen
- 15080 Hura
- 15081 Miconia
- 15082 Miconia ciliata
- 15083 Kyllinga caespitosa
- 15084 Nephrolepis
- 15085 Ageratum

H. F. cor. r. paler within
 H. ter. F. rachis, per. tube, + 5 per. l. br, deep r.
 H. repunt Fr. b.
 S. 6-8' F. pet. w.
 S. 5-7' F. cor. gr. y. Fr. dull.
 F. thin. repunt
 on rocks
 on soil
 T. 10-15'
 S. 6-10'
 S. or lant. 10-15' F. pet. w.
 S. 10-12' F. pet. magenta
 T. 10-15' F. pet. w.
 on fallen log.
 on tree trunk
 E. H.
 T. 15-20'
 T. 15-20'
 F. sepals r. cor. p. S. low.
 V. woody. F. ant. b.
 E. H.
 T. 15-30' F. pet cream w.
 T. 20-30' F. pet. light y.
 H. woody. F. pet. y.
 H. 1-3' F. cor. v. ant. y. tinged
 H. 2-4' F. cor. v. ant. y. tinged
 H. coarse lower 2-7' F. pet. deep
 H. perianth woody
 on twigs
 on twigs
 T. 25-40'
 S. 15-20' Fr. dull r. when
 S. 10-15' F. pet. w. sta + ant. y.
 S. 10-15' F. pet. light p. dark p.
 H. sta. + ant. dark p.
 F. heads w.
 F.
 F. cor. w. pappus (?)
 gent. br

Dec. 11. M. de los S. w. slope.
 woods

roadside M. de los S.
 thicket woods

Dec 12 mesa de las Santes
 except lip y.
 in open

15051
15052
15053
15054
15055
15056
15057
15058
15059
15060
15061
15062
15063
15064
15065
15066
15067
15068
15069
15070
15071
15072
15073
15074
15075
15076
15077
15078
15079
15080
15081
15082
15083
15084
15085

- 15086 Clidemia
- 15087 Marubium
- 15088 Cyathea
- 15089 Cassia
- 15090 Castilleja
- 15091 ~~Polygala~~ Cyperus cayennensis
- 15092 moss
- 15093 hepatic
- 15094 Lycopodium cominum
- 15095 Achyrocline
- 15096 Tagetes pusilla
- 15097 ~~Verbena~~ lichen
- 15098 lichen
- 15099 Clusia
- 15100 moss
- 15101 Meriania
- 15102 Myrsurus
- 15103 lichen
- 15104 Hypericum thesiodes
- 15105 Weinmannia
- 15106 Panicum
- 15107 Tybouchera albocentra
- 15108 Thibodia
- 15109 Licuala pectinata
- 15110 Licuala pectinata
- 15111 Richardia
- 15112 Paspalum unispikium
- 15113 Mhuosa
- 15114 Solanum
- 15115 Solanum
- 15116 ~~Atrium~~ Randia
- 15117 Polygamum
- 15118 Mikania cordifolia
- 15119 Juniperus "cipoc"
- 15120 Baccharis

H. 2-4' Fr. pur.
 H. Fr. cor. low.
 T. F. caudex 4-12'
 { weak semi-pro. S. } style 2 1/2', fr. 5"
 to erect S. flat-topped crown 4" h.
 H. 1/2-1 1/2' F. bracts flat base 9. at
 F. middle, tipped with r.
 H.
 on soil
 on soil
 F. coarse
 H. 2-3' F. heads gr. y.
 H. F. umbel. grass gr.
 H. rays light y.
 F. rays y. styles crown
 upright on bare rocks
 T. 20-35' - wide spread. crown
 trunk to branches 5'
 on soil
 H. F. pet. light p. b.
 F. ant. y.
 H.
 on soil
 H. F. pet. y.
 T. 6-15' F. sta. w.
 trunk to 2"
 H. 4-7' F. pet. deep b. w. at base.
 S. 10-15' F. lob. w. with b. hairs. ant. b.
 S. F. cor. r. prop. 1/3 v. dust. 1/3
 F. style pale r. prop. purp. dust.
 F.
 F. semi-succ. Fr. pur. w.
 H. semi-pro.
 H. woody 2-3' stem simple
 S. 4-6' F. cor. w.
 S. to 10' wide- F. ant. y. pet. light b.
 S. spread bran. F. ant. w.
 T. 10-15' slender. Fr. b.
 H. F. w.
 V. woody F. cor. ~~at apex~~
 T. 50-70' trunk 2' diam. 2 at apex
 S. 5-6' F. heads w.

Dec. 12 M. de S. Grassland

F. pet. y.

S. semi-pro. to
S. sub.-erect. to 2 1/2'

Edge of wds.

Grassland.

7u	98077
u	98078
u	98079
r	98080
r	98081
r	98082
u	98083
u	98084
u	98085
u	98086
u	98087
u	98088
u	98089
u	98090
u	98091
u	98092
u	98093
u	98094
u	98095
u	98096
u	98097
u	98098
u	98099
u	98100
u	98101
u	98102
u	98103
u	98104
u	98105
u	98106
u	98107
u	98108
u	98109
u	98110
u	98111
u	98112
u	98113
u	98114
u	98115
u	98116
u	98117
u	98118
u	98119
u	98120

P.P. 11

P.N. 6 O

- 15121 Louania
- 15122 Clusia
- 15123 Fuchsia
- 15124 Thibodia
- 15125 Hydrocotyle
- 15126 Selidnanthus
- 15127 Cassia
- 15128 Vittaria
- 15129 Lindsaya
- 15130 Lindsaya
- 15131 Anona
- 15132 (rub.)
- 15133 Selidnanthus
- 15134 Laphanox
- 15135 fungus
- 15136 hepatic
- 15137 Lophidium
- 15138 Cladonia
- 15139 Xaris
- 15140 Rhyssospora globosa
- 15141 Cephalea
- 15142 Rhyssospora glauca
- 15143 Paspalum
- 15144 Piper
- 15145 Polypodium tetrasorium.
- 15146 Elaphoglossum
- 15147 Polypodium glaucisylum
- 15148 lichen
- 15149 Oleandra
- 15150 Vittaria
- 15151 Psychotria
- 15152 Trichomanes
- 15153 Trichomanes robustum Fourm. aff.
- 15154 Palicourea
- 15155 Sabicea

F. spreading. Fr. 9. dist. ^{Fr. 9. dist.}
 T. 10-20' ^{Fr. 9. dist.}
 S. 5-10' ^{F. cal. deep. 9. prox. red}
 S. spread. ^{F. pet. fil. style}
 S. 6-12' ^{F. cor. r. prox. p. w. dist.}
 H. repent, in pool
 H. coarse, ^{F. cor. p., tube shiny}
 H. 5-20' ^{F. pet. y.}
 S. 2-5, spread, ^{F. pet. y.}
 S. bran, pros.
 F. upright in soil
 F.
 F. 20-30' ^{F. sep. 9.}
 T. 8-12' ^{F. cal. r. cor. p.}
 S. 8-12'
 H. 10-20' ^{see 126}
 H. sapro. ^{E. y. throughout}
 on decayed soil
 on tree trunk
 F.
 lichen on soil
 H. ^{F. per. y.}
 H. ^{F. pet. w.}
 H. ^{F. pet. w.}
 H. ^{F. pet. w.}
 H. ^{F. pet. w.}
 S. 3'
 F. at base of trees
 F. on tree trunk
 on tree trunk
 F.
 F. dependent from
 F. trunks & branches
 S. 8-20' ^{Fr. 9. b.}
 F. banks of small streams
 F.
 F. slender tr. ^{ill. bran. r.}
 T. 15' ^{F. cor. long. lit. y.}
 S. 10-15' ^{spreading tracts upright r.}

Dec. 12 M. de la S. woods
 tube & lobes.
 ant. 9.
 woods
 in pool - marsh.
 out. 9. in, long, striped with w. woods
 woods
 - banks of stream
 woods
 woods
 marshy meadow
 woods.

det. W. W. W. 1977

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

1 15156 *Jussiaea angustifolia*

1 15157 moss

1 15158 hepatic

1 15159 moss

1 15160 moss

1 15161 moss

1 15162 hepatic

1 15163 *Cleistania*

1 15164 *Miconia*

1 15165 *Borreria*

1 15166 ~~*Ilex*~~ *Symplocos* A. fruiting specimen

1 15167 *Andropogon*

1 15168 *Cuphea glabra*

1 15169 *Oleandra*

1 15170 *Crotalaria*

1 15171 *Themistoclesia cordifolia*

1 15172 *Buttiferia*

1 15173 *Juncus*

1 15174 *Mikania*

1 15175 *Fimbristylis*

1 15176 *Ligularia*

1 15177 *Cyperus*

1 15178 *Sporobolus*

1 15179 *Hatthoria* *Jacquinia*

1 15180 *Cassia*

1 15181 *Chaptalia*

1 15182 moss

1 15183 lichen

1 15184 lichen

1 15185 hepatic

1 15186 lichen

1 15187 *Ilex*

1 15188 *Mikania*

1 15189 *Eupatorium*

1 15190 *Xyris*

S. ^{few-bran.} 4-7' F. pet.

on tree trunks

around decaying twigs

on wet bank

on soil

on decaying wood

on decaying wood

S. 4-6' F. pet. bl. p.

H. suff. or woody F. pet. from w to pale b.

H. pros. F. cor. w.

S. 5-7' F. pet. w.

H.

H. ^{pro.} woody F. pet. mag.

F. sub-secan, climbing, among rocks

H. woody, bran. at base. F. cor. light

T. 15-20' F. pet. yellowish

H.

V. woody F. pappus w.

H.

H.

H.

H.

S. 1-3' F. pet. y.

T. 12-20' F. pet. y.

H. F. pappus w.

H.

on soil

on rocks

on rocks

on moist bank.

on rocks

S. 10-12' F. pet. w.

V. herb. F. cor. bluish w.

H. ^{at base} woody F. l. purp. style. str. g.

H. F. pappus pale b.

H. F. pet. y.

Dec. 12 M. de los S. woods

in crevices of bare rocks

thicket

wet meadow

crev. bare rocks.

M. de los S. in open

woods.

leaves silky beneath open.

wet marl

thicket

wet marl

M. de los S.

marshy land

Vertical column of small handwritten marks or numbers on the right edge of the page.

- 15191 *Vernonia*
- 15192 *Aristida*
- 15193 *Panicum*
- 15194 *Scleria luteola*
- 15195 *Metastelma*
- 15196 *Dichromena*
- 15197 *Mikonia*
- 15198 *Eupatorium*
- 15199 *Centropogon*
- 15200 *Mikania*
- 15201 *Eupatorium*
- 15202 *Allophila*
- 15203 *Trichomanes crispum* L. aff.
- 15204 *Nephrolepis*
- 15205 moss
- 15206 moss
- 15207 *Bromelia*
- 15208 *Peperomia*
- 15209 moss
- 15210 moss
- 15211 *Selaginella*
- 15212 lichen
- 15213 *Eupatorium*
- 15214 *Epidendrum*
- 15215 *Epidendrum*
- 15216 *Tibouchena*
- 15217 (acanth)
- 15218 *Panicum*
- 15219 *Malaxis*
- 15220 (rub.)
- 15221 lichen
- 15222 lichen
- 15223 *Renzalmia*
- 15224 *Scleria*
- 15225 *Eurya*

S. 6-8' crown compact, F. ray bright rounded, y.

H.

H.

H. woody F cor. w.

V. woody bracts w. at base

H.

T. 12-15' F. buds w. Fr. purple

H. I woody F. ~~deep purple~~ deep p. b.

H. 2-4' woody, bran. at base, long semi-pros. F. corr.

V. I woody F. pappus w. sta. w.

S. 4-7'

F. caudex to 2' l. semi-pros.

F.

F. on soil

among twigs

E. H. in basket of twigs 2.5 ft long

H.

among twigs

on wet bank.

on wet bank.

on rock.

S. 6-9' bran. spreading F. pappus w.

H. F. sepals salmon prox. deep red

H. F. column g. w. lip y. g.

H. F. act. + fr. mag. ant. y.

S. 5-8' stem simple, 2" diam.

H.

H.

S. 5-7' stem simple, leafy at summit F. sep. + pet. g. y.

on rocks

on rocks

H. coarse leaves basal.

H.

T. 15-20' bran. droop.

Dec. 12 M. de las S.
rocky crevices
Mesa

cor. w. light p. b at margin
style light purp.

rocky ledge.

det. Windisch 1977

woods

Mesa
exposed rocks

tinged with middle "crest" y.
y. g. above, purp. at apex

rocky cliffs

exposed rocks

rocky cliffs
exposed rocks

thicket
exp. rocks.
Mesa

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

P. P. & NG

P. P. & O-G

- 15261 *Pleurothallis*
- 15262 *Epideum longiflora*
- 15263 *Anthurium corifolium*
- 15264 *Piper*
- 15265 *Piper*
- 15266 *Miconia albida*
- 15267 *Anthurium*
- 15268 *Stelis*
- 15269 *Stelis*
- 15270 *Malaya*
- 15271 *Vittaria*
- 15272 *Polypodium (fauccolatum-type)*
- 15273 *Miconia*
- 15274 *Miconia*
- 15275 *Psychotria*
- 15276 (nb.)
- 15277 *Canva*
- 15278 *Pleurothallis*
- 15279 *Meriania*
- 15280 *Xyris*
- 15281 *Lycopodium*
- 15282 *Polygala meriana*
- 15283 *Crotal*
- 15284 *Melastoma*
- 15285 *Claphoglossum*
- 15286 *Palicourea*
- 15287 *Dichaea lycopodium*
- 15288 *Phyllocladon*
- 15289
- 15290 *Ocotea*
- 15291 *Brouelia*
- 15292 *Peperomea*
- 15293
- 15294 ~~(clad)~~ *Ficus*
- 15295 *Miconia*

E.H.
 E.H.
 H. at base of spath. r. pur.
 S. stem simple, straight
 T. stem erect simple 20" h.
 S. leafy upper 1/3
 S. bran. + stem slender
 H. terr. at base of tree
 E.H. F. sep. q. w. with
 E.H.
 E.H. F. sep. deep. rose
 F. column. y.
 F. on trunks and branches
 F. climbing on tree trunks
 T. slender
 T. 12-15'
 T. 15' h. or more with
 T. short bran.
 T. 12-15' Fr. black.
 T. 25-30' Fr. w. droop.
 H. coarse
 H. 5-7' Inf. r.
 E.H.
 H. F. pet. pale lilac
 H. F. but cream
 H. F. per y.
 F. in soil long bran. erect
 H. F. sep. p.
 S. 6-12' few-bran.
 T. 10-20' F. pet. mag. sta. w.
 F. tree with v.
 T. 15-20' F. bran. w. pur.
 F. cor. light b.
 E.H.
 H. scar. climbing | spath. w.
 H. up tree trunks
 T. 25-30'
 T. (fallen) w. l. deep. p.
 E.H.
 H.
 T. (h.?) prob. tall.
 T. 25-35'
 T. 20-30'

Dec 13. woods Mesa
 with weak, divar. bran. at summit
 spikes to ~~15~~ 2' l.
 spathe w.
 deep pur. spots
 also bit wet meadow
 numerous short bran.
 flat on ground.
 woods, edge
 rig at centre dense woods
 streaked + blotched with red out.
 in. pros. dust w.

15261
15262
15263
15264
15265
15266
15267
15268
15269
15270
15271
15272
15273
15274
15275
15276
15277
15278
15279
15280
15281
15282
15283
15284
15285
15286
15287
15288
15289
15290
15291
15292
15293
15294
15295

15331 lichen
 15332 moss
 15333 hepatic
 15334 Trichomanes
 15335 (juner.)
 15336 palm
 15337 Lindsaya
 15338 Alsophila
 15339 Clathroglossum
 15340 Polypodium
 15341 Polypodium
 15342 Trichomanes
 15343 moss
 15344 Polypodium deale
 15345 Peperomia
 15346 Selaginella
 15347 lichen
 15348 lichen
 15349 lichen
 15350 leaf rust
 15351 lichen
 15352 lichen
 15353 lichen
 15354 (clus.)
 15355 Blechnum forficatum
 15356 Polypodium
 15357 (rub.)
 15358 Trichomanes
 15359 Splegnum
 15360 hepatic
 15361 hepatic
 15362 Verbascum
 15363 Piper
 15364 Passiflora
 15365 (rub.) Policonria

on decaying wood
 on decaying wood
 on decaying wood
 F. on decaying wood
 H. climbing on tree trunk
 H. leaves long let. beneath
 P. trunk 8-10'; 4-6" diam. Fr. dark
 P. leaves 3-5'
 F. in crevices of rock
 T. F. trunk 6-10'; 2-4" diam.
 F. under projecting rock. Fr. appearing
 F. in crevices
 F. stem appressed to tree trunk
 F. upper 1 or 2 fr. fertile
 F. on wet banks.
 wet banks.
 F. wet banks, also rocky crev.
 H.
 H.
 on rocks
 on rocks
 on rocks
 on 15217?
 on rocks
 on rocks
 on rocks
 T. 12-20' Fr. depressed globose y. g.
 F. with 12 rib. with
 F. on tree trunk
 F. fallen. F. cal. y. g. reddish prox.
 T. pol. tall
 F. dependent from branches
 on moist banks
 on tree trunk
 on tree trunk
 S. 5-8' F. rays y. sta. + styles y.
 S. 5-7'
 V. herb. (this spec. juv.)
 S. F. cal. r. p.

Dec. #14 woods

Mesa.

rocky places
 exposed banks
 exposed rocks
 woods

exposed rocks

woods

edge of woods

15331
 15332
 15333
 15334
 15335
 15336
 15337
 15338
 15339
 15340
 15341
 15342
 15343
 15344
 15345
 15346
 15347
 15348
 15349
 15350
 15351
 15352
 15353
 15354
 15355
 15356
 15357
 15358
 15359
 15360
 15361
 15362
 15363
 15364
 15365

15401	Croton		S. 3-8'	F. pet. w.
15402	Eugenia	"aroyana"	T. 12-15'	F. bracts p.
15403	Cassia		S. 8-10'	F. pet. y.
15404	Hyptis		H. 2-3'	F. cor. mag. b.
15405	Duga		T. 25-30'	
15406	orchid		H. terr. leaves pur. beneath	Fr. q.
15407	Polypodium	lauce (type)	F. on rocks	
15408	Latura		S. 8-10'	F. cor. w. fl. droop.
15409	Vernonia		S. 4-7'	F. cor. + pappus w.
15410	Verbena		T. crown round	F. pappus b.
15411	Miconia		S. 3-5'	F. pet. sta. styles w.
15412	Solanum	ayurea	T. or S. 8-12'	F. cor. wh. g.
15413	Lantana		S. 3-5'	F. ant. y.
15414	Eupatorium		S. straggling	F. cor. w.
15415	Cassia		H. woody at base	F. invol. g. with r. viol.
15416	(comp.)		H. base 2-3'	F. lacin. at apex
15417	Eupatorium		T. 8-12'	F. pet. y.
15418	Matricaria		S. 3-8'	F. y.
15419	Cassia		H. coarse	F. invol. light g.
15420	Croton	"maquero"	S. ± 10'	F. cor. p. styles w.
15421	Piper		S. 3-4'	F. rays w. stig. g.
15422	Hyptis		S. 7-10'	F. cor. pinkish
15423	Baccharis	truncata	S. 6-8'	F. pet. y.
15424	Equisetum	giganteum "caula de caballo"	S. 12-22'	F. pet. w.
15425	Mimosa		H. woody 2-3 1/2'	F. cor. cream
15426	Indigofera		S. 5-7'	F. invol. g.
15427	Miconia	"clausa"	T. 12-20' leaf	F. cor. gr. w.
15428	Phaseolus	"tote"	V. woody	F. to 8"
15429	Eupatorium		V. woody	F. pet. p. prox. r. dist.
15430	Clusia		T. 12-20'	F. sta. w. prox. b. p. dist.
15431	Bradberia		V. herb.	F. pet. p.
15432	(rub.)		S. 6-8'	F. pet. w.
15433	Zizyphus		S. or small T.	Fr. b. F. pet. gr. w.
15434	Evolvulus		V. turning herb	F. cor. light b.
15435	Escobedia	"asofriu"	H. stiff	F. 1 cm. diam. cor. w.

Dec. 17. slopes, n - Mesa

woods
dense forest floor - Mesa
Mesa
Dec. 15 in garden - Mesa
n. slopes - Mesa

cor. pale p, r. viol. at apex

invis p. purp, also keel
center, purp. at center

"roots used for yellow coloring matter"

Handwritten notes and numbers in the right margin, including a vertical list of numbers (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50) and some illegible text.

15436	<i>Trixis</i>	(common at this alt.)	S 2-5'	F involg. rays gold. y.
15437	<i>Gliricidia sepium</i>		T. with erect leafy branches. 6-12'	F. cor. o. y. pet. p.
15438	<i>Serjania</i>		V. woody	F. pet. w.
15439	<i>Luggeria</i>		S. 5-7' with droop.	F. cor. w.
15440	<i>Iponoea</i>		S. flowering herb.	F. cor. p, paler prox.
15441	(comp.)		H. coarse.	F. cor. light g.
15442	<i>Vernonia</i>		H. 5-8'	F. styles purp.
15443	<i>Cosmos</i>	"napola"	H. 4-6'	F. involg. g. cor. pale p. pappus w.
15444	<i>Vernonia</i>		H. 3-5'	F. rays deep p. cor. gr. with golden lobes
15445	<i>Piper</i>		S. 5-7'	F. cor. + pappus w.
15446	<i>Epidendrum</i>	"arvil"	S. 4-6'	
15447	<i>Paclura</i>		E. H. on wall.	F. sep. deep purp.
15448		"plantavilla"	I. 35-50' in cemetery	F. lip deep p.
15449	<i>Medicago</i>	Canina	H. 20-30'	F. sep. light r. pet. deep r.
15450	<i>Solanum</i>		T. 11'	F. cor. w. faint y.
15451		"almendro"	T. 50-60', spread.	
15452	(sub.)	"oro blanco"	T. 10-12'	
15453	<i>Passiflora maliformis</i>		V. herb. F. bracts light g. sep. light g. out.	
15454	<i>Passiflora pallida</i>		V. herb. F. same-spotted in. outer fil. upper fil. light g.	
15455	<i>Strutianthus</i>		H. per. dependent from trees	
15456	<i>Smilax</i>		V.	
15457		"grayava del no"	T. 20-25'	F. pet. w. sta. y.
15458		"quajabito de quinea"	T. 10-12'	
15459	<i>Mimosa</i>	(comp.)	T. 10-12' trunk 6" diam. F. sta. g.	
15460	<i>Baccharis</i>		S. straight 2 way, flat topped	
15461	<i>Bignonia</i>		S. 6-10' trunk to 2" diam. F. cor. w. styles	
15462	<i>Cuglia</i>		S. 2-5' bran.	F. cor. mag. p.
15463	<i>Mimosa</i>		S. 6-10'	F. pet. w. sta. y.
15464	<i>Cavendishia</i>		H. somewhat woody 3-6'	F. sta. p.
15465	<i>Biophytum</i>		S. 4-8'	F. cor. light p.
15466	<i>Tibouchena</i>		H. coarse	F. pet. p.
15467	(comp)		S. 2-4' bran. spread	F. pet. deep mag.
15468	<i>Eclipta</i>		V. herb.	F. rays w. bracts gold. y.
15469	<i>Malvastrum</i>		S. 3-5'	F. cor. y.
15470	<i>Euphorbia</i>		H. pro.	F. pet. light p.

Dec. 15 u. slopes - Mesa
 hills southward from Piedecuesta
 styles deep purp.
 sp. p. green tipped in. column g. y. at apex
 Piedecuesta
 Bucaramanga

Dec. 16
 lip deep r. o. r. spotted in. garden - Buc.
 Dec. 17 in yard Buc.
 Dec. 18 Bucaramanga
 densely deep-r. spotted in. pet w. out. less densely
 r. w. striped prox. b. + w. dist. gym. + styles y. g. per. dotted.
 w. in. pet. w. p. at margin as long as sepals. Fil. g. prox.
 grass g. Styles purp.

Dec. 19
 Dec. 20
 Piedecuesta
 between Pied. + Vegas
 Open hillside.
 Dec. 16 crevices of tiles in patio Buc

980
 P-5
 P. Q. 1. N. S.
 P. Q. 2.
 Q. 3
 Q. 4
 1200
 1200-
 2000.

- 15576 Passifloraxista
- 15577 Rubus
- 15578 Bauera
- 15579 Centropogon
- 15580 Calceolaria
- 15581 Centropogon
- 15582 Calceolaria angustifolia
- 15583 Myosotis
- 15584 Alousoa
- 15585 Castilleja
- 15586 Berberis
- 15587 Bauera
- 15588 Agrostis
- 15589 Bromus
- 15590 Hydrocotyle
- 15591 Agrostis minor
- 15592 Geranium
- 15593 Bidens
- 15594 Anaca
- 15595 Cardamine
- 15596 Mantia
- 15597 Siegesbeckia
- 15598 Oxalis
- 15599 Ranunculus
- 15600 Urtica
- 15601 Castilleja
- 15602 Melastoma crassiflora
- 15603 Lycopodium
- 15604 Scleria
- 15605 Bartsia
- 15606 (orchid)
- 15607 Polypodium
- 15608 Peperomia
- 15609 Cerastium
- 15610 Fuchsia

V. herb. F. tube g. out. w. in
 V. woody F. P. corona w.
 V. herb. F. pet. p.
 V. herb. F. outer sep. p. - purp.
 V. woody F. inner y. dist. g.
 H. 2-4' F. cor. y.
 S. elong. F. cor. o. r.
 S. brachi. F. cor. y.
 S. 2-5' F.
 H. F. cor. bright b.
 H. F. y. at celit.
 H. F. cor. o. r. sta. br. y.
 H. 6-15" woody below F. bracts r.
 F. cor. o.
 F. pet. y.
 V. herb. F. outer sep. r.
 F. inner & br. y.
 H.
 H.
 H. repent
 H.
 H. ~~brach.~~ bran. F. repeat.
 H. F. cor. y.
 H. coarse F. sep. red. purp.
 to 5' F. cor. ant. y.
 H. weak F. pet.
 H. weak.
 H. succ. F. cor. y.
 H. succ. F. cor. y.
 H. matted F. sep. y.
 H. stem erect
 H. F. bracts r.
 10-12' F. cor. yellowish.
 F. pet. deep. r.
 H. mat. soil F. cor. w.
 H. succ. F. cor. deep purp.
 F. w. at base
 H. succ. at base F. cor. w. p. dist.
 H. stem erect
 E. H.
 F.
 E. H. succ.
 H.
 B. F. tube p. r. out.
 F. w. in

Dec. 20 woods far above Vegas
 lot at upper margin.
 pro. purp. - dotted
 exposed hillside
 w.
 e. h.
 not spotted ant. purp. w.
 paramillo
 Jan. Vegas
 pt. light r.
 sta. w.

3000-
3300
3300-
3700
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

- 15681 *Scaevola*
- 15682 *Bidens*
- 15683 *Hieracium*
- 15684 *Espeletia* "frailigone"
- 15685 *Ranunculus*
- 15686 *Andropogon*
- 15687 *Eupatorium*
- 15688 *Verbena*
- 15689 *Eupatorium*
- 15690 *Miconia*
- 15691 *Cestrum*
- 15692 *Solanum*
- 15693 *Werneria*
- 15694 *Hypericum*
- 15695 *Jamesonia*
- 15696 *Cyrtopteris*
- 15697 *Odontosoria*
- 15698 *Miconia*
- 15699 *Polystichum*
- 15700 *Struthiopteris*
- 15701 *Polypodium*
- 15702 *Eupatorium*
- 15703 *Graphalium*
- 15704 *Erigeron*
- 15705 *Scirpus*
- 15706 *Senecio*
- 15707 *Elaphoglossum*
- 15708 orchid
- 15709 *Elaphoglossum*
- 15710 *Elaphoglossum*
- 15711 *Senecio*
- 15712 orchid
- 15713 *Polystichum*
- 15714 *Peperomia*
- 15715 *Epilobium*

F. low, cor. w.
 D. pro. cal. deep n
 H. rays br. y. cor. o.
 H. cor. br. y.
 H. coarse, leaves & spikes
 H. basal, sep. y.
 H. 3-4' in clumps invol. q. cor. lobes
 H. woody at base, invol. q. br. y. li. b.
 T. 10-15' rays & cor. br. y. abostyle.
~~F. 5-10' cor. & style~~
 T. 5-10' crown nearly spher.
 T. trunk 4-5' h. 8" diam.
 S. 5-7' cor. deep pu. out.
 H. lobes q. at mar.
 H. cor. li. b. ant. y.
 H. rays w.
 S. semi-pro. pet. y. sta. 50-100
 F.
 F.
 F.
 S. compact pet. pu. ant. br.
 F. 2-5'
 F. caudex upright 4-8" diam.
 F. 1/2-2' high, base of stipes
 F. to 2' cor. & sta. w.
 H. heads gr. y.
 H.
 H. slender pet. light p.
 H. erect, cor. br. y.
 H. slender
 F.
 H. ep. sep. quib. not. with
 F. col. y. q. prox pu. dist
 F.
 T. 10-12' cor. y.
 H. ep.
 F.
 F. H.
 H. pet. de. p.

Dec. 20 paramo of Vegas

Dec. 21 ~~F~~ edge of paramo

2700 3
3800

3600-
3700

3

1

3

2

2

2

2

paramillo

- 15716 Hieracium
- 15717 Rubus
- 15718 lichen
- 15719 lichen
- 15720 moss
- 15721 Orthrosanthus
- 15722 Tribodia
- 15723 lichen
- 15724 moss
- 15725 hepatic
- 15726 Polypodium
- 15727 Polypodium
- 15728 Lipsoloma
- 15729 Peperomia
- 15730 Eupatorium
- 15731 (melast.)
- 15732 Osteolemus
- 15733 Begonia
- 15734 Fuchsia
- 15735 Buddleia
- 15736 Geranium
- 15737 Weinmannia
- 15738 Laurus
- 15739 Stellaria
- 15740 Polypodium triangulare
- 15741 "
- 15742 moss
- 15743 hepatic
- 15744 Eupatorium
- 15745 Eupatorium
- 15746 Polypodium
- 15747 Polypodium
- 15748 Polystichum
- 15749 lichen
- 15750 moss

H. heads y.
 V. woody pet rich p.
 soil
 soil
 soil
 H. per. br. br
 T. 30-40' cor. r, yish. dist
 on twigs
 on decaying wood
 on decaying wood
 on trees on 722
 on trees
 H.
 H. on trees on 722
 S. 7-10' style yish g.
 T. slender pet. yish. w.
 ? Fr. y. g.
 H. succ. pet. w. stay y.
 (V. or S.?) sep. pet, full r. ant. cream
 T. cor. b.
 H. pet. deep p.
 T. 7-10' pet. w.
 H.
 H.
 F.
 S. pet. mag. ant. y.
 S. on decaying wood
 H. woody cor. grayish w
 S. 5-10' lobes styles pale
 cor. g. prox fine w. dist. styles + ant. w.
 F.
 F.
 F.
 soil
 soil

Roc. ~~34~~ paramillo
 bet. above Vegas

3600
 3200
 3400
 3400
 3600

2

34

34

81701
 81702
 81703
 81704
 81705
 81706
 81707
 81708
 81709
 81710
 81711
 81712
 81713
 81714
 81715
 81716
 81717
 81718
 81719
 81720
 81721
 81722
 81723
 81724
 81725
 81726
 81727
 81728
 81729
 81730
 81731
 81732
 81733
 81734
 81735
 81736
 81737
 81738
 81739
 81740
 81741
 81742
 81743
 81744
 81745
 81746
 81747
 81748
 81749
 81750

- 15751 moss
- 15752 moss
- 15753 moss
- 15754 moss
- 15755 Elaphoglossum
- 15756 Probatulus
- 15757 Paspalum
- 15758 Odontosoria
- 15759 Arenaria minuta
- 15760 moss
- 15761 moss
- 15762 Solanum
- 15763 Eupatorium
- 15764 Matricaria
- 15765 Senecio
- 15766 Oxalis
- 15767 Steltaria
- 15768 Hieracium
- 15769 Paspalum
- 15770 Agrostus
- 15771 Elaphoglossum
- 15772 Stipa
- 15773 grass
- 15774 Asplenium
- 15775 Elaphoglossum
- 15776 Eupatorium
- 15777 (Melastomaceae)
- 15778 Asplenium
- 15779 Viola
- 15780 Mitholacna
- 15781 (comp.)
- 15782 Solanaceae
- 15783 Phytolacca
- 15784 Bohemia
- 15785 Lycopodium

soil
 soil
 soil
 soil
 Fan soil y. shrubby pet. de.p.
 H.
 F.
 H. repent. pet. w.
 soil
 soil
 S. 6-10' F. cor. cream
 S. 4-5' cor. y. ant. y. very
 sty. light p. violet
 H. ray br. y.
 H. infl. green y.
 H. succ. pet. y.
 H. repent. pet. w.
 H. infl. y.
 H.
 H.
 F. on rocky bank
 H.
 H.
 F. on rocks
 F. on rocks
 S. 5-8' cor. sty. cream
 S. 3-4' pet. rich. alb
 F. on rocky banks
 H. rep. pet. light b, striped
 E. 8-12' lobes y. sty. green
 S. 3-4' cor. cream
 S. 1-3' cor. dull p. b.
 H. 1-3' sep + fil. de.p.
 V. herb. lower sep. lg
 F.

Dec. 21 paramillo

3400
~~3300~~
 3600

between above Vegas
 ant. bry. * exposed banks above Vegas
 with darker b.
 thicket
 minor y. unpotted

~~3300~~
 3300-
 3400

Fu
 |
 |
 |

3

15786 *Elaphoglossum*
 15787 *Stipa*
 15788 *Pernettya*
 15789
 15790 *Mimulus*
 15791 *Seranium*
 15792 *Lycopodium*
 15793 *Baheria* "chupamplana"
 15794 *Thibodia*
 15795
 15796 *Gaultheria*
 15797 *Elaphoglossum*
 15798 *Elaphoglossum*
 15799 *Lycopodium*
 15800 *Vaccinium*
 15801 *Melastoma*
 15802 lichen
 15803 *Thibodia*
 15804 *Alsophila*
 15805 *Sisyrinchium*
 15806 *Thibodia*
 15807 *Elaphoglossum*
 15808 *Elaphoglossum*
 15809 *Polypodium*
 15810 *Pittacanthus*
 15811 (orchid)
 15812 *Odontocoma*
 15813 *Polypodium*
 15814 *Lycopodium*
 15815 *Gaultheria*
 15816 moss
 15817 hepatic
 15818 *Trichomanes*
 15819 *Reperomea*
 15820 *Thibodia*

F. on bank.
 H.
 S. 3-10'
 H.
 H. cor. y.
 H. pet deep p.
 F.
 V. herb. per. sep. all deep
 S. 10-15' cor. r.
 S. bran. dependant.
 S. depend. pet w. crown q.
 S. 10-12' cor. lip Fr. r. b.
 F.
 F.
 F.
 S. 6-8' cor. light p.
 S. 3-5' stems erect with short lat.
 peaty soil
 S. cor. br. r.
 F. caudex 6" above gr. fr., incl. style, 3'
 H.
 F. cor. deep. r. q. at apex
 F.
 F.
 F.
 E. S. bran. sep. scarlet
 H. terr. droop. pet. sep. at base
 F.
 F.
 F.
 S. 5-8' comp.
 on soil
 on soil
 on wet log
 H. succ. on wet fallen T.
 S. or low T. cor. de. p. prof.

Dec. 21 exposed hillside above veg.
 woods
 woods
 e. h.
 bran. pet. deep. mag
 edge of woods
 e. h.
 thicket
 e. h.
 woods
 much palm diet

3300
 3400
 2
 1
 1
 1
 1
 2
 1
 2
 3300-
 3200.

15821	orchid	E.H.	fr. g.
15822	Bromelia	E.H.	bracts r.
15823	Senecio	S. 3-4'	heads y.
15824	Hypericum	S. 2-4'	much-bran. pet. y.
15825	Gaultheria viscosa	S. 4-7'	sep. r. cor. p. w.
15826	lichen	on twigs	
15827	Guaphalium	H. I woody	heads pearl w.
15828	grass	H.	
15829	Liabum	S. 8-10'	ray ls. y. cor. deep
15830	grass	H. 6-15'	
15831	Osteonales	T.	
15832	Ruta	H. coarse,	pet. w.
15833	Matricaria	H. odor.	ray w. cor. y.
15834	comp.	S. 2-3'	rays w. ant. juv.
15835	grass	H.	
15836	Adipocline	H. to 3'	
15837	Gaultheria	S. 2-4'	cor. li. p.
15838	Hieracium		heads y.
15839	Sestrum		col. tube r.
15840	Weinmannia	T. 15-20'	lobes gr. y.
15841	Eupatorium	S. 6-10'	sta. w.
15842	Hydrocotyle	T. 20-30'	cor. w. sty. b. w.
15843	Tillandsia	E. H.	infl. o. r.
15844	Elaphoglossum grandifolium	F. on soil	
15845	Elaphoglossum	F.	
15846	Polypodium angustifolium	F.	
15847	Polypodium	F. on tree	
15848	Polypodium	F.	
15849	Pluchea	T.	
15850	Solanum	S.	cor. cream. ant. y.
15851	Hypericum	S. 2-3'	cor. y.
15852	Absorplula	F. trunk 20'	fr. (incl. st.) 6'
15853	Weinmannia tomentosa	T. 20-30'	
15854	Polypodium australe	F.	
15855	Gaultheria alba	S. 7-9'	br. + cor. w.

Dec. 21 woods

above Vegas

3200
3300

e. h.
edge of woods.

e. h.

woods

e. h.

lobes gr. y.

woods

e. h.

3120-
3200

Vertical text on the right edge of the page, possibly bleed-through or a separate column of notes.

- 15856 *Hypericum*
- 15857 *Erythrodia*
- 15858 *Polypodium*
- 15859 *Stelis*
- 15860 *Eupatorium*
- 15861 *Cyrtia*
- 15862 *Moringa* ~~lucida~~
- 15863 *Moringa*
- 15864 *Viburnum* "garrocha"
- 15865 (rub.)
- 15866 (laur.)
- 15867 (laur.)
- 15868 *Vaccinium*
- 15869 *Miconia*
- 15870 *Epidendrum fimbriatum*
- 15871 *Thibodia*
- 15872 *Phoradendron*
- 15873 *Tillandsia*
- 15874 *Claphoglossum*
- 15875 *Lepanthes*
- 15876 *Asplenium salicifolium*
- 15877 orchid
- 15878 *Stelis*
- 15879 *Melastoma* "marcato"
- 15880 *Thibodia*
- 15881 lichen
- 15882 *Saccoloma*
- 15883 *Claphoglossum*
- 15884 moss
- 15885 *Polypodium*
- 15886 *Allophila*
- 15887 lichen
- 15888 moss
- 15889 orchid
- 15890 *Palicourea*

S 1-3' pet. y. sta. ± 20
 H. terr luds g. w.
 F. on tree
 H. ep.
 H. ± 2 1/2' cor. + sty. w.
 T. F.
 S. 6-8' 5-11
 S. 5-7' 6-8'
 T. 12-16' cor. w.
 S. erect 8-12'
 T.
 T.
 S.
 V. woody cor. w. sty. w.
 H. terr sep. light p. to w.
 S. cor. dark to pale p.
 E. H. on *Permettya*
 E. H.
 F. on soil
 E. H.
 F.
 E. H.
 E. H. sep. pale g. rich pur. or
 T. trunk 7-8" pet. nch. b. or pale
 S. bran. acan. cor. br. or
 S. or woody v. cor. br. or
 on tree trunks
 F. fr. (incl. st.) 3-5'
 F.
 on soil
 F.
 T. F.
 on tree
 soil
 H. ep. seq. r.
 S. slender cor. pale. at base
 S. ± 6'

Rec. 21 e. h. woods
 dry banks.
 e. h. woods
 sta. p. poor w. dist. sty. p.
 Reduct. lobes g.

3020-3200
 2700-2000
 15856
 15857
 15858
 15859
 15860
 15861
 15862
 15863
 15864
 15865
 15866
 15867
 15868
 15869
 15870
 15871
 15872
 15873
 15874
 15875
 15876
 15877
 15878
 15879
 15880
 15881
 15882
 15883
 15884
 15885
 15886
 15887
 15888
 15889
 15890

15891		S. 6-8'	cor. g. w.
15892	mass	on soil	
15893	mass	on soil	
15894		T. 15-20'	pet. w.
15895	Quercus "roble"	T. 30-60'	
15896	Miconia "tuno"	S. 6-10'	pet. p.
15897	Weinmannia "lusevillo"	T.	
15898	Mudilebeckia	V. woody	stems br. r.
15899	Psychotria	S. 6-12'	cor. p.
15900	lichen	on soil	
15901	lichen	on soil	
15902	mass	on soil	
15903	Fycopodium "madrillo"	F.	
15904	Pteranoptera bancroftii	F.	
15905	(gent.)	S. 8-12'	cor. rich p. - y. poor in
15906	(moss)	F. 15-25'	faintly
15907	Viola "granosa"	H. repent.	cor. w. faintly
15908	hepatic	on decaying wood	pet. viol, pur. strip
15909	Hymenophyllum	F. on tree	
15910	Polypodium	F.	
15911	Passiflora longipes	V. herb.	
15912	Epidendrum	H. terr.	per. p. col. deep p.
15913	Gaultheria "cauraxero"	S. 8-12'	bracts rich p. pale
15914	Marchantia	on soil	
15915	Ficus	T.	
15916	mass	on soil	
15917	mass	on soil	
15918	Zibouchea	S.	
15919	Mitella	T. 15-20'	cor. pale p. to w.
15920	Hypocnemum	S. 2-3' ascending	pet. & sta. w.
15921	mass	on soil	br. pet. y.
15922	mass	on soil	
15923	Ochloptera	F.	
15924	mass	on soil	
15925	mass	on soil	

Dec. 21 woods

2700-3000

pink striped (used for fevers)

thickets e.l. thickets

15925

15926	<i>Passiflora lactosa</i>	V. herb. descr. elev.
15927	<i>Rauvolfia</i>	H. sep. y.
15928	<i>Odontosoria</i>	F.
15929	<i>Odontosoria</i>	F.
15930	(<i>Bromeliad</i>)	E.H. wfl. l.r. r.
15931	<i>Suriana</i>	T 20-25'
15932	bamboo	V. herb.
15933	<i>Eupatorium</i>	S 8-10' cor. sty. rich p.
15934	<i>Melastoma</i>	S herb. pet. rich p.
15935	<i>Passiflora lyacinthiflora</i>	V. herb.
15936	<i>Splachnum</i>	on soil
15937	<i>Clusia</i>	T 35-40' wide spread
15938	<i>Ficus</i>	T
15939		T
15940	<i>Lycopodium</i>	F.
15941	<i>Melastoma</i>	T. pet. l.r. r.
15942	<i>Asplenium</i>	on trees spathe p. out.
15943	<i>Piper</i>	T 20' tr. lran. near sun
15944	<i>Poly podium</i>	F. rep. at base of trees
15945		T
15946	orchid	H. terr. pet. w.
15947	(<i>eric.</i>)	S 4-6' cor. w.
15948	<i>Asplenium salicifolium</i>	F on trees
15949	<i>Pilea multiflora</i>	H. succ. rep.
15950	<i>Asplenium macrocarum</i>	H. at base
15951	<i>Passiflora biflora</i>	F.
15952		V. herb.
15953	<i>Urena impressa</i>	V. woody
15954	<i>Antheurium</i>	S 6-12'
15955	Hebe <i>Erythroides laigifolia</i>	H. terr. spathe g. out, paler in becoming deep p.
15956	<i>Erythroides caulescens</i>	H. terr.
15957	<i>Poly podium flexinervum</i>	H. terr.
15958	<i>Bromelia viridia</i>	F. leaves basal cor. w.
15959	<i>Elaphoglossum ligulatum</i>	H. terr.
15960	<i>Miconia</i>	F. 8-12' pet. w.

Dec. 21. thickets above Vegas
fields
e. h.

woods

pet. g. y.

H. in

Rec. 23 w. to woods

Vegas

2800-3000

2600-2900

1
1
1
2
#4
1
3
1
2
1
2
#4
#4

- 15961 (juncus)
- 15962
- 15963 *Cardamine*
- 15964 *Aulonium microspathum*
- 15965 *Aulonium*
- 15966 *Erythodes attenuata*
- 15967 *Psychotria*
- 15968 *Alseodora* *Trichomanes microphylla (Bl.) J. Sm.*
- 15969 hepatic
- 15970 moss
- 15971 lichen
- 15972 *Asplenium attenuata*
- 15973 *Polypodium luteum*
- 15974 lichen
- 15975 *Peperomia variegatum*
- 15976 *Centropogon*
- 15977 *Miconia*
- 15978 *Thibodia*
- 15979 (loganiaceae)
- 15980 *Thibodia*
- 15981 hepatic
- 15982 hepatic
- 15983 moss
- 15984 *Psychotria*
- 15985 *Ilex*
- 15986 *Columnia*
- 15987 *Thibodia*
- 15988 *Vaccinium*
- 15989 *Weinmannia obtusifolia*
- 15990 *Cinchona*
- 15991 *Quercus*
- 15992 *Trichomanes capillaria*
- 15993 *Miconia*
- 15994 *Polypodium angustifolium*
- 15995 *Polypodium macrodonum* (cuticle leaves)

H. low scan cor. 0.
 H. low scan cor. q. w.
 H. scan.
 H. terr. spathe grass g.
 H. terr. spathe waxy ju.
 H. terr. per. w. column y.
 S. fr. d.g.
 T. F. caudex 2' stipe 2' fr. 4'
 on soil
 on soil
 on trees + soil
 F.
 F. on trees
 F. fr. drooping
 on trees
 H. on trees
 V. woody cor. pale p.
 V. herb. cor. + peep. q. w.
 V. woody
 S. slen.
 S. 8-15' bracts p. cal. y. p.
 on soil
 on trees, drooping
 on decaying wood
 S. 6-12' cor. q. fr. w.
 S. 10-12' cor. q.
 S. cor. br. y.
 H. cal. p. style p.
 S. 10-20' cor. light p. paler dist.
 S. 8-15' peris. cal. + style.
 S. 10-12'
 T. 30-40' cor. b.
 T. 12-20'
 F. on trees
 S. 8-12' pet. t. fil. light pale.
 cut li. q.

Rec. 22 woods
 Vegas
 2600-2900
 1
 3
 1
 #u
 #u
 3
 prox, w. dist. br. at mar. cor. r. p.
 edge of woods
 fil w. ant. br, paler dist.
 woods
 e. of woods
 woods.

15961
15962
15963
15964
15965
15966
15967
15968
15969
15970
15971
15972
15973
15974
15975
15976
15977
15978
15979
15980
15981
15982
15983
15984
15985
15986
15987
15988
15989
15990
15991
15992
15993
15994
15995

- 15996 Polypodium pumila
- 15997 (vaccin.)
- 15998 Quercus
- 15999 Lycopodium
- 16000 Meibomia
- 16001 palm
- 16002 moss
- 16003 Boraria
- 16004 moss
- 16005 Cyperus macrochaetus
- 16006 Glucoides
- 16007 Fragaria
- 16008 moss
- 16009 Eupatorium
- 16010 Thabum
- 16011 Mitharia
- 16012 Cuphea
- 16013 Solanum
- 16014 Tibouchena
- 16015 Veronica
- 16016 Sisyrynchium
- 16017 Thalictrum podocarpum
- 16018 Equisetum quinqueidentum
- 16019 Pilea crevata
- 16020 Pilea rotundifolia
- 16021 Polypodium ciliatum
- 16022 Trichomanes elongatum
- 16023 Hydrocotyle Humboldtianum
- 16024 Sellaquilla
- 16025 Pilea atropurpurea
- 16026 moss
- 16027 Tropaeolum
- 16028 Peperomia diformis
- 16029 moss
- 16030 moss

F. 8-12'
 S. 8-12'
 T.
 F.
 H. stem. b. pu. wings
 P. stipe 3' + keel lar.
 fr. 3'
 on decaying wood
 H. cor. w.
 on decaying wood
 H.
 H. part. w.
 on decaying wood
 S. 8-15' cor. pap. li. stem col.
 styles b. stig. w.
 S. 10-12' rays br. y. cor. y.
 V. woody. pappus li. b.
 H. repeat. pet. p. to w.
 H. erect
 T. 10-12' trunk 2" diam cor. w.
 H. pet. pale p. to w. aut. y.
 H. sta. deep p. aut. y.
 H. cor. tuberc. y. q. lobes p.
 cor. pu. striped
 H. per y. ± 1 cm diam
 H. coarse sep. q. aut. y.
 F.
 H. succ. repeat
 H. at base to 3' long
 H. succ.
 F. dependent from branches
 F. dependent from branches
 H. repeat in
 H. wet soil
 F. in wet soil
 H. succ. repeat whole plant
 deep pu.
 on trunks
 V. herb. cal. spur red, lobes q.
 cor. deep pu. striped with q.
 H. succ. closely
 H. esp. to trunks
 on trunks
 " "

Dec. 22 woods
 edge of woods Vegas
 field
 edge of woods
 woods
 field
 woods
 field
 woods
 edge of woods
 field
 edge of woods
 field
 thicket
 marsh
 dense woods along stream
 sta. bl. per. aut. steel bl.

2600- Fu
 2900

2800
 2900
 3000
 3100
 3200
 3300
 3400
 3500
 3600
 3700
 3800
 3900
 4000
 4100
 4200
 4300
 4400
 4500
 4600
 4700
 4800
 4900
 5000

- 16031 *Elaphoglossum parvulum* F. on trees
- 16032 *Sabira* H. to 2 1/2' at base cor. rch p. w. at base
- 16033 *Cyathea* F. trunk 3' h. fr. 7'
- 16034 *Elaphoglossum philoglyphum* F. terr.
- 16035 *Peperomea* H. on tree
- 16036 *Atturnum rotundifolium* H. on tree spathe q.
- 16037 *Begonia* S. 2-4' long. pet. w. wide-spread. sta. y.
- 16038 *Riccia* on leaf of 16036
- 16039 *Siparuna* T. 15-20'
- 16040 *Coccoloba* H. 2-3' cor. w. fr. br. b.
- 16041 *Polypodium* F. on tree
- 16042 *hepatic* on leaf of 16150
- 16043 *Pilea viridis* H. on wet forest floor
- 16044 *Palu* D. trunk 3' h.
- 16045 *Palicourea* S. stem 1/2 - 3/4 diam
- 16046 *Peperomea* S. succ. stem repeat
- 16047 *Atturnum hastatum* H. at base, to 4' h. spathe q. becoming b.
- 16048 *Lagerstroemia* H. sp.
- 16049 *Apleurium* T.
- 16050 *hepatic* F.
- 16051 *Piper* on leaves
- 16052 *Canva* S. 3-4'
- 16053 *Polypodium suspensum* H. terr. br. deep r. cor. light y.
- 16054 *Pilea* F. on trees
- 16055 *Peperomea* H. terr. repeat at base, to 2'
- 16056 *Psychotria* H. succ.
- 16057 *Cibotium* S. 5-10' cor. (mottled) yellow lobes q.
- 16058 *(rub.)* F. trunk ± 1' woody
- 16059 *Jouana* V. woody
- 16060 *Pilea Erythrodia prescottia* F. H. terr. 3 sep. grasses q. 2 sep. w.
- 16061 *Agrostis* N.
- 16062 *Carex* N.
- 16063 *Cyperus* H.
- 16064 *Nepalanthus* H. heads w.
- 16065 *Juffa* V. herb. cor. y.

23
Dec. 22 dense woods along stream U.

3600
2900

tract w. striped with p. stem per. q.

lip. w. g. dotted rocky bank
marshy meadow

meadow

16031
16032
16033
16034
16035
16036
16037
16038
16039
16040
16041
16042
16043
16044
16045
16046
16047
16048
16049
16050
16051
16052
16053
16054
16055
16056
16057
16058
16059
16060
16061
16062
16063
16064
16065

- 16066 Eupatorium
- 16067 Mentha arvensis
- 16068 Pityrogramma tartarea
- 16069 Polypodium
- 16070 Lichnum
- 16071 Equisetum
- 16072 Viola major
- 16073 Hydrocotyle
- 16074 Gunnera
- 16075 Oxalis
- 16076 Polypodium
- 16077 Columnea
- 16078 Rondeletia
- 16079 Hydrangea
- 16080 Polyrhiza
- 16081 Saraya
- 16082 Pilea
- 16083 Randia
- 16084 Miconia
- 16085 Saraya
- 16086 Lactylis
- 16087 ~~Albizia~~ Hibiscus
- 16088 Viola prolifera
- 16089 Hydrangea
- 16090 Thibodia
- 16091 Jacobinia
- 16092 Salvia
- 16093 Pilea daucifera
- 16094 ~~Salvia~~ Relbunium
- 16095 Tropaeolum
- 16096 Asplenium
- 16097 Pilea abrupta
- 16098 Asplenium
- 16099 Clematis
- 16100 Thibodia

S. with bran. bracts w. prox. q. dist. dependent striped with 3 q. nerves
 H. with woody cor. lvs. p. spot. dist. lvs. lower part 3 largest lobes p. spot.
 F. on moist banks
 F. on trees
 H.
 F. moist pet. deep p. prox pale
 H. soil violet dist. lvs. pale
 H. moist soil
 H. coarse, leaves spikes 2-4' h. to 3-4' across, erect leaves p. ting. beneath.
 H. succ.
 F.
 H. proc. woody, fr. w. prox, deep p. dist
 V. herb.
 S. with droop. bran, bracts q. w. 8-12' 56-12' pedicels r. p. coarse, bran. droop. rays y.
 H. 4-6' pet. q. out, q. w. in.
 T. succ. plant purplish throughout
 H. on rocks, moist.
 S. 8-12' cor. w.
 S. 8-12' pet. w.
 S. bran. proc. pet w, ant y.
 S.
 H.
 S. bran. droop. pet. r.
 S. 7-10' stems repeat
 H. moist soil
 V. herb. pet. deep r. sterile pet. light p. and p. lobed
 S. 8-15' bracts rich p. and p. lobed
 V. woody fil. p. prox, paler dist. ant. b. paler dist. style q. w. prox, pale p. dist.
 V. slender pet. blunt o. fil. pet. much paler prox, ant. deep brown. woods
 H. 3-4' cor. q. prox, rich p. dist.
 H. succ, stem repeat at base
 V. herb.
 V. herb. ~~cal.~~ spurp. cal. lobes q. pet. deep pur. pedicel q. prox, or midway deep p. dist.
 F.
 H. succ. 3' h.
 F. on trees, or droop.
 V. woody F. w.
 S. 8-10' fr. dark q.

23
 Dec. 22 edge of woods Vegas 2600-2900
 → cor. light p, lobes + styles rich p.

field

no, striped with p. marshy borders of stream

edge of woods along stream

pet. deep p. faintly striped with w.
 (lin)

marshy borders of stream
 edge of woods along stream
 marshy borders of stream
 e. w.

ant. b. paler dist. style q. w. prox, pale p. dist. woods
 much paler prox, ant. deep brown.

e. w. along stream

3

4

4

16101 Cassia
 16102 Jussiaea
 16103 Rubus
 16104 Polygala
 16105 Lobelia
 16106 Cissampelos
 16107 Phlox rugosus
 16108 Cordia
 16109 Weinmannia
 16110 Suranta
 16111 Passiflora
 16112 Rosa
 16113 Eupatorium
 16114 Euphorbia
 16115 Pracotia
 16116 Anoda
 16117 Ageratum
 16118 Saraya
 16119 Psychotria
 16120 Portulaca
 16121
 16122 moss
 16123 Equisetum giganteum
 16124 (comp)
 16125 hepatic
 16126 Pilea
 16127 Mikania
 16128 Miconia
 16129 lichen
 16130 Symplocos
 16131 moss
 16132 moss
 16133 Boehmeria
 16134 Weinmannia
 16135 Epidendrum

T 12-15' pet. y.
 H. \pm 2' wet soil pet. y.
 V. woody pet. pale p.
 H. pet. deep p. paler at apex
 H. cor. b.
 V. herb. F. g.
 S 4-8' F. clusters reddish
 S 8-12'
 T 10-12' sta. w.
 S 7-10' with cor. p. midrib b.
 S elong. bran fr. o.
 V. herb. sep. coriaceous, br. ant, y. g. in.
 S low on pet. p. corona (clawlike)
 S moist bank. sep. operculum q.
 S 7-10' cor. g. lobes rich p.
 H. pro. sty. rich p.
 H. ten. sep. g. w.
 H. pet. w. prox, b. p. dist
 H. cor. w. sty. p.
 T 15-18' pet. w. ~~sta.~~ sta. y.
 S 8-12'
 H. ten. tube y. sep. g. p.
 S 8-12' buds br. q.
 on tree
 F \pm 5' h.
 H. coarse cor. w. prox, p. striped dist
 H. to 7'
 on tree stem
 H. succ. rep. at base to 3' h.
 V. woody cor. & sty. g. w.
 V. below fl. buds q.
 T 12-15'
 at tree
 F. stipe 4' br 6'
 F. calices upright
 at tree
 at tree
 T 15-20' per. seq. light q. autn
 T 12-20' leaves br. q.
 H. ep. ~~tube~~
 F. light q. throughout

Rec. 23
 Rec. 22 clearing
 r. b. of stream
 Vegas

2600-
 2900

field
 e. w. along stream
 clearing.
 field.
 e. w.
 exposed hillside

woods
 edge of woods
 woods

P.T.

16136 *Alsophilula*
 16137 *Piper*
 16138 (*acanthi*)
 16139 *Psychotria*
 16140 *Plantago*
 16141 *Juniperus*
 16142 *Loumaria cordata*
 16143 *Hymenophyllum*
 16144 *Hymenophyllum*
 16145 *Hymenophyllum*
 16146 *Hymenophyllum*
 16147 *Hymenophyllum*
 16148 *Hymenophyllum*
 16149 *Epipactis*
 16150 *Laelia*
 16151 *Stelis*
 16152 *Jepanthes*
 16153 *Jepanthes*
 16154 *Jepanthes*
 16155 *Jepanthes*
 16156 ~~Attalaxia~~ *Mayillana*
 16157 *Mayillana*
 16158 *Mayillana*
 16159 *Vernonia*
 16160 *Lioscorea*
 16161 *Eclites*
 16162 *Peperomea*
 16163 *Ipanea*
 16164 *Eupatorium*
 16165 *Vernonia*
 16166 *Mileania*
 16167 *Verbisina*
 16168 *Centropogon*
 16169 *Polygala*
 16170 *Selidananthus*

T. F. ^{slip} 3' usually much
blackerthan in spec. |
 S. 2-4'
 H. ^{coarse,} 5-8'
 S. 7-6'
~~H.~~
 T. 40-50'
 H. pro. pet. w.
 F.
 F. on trees
 F. on trees
 F. on trees
 F. on trees
 F. on trees
 F. on trees
 H. terr.
 H. ep. & terr.
 H. ep.
 H. ep.
 H. ep.
 H. ep.
 H. ep.
 H. ep.
 H. ep.
 H. ep.
 V. woody. pappus w.
 V. herb.
 V. herb. | cor. lobes pur. spotted toward apex.
 H. ^{ter.} fleshy
 V. herb. | cor. cream w.
 H. coarse, cor. & sty. pure w.
 H. 3-5'
 V. woody pappus w.
 V. woody cor. cream w.
 S. 4-7' rays y.
 V. woody cor. p.
 H. 3-4' pet. w. prox. pale p. dist.
 S. 8-12' cor. p., w. striped in.

Rec-22 wood

Vegas 2000-2200

clearing
 field
 woods

S-3 P

Dec. 24 open banks bet. Pied. & Jas U. edge of woods

2000-2200

woods
 edge of woods

20131
 20132
 20133
 20134
 20135
 20136
 20137
 20138
 20139
 20140
 20141
 20142
 20143
 20144
 20145
 20146
 20147
 20148
 20149
 20150
 20151
 20152
 20153
 20154
 20155
 20156
 20157
 20158
 20159
 20160
 20161
 20162
 20163
 20164
 20165
 20166
 20167
 20168
 20169
 20170

- 16171 Eupatorium
- 16172 Thuarea
- 16173 Chamaefistula
- 16174 Cordia corymbosa
- 16175 Passiflora
- 16176 Ficus
- 16177 Calliandra
- 16178 Solanum grandiflorum "toron"
- 16179 ~~Leucaena~~ Serjania
- 16180 Eupatorium
- 16181 Metastelma
- 16182 Vernonia
- 16183 Bursera
- 16184 Trixis
- 16185 Serjania
- 16186 Gossypium
- 16187 ~~Opuntia~~ Jacquinia
- 16188 Jatropha
- 16189 ~~Leucaena~~ Loup.
- 16190 Machaonia
- 16191 Hibiscus
- 16192 grass
- 16193 ~~Crotalaria~~
- 16194 Presine
- 16195 Guaiacum
- 16196 Vernonia
- 16197 ~~Hemistylis~~
- 16198 Paulownia
- 16199 Peperomia
- 16200 Pilea
- 16201 Acaecia
- 16202 Diplazium
- 16203 Ribinia
- 16204 Bauhinia
- 16205 Alacia

S 5-8' cor. g. w. prox
 H. 1 1/2-2' p. at apex, sty
 woody pet y, br. blackish at base
 H. at base
 T 30-40'
 S 4-6'
 V herb. sep. grass g. out
 V herb. q. w. in, pet w. p. tinged
 V herb. at margin. Corona (leaves)
 T 5-15' pet. g. w. corona plum w.
 cal. grass g. cor. g. paler
 T 10-20' prox. ~~ata~~ rich p.
 cor. br. l. paler out.
 light l. at midrib in.
 V woody
 S 6-10' bran. cor. w.
 droop. Jaffers pale y.
 V herb. cor. tube y, lobes pale y.
 V woody cor. w.
 T 10-12'
 H. coarse rap y, cor. y.
 or low 3 to 5' fop. greyish w.
 V herb.
 T 8-15' bracts g. cal. g. w. spotted with ~~black~~ dark br.
 petals p, paler prox. style w, spotted dist with dark br. fil. pale y.
 V herb. cor b, paler prox.
 T 8-12' pet. deep r, ant. y.
 V woody cor. y.
 T 15-18'
 S 6-10' cor. r. o, paler dist.
 H. bran. pros.
 T 10-12' sty. w.
 V herb.
 V herb. cor. br. n.
 V ~~with~~ pap. w.
 S. with droop. bran.
 T 19-15' cor. w, fil. w. ant. y.
 V herb.
 H.
 H.
 F.
 F.
 V herb. cor. y. ting milk p
 T 15-20' fr. r.
 T 15-18'

Rec. 24 edge of woods bet Pied + JasO.

thicket Piedecuesta
Dec. 27 thicket Florida

roadside (used as au.
ant. y. (used poison)
y. at throat
Dec. 28. northern slopes, Buc. plateau

valley of R. Surata

rocky banks

thickets

2000
2200
1400-
1600
1000
900
800-
1000
400-
600

2
3
U-4,5
#n
24

16206	Tresima	V. herb.	pet g. w.
16207	Adiantum	F.	
16208	Piper	S. 3-6'	
16209	Pachira	T. 10-12' foliage	bracts brown
16210	Nyctocarpa	T. mostly at summit	stg. w.
16211	grass	T. 8-12'	
16212	Piper	H. bran droop, to 5'	
16213	Guazuma	S. 12-15'	
16214	Eupatorium Hyptis	T. 20-30'	
16215	Calliandra	S. 3-6'	cor. b, paler prox. ant. y.
16216	Piper	T. 30-40' 25-35'	ant w.
16217	Hyopteryx	S. or small T. 12-20'	
16218	Meriania	F.	
16219	Cordia	V. woody	cor. w.
16220	Polygala	S. 4-7'	cor. w.
16221	Epidendrum	H. woody at base	pet. w. ting. with p.
16222	Epidendrum	H. bran semi-proc	
16223	Passiflora (16175?)	H.	
16224	Peperomia	V. herb.	
16225	Crotalaria	H.	
16226	Wattleria	S. 4-6'	pet w. stg. w.
16227	Serjania	S. 4-8'	cal. paleq. pet w. ant. y. w.
16228	Eupatorium odoratum	V. herb.	cor. w.
16229	Plumbago	S. 6-8'	cor. pale b, sty. b.
16230	Ficus	S. 3-6'	cor. w. ant. b, fil. w.
16231	Cactus	T. 40-60'	stg. + sty. w.
16232	Serjania	H. to 8" li.	
16233	Comp.	V. herb.	
16234	Antennaria	S. 3-4'	cor. w, stg. pale y.
16235	grass	H. terr.	spathe reddish
16236	Unicarposia	H. to 7'	pap. (?) cream w.
16237	Cissampelos	H. 1-3'	stg. r. brown.
16238	Pteris	V. herb.	pet. pale lav.
16239	Pterocarpus (Malpighi)	F.	
16240	Piper	S. 12-15'	
		S. 3-6'	

Dec 28 thickets valley of Surata R.
rocky banks
thickets

400-600

exposed banks

thickets
open banks

thickets

~~clearing~~
open banks
thickets

16241	<i>Terna nevadum</i>	T. 10-15'	
16242	<i>Bauhinia</i>	S. or low T. 8-12'	pet. w.
16243	Piper <i>Acalypha</i>	S. 10-15'	
16244	<i>Eupatorium</i>	S. 3-5'	cor. bl. sty. bl.
16245	<i>Piper</i>	S. 12-15'	
16246	<i>Amaripidaca</i>	V herb.	cor. deep lav.
16247	<i>Psettium</i>	T. 10-12'	pet. w. fil. w.
16248	<i>Miconia</i>	S. or small T. 4-8'	pet. w. fil. w.
16249	<i>Solanum</i>	S. 3-6'	pet. bl. ant. y.
16250	<i>Hiraea</i>	S. ^{5-8'} 5-9' 10-12'	pet. y
16251	<i>Wissadula</i>	S. 5-9'	pet. y
16252	<i>Rhus</i>	T. 12-15'	pet. w.
16253	<i>Dioclea</i>	V herb.	stand. pump., deep pump, center; wing pump; keel wh.
16254	<i>Ploradendron</i>	Ep. s. ^{on melia} <i>agederach</i>	simple at apex
16255	<i>Mimosa "galinero"</i>	T. ^{8-40 ft} 8-40 ft	st. wh.
16256	<i>Guazuma</i>	T. 20-25'	pet. wh.
16257	"uo"	S. ^{4-6'} 4-6'	pet. gr. wh.
16258	<i>Pilea microphylla</i>	H. succ.	
16259	<i>Peperomea</i>	H. succ.	
16260	(100.)	V. woody	pet. w.
16261	<i>Serrania</i>	V. woody	pet. w.
16262	<i>Hiraea</i>	S. 4-5'	pet. y.
16263	<i>Eugenia</i>	S. 6-9'	fr. br. r. pet. w.
16264	<i>Cassia</i>	H. shrubby 2-3'	
16265	<i>Lavalla</i>	H. very vigorous	
16266	<i>Jussiaea</i>	S. 3-5'	
16267	(comp.)	H. shrubby 2-3'	pet. y.
16268	<i>Calliandra</i>	V. woody	rays o. y. cor. lobes br.
16269	<i>Helicteris</i>	T. 25-30'	
16270	<i>Acalypha</i>	T. 15-20'	
16271	(comp.)	T. low with droop. bran 10-15'	pet. w.
16272	<i>Wary Waszywickya</i>	S. 5-7'	ray. y.
16273	<i>Cordia</i>	S. 8-12' bracts br. r.	cor. gr. y, r. lobes
16274	<i>Crotar</i>	S. low 2 1/2-4'	cor. w.
16275	<i>Vernonia</i>	H. 2' woody at base S. 3-4' stem simple	cor. incl. p. pappus w.

Rec. St. clearing valley of Sur. r.
thickets

n. s. B. p.
open hillside
29 exposed hillside Bucaramanga

Upper valley of Rio Lebrija, n.w. of Buc.

open rocky bank
open ~~bank~~ hillside

400-600

800-1000

750

400-600

2

3

#1

photo
photo

#

16276 Cassia
 16277 Aulopogon
 16278 Aeschynomene
 16279 grass
 16280 Eupatorium
 16281 Psoloma
 16282 Peperomia
 16283 Justicia
 16284 Polypodium
 16285 Epiphyllum
 16286 Machaderium
 16287 Jacquemontia
 16288 Wrethartus
 16289 Palicourea
 16290 Mikania
 16291 Heliconia
 16292 Peperomia
 16293 "
 16294 Annonia
 16295 Croton
 16296 Acaciella bellipii B & R
 16297 Piper
 16298 Anthurium
 16299 (rub.)
 16300 Ipomoea
 16301 Platycheilia
 16302 Jascais
 16303 Cardiospermum
 16304 Cida angustifolia
 16305 Malachra
 16306 Rapanea "cucharo"
 16307 Sclactia
 16308 Eclites
 16309 Inamoclit
 16310 Eupatorium

T 10-15' pet. y.
 H. somewhat woody cor. y.
 H. 3' h. up to 6 ft.
 Coars. herb
 H 1.5-2.5 ft. cor. w. lobes & styles
 H rich pink
 cor. yellowish or red-stained within
 succ. herb Spikes white
 S 8-10 ft. calyx y, cor r.
 H
 Succ. vine Epiphytic
 T 15-25'
 H vine Cor. bright blue
 Ep. shrub Spikes bright green
 T 20-30' Cor. wh.
 H vine Cor. & styles wh.
 Succ. vine
 Succ. herb on dry tree bases
 S 10-15' " " " "
 H
 Erect 5-7 ft. Pet. y.
 S 6-8' Stand wh.
 H terr
 S 8-12' cor. w.
 V. herb. cor. w.
 V. herb. pet. y.
 S 10-15'
 V. herb. br. li. g.
 V. herb. pet. w.
 H pet. y.
 H
 small T 8-15' trunk 2-3" diam.
 H 2-2 1/2' I woody
 V. herb. cor. y.
 V. herb. cor. scar.
 S 7-10' cor. & sty. p. w.

Sec. 29 open hillside

valley of Riber
Rio Lebrija

2
1

open rocky bank

thicket
rocky bank

thicket

river bank

dry hillside

(used for roofs)
[trunk]

thickets

16311	(comp.)	H. 3-4'	heads y.
16312	Paullinia	V. herb.	fr. r.
16313	Scutellaria	H.	cor. li. b.
16314	Saracha	S. with sub-	cor. y. w.
16315	Echinocereus	S. scan. fr. au.	tactus, plants to 10" diam
16316	Ocimum	H.	
16317	(tilia)	S.	pet. w. star y.
16318	Machaerium	T. 20-30'	
16319	Strutianthus	on 16318	
16320	Piper	S. 2-4'	
16321	Piper	S. 2-3'	
16322	Cipollinum	S. 4-7'	cor. light violet sty. pet. w.
16323	Abutilon	H. ± woody	
16324	Celitis	"japiwo del monte" V. herb.	cor. q. y.
16325	Stigmaphyllon	"agalita de pepina" V. woody	
16326	Aristolochia	V. woody	fr. 6-angled
16327	Piper	"cordocilla" S. 5-7'	
16328	Alemania	"picurita" L. 4-6'	pet. w.
16329	Clematis	"cabello de ahil" V. herb.	
16330	Bignonia	V. woody	cor. red p.
16331	Paclia	"barigon" T. 25-30'	sta. w.
16332	Solanum	T. 6-8'	flat. top. cor. p. b.
16333	Psidium	"arayan" T. 10-25'	spread crown. ant. y.
16334	Castilleja	H.	
16335	Vismia	"sangrito" L. 12-30'	
16336	Cordia ferruginea	"mulato" S. 3-5'	cor. w.
16337	Deschymone	H. woody	cor. y.
16338	Verbena	H. to 5'	cor. w.
16339	Verbena	H.	cor. lav.
16340	Passiflora cuneata	V. herb.	
16341	Bletia	H.	ap. pur.
16342	(legum.)	H.	pet. w. at center,
16343	Passiflora coreacea	V. herb.	
16344	Passiflora	V. herb.	
16345	Deschymone	H.	cor. y.

Dec. 29 thickets valley of P. P. P.
Riosabaja
rocky hillside

woods
open hillside
(fr. used as darts by children)

Buc.

Dec. 30 open hillsides
(sap. used as coloring matter)

1100
1300

V-3

P.F.H.

P.H.

16301
16302
16303
16304
16305
16306
16307
16308
16309
16310
16311
16312
16313
16314
16315
16316
16317
16318
16319
16320
16321
16322
16323
16324
16325
16326
16327
16328
16329
16330
16331
16332
16333
16334
16335
16336
16337
16338
16339
16340
16341
16342
16343
16344
16345

- 16346 *Cyolobus*
- 16347 *palu*
- 16348 *Tillandsia usneoides*
- 16349 *Rhipsalis*
- 16350 *Triplaris*
- 16351 *Begonia*
- 16352 *Peperomea*
- 16353 *Peperomea*
- 16354 *Peperomea*
- 16355 *Dicliptera*
- 16356 *Asplenium*
- 16357 *Lycopodium*
- 16358 *Piper*
- 16359 *Boerhaavia*
- 16360 *Adiantum*
- 16361 *Anacardium*
- 16362 *Martynia*
- 16363 *Eupatorium*
- 16364 *Hamelia*
- 16365 (*Commelin*)
- 16366 *Euphorbia*
- 16367 *Cracca*
- 16368 *Asplenium*
- 16369 *Polypodium*
- 16370 *Wiegandia*
- 16371 *Tubera nitens*
- 16372 *Tripteris*
- 16373 *Cyperus*
- 16374 *Paspalum*
- 16375 *Oxalis*
- 16376 *Munna*
- 16377 *Amyris*
- 16378 *Opuntia*
- 16379 *Sesuvium*
- 16380 *Echeveria*

V. herb. cor. y. g.
 T + 40ft. ^{infl. wh., ± 9ft. long}
 H ep. drooping from branches
 succ. ep. bran. dependent
 T 12-20' sep. g. ant. g. w.
 H succ. pet. p. to w.
 H succ.
 H succ.
 H succ.
 H. cor. y.
 F.
 F.
 S 5-6'
 H.
 F.
 T 15-25'
 P 10-15' leaves 4-5'
 S 6-10' cor. w. prox. dist. + sty. p.
 S 4' stem erect. cor. deep r.
 H. sub-scan. pet. w.
 H. 3-4' pet. w.
 F.
 F.
 T 8-12' pet. p. p.
 H. woody at base pet. y.
 F.
 H.
 H.
 H. pet. y.
 H. 2-3' sta. br. p.
 S 5-10'
 S 6-12' pet. r. p., drying o.
 H. woody pet. w. sta. w. prob. p. dist.
 H. succ. sep. g. pet. cor. in ones, w. densely r. most. out, + appearing r. r. slopes

Dec. 30. open hillsides Buc.
 31. *M. patio* "
 Jan. 2. ~~wooded slopes~~ valley of R. Jurata
 rocky slopes } between Buc. + El
 Jaboncilla

1100
 1300
 1500
 800-
 1500

dry hillsides
 rocky hillsides
 stream bed
 rocky slopes
 dry hillsides
 ones, w. densely r. most. out, + appearing r. r. slopes

16381
 16382
 16383
 16384
 16385
 16386
 16387
 16388
 16389
 16390
 16391
 16392
 16393
 16394
 16395
 16396
 16397
 16398
 16399
 16400
 16401
 16402
 16403
 16404
 16405
 16406
 16407
 16408
 16409
 16410
 16411
 16412
 16413
 16414
 16415
 16416
 16417
 16418
 16419
 16420
 16421
 16422
 16423
 16424
 16425
 16426
 16427
 16428
 16429
 16430
 16431
 16432
 16433
 16434
 16435
 16436
 16437
 16438
 16439
 16440
 16441
 16442
 16443
 16444
 16445
 16446
 16447
 16448
 16449
 16450
 16451
 16452
 16453
 16454
 16455
 16456
 16457
 16458
 16459
 16460
 16461
 16462
 16463
 16464
 16465
 16466
 16467
 16468
 16469
 16470
 16471
 16472
 16473
 16474
 16475
 16476
 16477
 16478
 16479
 16480
 16481
 16482
 16483
 16484
 16485
 16486
 16487
 16488
 16489
 16490
 16491
 16492
 16493
 16494
 16495
 16496
 16497
 16498
 16499
 16500

P.X-1

- 16381 *Apenia*
- 16382 *Pellaea cordata*
- 16383 (*Myrseniaceae*)
- 16384 *Bignonia*
- 16385 *Marsdenia*
- 16386 *Notholaena bonariensis*
- 16387 *Vernonia*
- 16388 *Piper*
- 16389 *Tournefortia*
- 16390 *Cephalocereus*
- 16391 *Tillandsia recurvata*
- 16392 *Senecio*
- 16393 *Phyllodeudron*
- 16394 *Tillandsia*
- 16395 *Clusia*
- 16396 *Phoradendron*
- 16397 *Polypodium*
- 16398 *Epiphyllum*
- 16399 *Santana*
- 16400 *Cassia pilicaulis*
- 16401 *Pleurothallis*
- 16402 *Anthurium*
- 16403 *Pleurothallis*
- 16404 *Polypodium*
- 16405 *Tillandsia*
- 16406 *Piper*
- 16407 *Epidendrum*
- 16408 *orchid*
- 16409 *Eupatorium*
- 16410 *Bromelia*
- 16411 *Ficus*
- 16412 *Passiflora curvata*
- 16413 *Savonia*
- 16414 *Mimosa*
- 16415 *Acalypha*

F
 F
 T 12-20' cor. w.
 V. woody cor. red p. out
 V. herb. cor. y.
 F
 S 6-10' cor. + pappus w.
 S 6-8'
 V. woody cor. y. w.
 Cac. to 20' h.
 H. ep.
 T 20-30'
 E. H.
 E. H.
 T 30-40' pet. w.
 E. S. on 16395
 F on rocks
 Ep. succ. per. tube q. seg. w. in. q. out.
 S 3-8' sta. o. prox. sty. deep. o.
 S 6-9' cor. w.
 H. ep. sep. w. prox. y. q. long. dist.
 H. terr.
 H. terr.
 F.
 H. terr.
 S 4-5'
 H. terr. 3 sep. open light gr.
 H. up to 3 ft. pet. wh. o. 1 pet.
 H. ter. tube o. 2 sep. cr. - y.
 S 5-9'
 S 2-3' cor. o. styles pure wh.
 H. panicle 3' high, 1.5 ft. wide,
 T 15-20'
 H. vine See notes
 S 3-5' pet. y.
 H 3-5' stem
 T 20-30 ft. erect purple stem. rich pink
 Infl. green

Jan. 2 dry hillside, Valley of Surata River 800-1500
 between Buc. & Jabonillo
 rocky slopes
 lobes at tube w. w.
 dry hillside
 rocky slopes
 dry hillside
 wooded banks of stream

X-4

Jan. 3 dry hillside valley of R. Sur. 1500-1800
 between Jabon. & Surata.
 rocky slopes
 1 pet. lip, o. col. red-spotted
 bracts
 per. rich pink; per. purple, stamens wh.
 dry hillside

16416 Jasirum
 16417 Cuscuta
 16418 Hura
 16419 Adenaria
 16420 Clusia
 16421 Pilea
 16422 Adiantum
 16423 Cheilanthes myriophylla
 16424 Passoquiveria
 16425 Ipomoea
 16426 Landerbergia
 16427 Buddleia
 16428 Salix
 16429 Comp.
 16430 Meriania
 16431 Begonia ~~clione~~
 16432 Ipomoea
 16433 Mimosa
 16434 Rubiaceae
 16435 Peperomia
 16436 Evolvulus
 16437 Polypodium
 16438 Comp.
 16439 Cassia occidentalis
 16440 Ipomoea
 16441 Stachys
 16442 Parozolzia occidentalis
 16443 Centropogon cornuta
 16444 Meibomia
 16445 Althonia ~~mirabilis~~
 16446 Canna
 16447 Rust on 16446
 16448 Exolobus
 16449 Mimosa
 16450 Silanum

S 8-12'
 Twining
 matted vine
 S low stems
 up to 7'
 S 5-10'
 T 25-35'
 H succ.
 H
 H
 T
 H twining
 vine
 T 25-30 ft
 T
 T ~~20-40'~~ 20-40'
 trunk straight
 succ. herb. vine
 S 6-10'
 Vine woody
 " herb.
 H erect
 S 8-10 ft. with
 subsc. branches
 H succ. epiphy.
 H prostrate
 H 4-8'
 H 2-4'
 H 1-2.5'
 V Herb. twining
 H 1.5-2.5'
 H 2-3'
 H somewhat
 decumbent
 H lax elongate
 branches, viciid
 H 2-3 ft.
 H 4-5 ft.
 H vine
 S 6-10'
 spreading S
 4-6'

corolla pure wh.
 " gr.-wh.
 pet. gr. wh.
 pet. wh.
 pet. pure wh. br. ^{1.5 in.} diam.
~~pet.~~
 Cor. yellowish-wh. ^{wilted}
 Cor. wh. ^{deep blue} ^{with pink} ^{stam.} ^{allot.}
 Cor. br.-red, pur.,
 Cor. light yel.
 Cor. bright green
 Rays red to or.; cor. or
 Pet. purple.
 Fruit only
 Cor. pink pur., blue dist.
 St. pinkish red
 Tr. white
 Cor. light blue
 Rays y; stam. purple
 Cor. wh., pink-pur., ^{stipled}
 Pet. y.
 Cor. pink throughout
 Cor. blue, pale without
 Per. gr., stam. wh.
 Cor. pale pink, lobes wh.
 Pet. pink
 Cor. rich purp.
 out. per. red, inner
 red, y. purp.
 Cor. gr.
 Pet. deep blue, lip y-g.
 Cor. y-wh., anther ^{dark y}

Jan. 3 rocky wooded slopes
dry hillside

valley of R. Sur.
 bet. Jab.
 Sur.
 1500-
 1700
 3

rocky wooded slopes

dry hillsides, among rocks
 rocky wooded slopes
 dry hillsides

anthers red dist. lobes red.

along stream
 rocky banks
 dry hillside

rocky wooded slope
 dry hillside

rocky wooded slope

2

1

2

2

7

7

2

16416
 16417
 16418
 16419
 16420
 16421
 16422
 16423
 16424
 16425
 16426
 16427
 16428
 16429
 16430
 16431
 16432
 16433
 16434
 16435
 16436
 16437
 16438
 16439
 16440
 16441
 16442
 16443
 16444
 16445
 16446
 16447
 16448
 16449
 16450

16451	Grass		used in making mats lvs only
16452	Passiflora	H twining vine	See notes
16453	Stigmaphyllon	H slender vine	Pet. y.
16454	Camp	H 2-4 ft.	Rays y.
16455	Cassia	H erect 4-7'	Pet. y.
16456	Inga	T 25-35'	Stamens wh
16457	Mimosa	S showy erect, 8-10'	" pure wh.
16458	Caesopinia	T 15-25'	Pet. or y.
16459	Cassia	T 12-20'	" bright y
16460	Alternanthera	H scandent	Heads purple
16461	Echinocistus	H vine	Cor. wh.
16462	Justicia	S 3-6'	Calyx rich pink, cor. ^{light} red
16463	Mimosa	S 8-12'	
16464	Abutilon	H coarse 4-6'	Pet. y, red-br. at base
16465	Piper	S 3-5'	
16466	Solanum	Woody vine	
16467	Polygala	H woody at base	Cor. pink-purp, anthers wh.
16468	Eupatorium	S 5-7' lvs. shiny	Pet. pink, brown streaked
16469	Eupatorium	H woody herb 2-4'	Cor. & styles wh.
16470	Tresina paniculata	S 5-8 ft.	" " " light green
16471	Orchid	H Epip.	Heads white.
16472	Jussiaea	S branches scandent among branches of trees, up to 20' -	fls wholly light green.
16473	Solanum	S 3-8'	Cor. gr.-wh, anthers y.
16474	Inga	S low up to 5'	Pet. wh.
16475	Cordia floribunda	S 5-7'	Cor. wh.
16476	Lasiacis	H vine	
16477	Passiflora capsularis	H vine	
16478	Passiflora Asclep.	H vine	Cor wh., gr. at center
16479	Phaseolus	H vine	stand. pi-br. without y-green
16480	Mimosa	S 6-10'	Pil. pink, anthers wh.
16481	Peperomia galioides	H epip.	
16482	Peperomia repleta	H epip.	
16483	Inga	T 25-35'	Stam. wh.
16484	Pavonia	S 2-4'	Pet. y.
16485	Conoclinium	H.	pet. p. anthers y. lvs. pale

Jan. 3 (native F. higher mts.) Bet. Jaboncillo & Surata 1600-1800 Pl. X-6
 wooded rocky slopes
 dry hillside
 thickets
 4 thickets along river - Surata' 1740m.
 wings pi. keel gr-wh.
 Jan. 8 field vic. of Surata 1600-1800

- 16486 *Notholaena*
- 16487 *Hemusia Eupatori*
- 16488 *Prockia?*
- 16489 *Juncea*
- 16490 *Asclepias*
- 16491 *Justicia*
- 16492 *Prockia*
- 16493 *Cestrum*
- 16494 *Eupatorium*
- 16495 *Milania*
- 16496 grass
- 16497 *Piper*
- 16498 *Acalypha*
- 16499 *Pomidium?*
- 16500 *Polypodium*
- 16501 moss
- 16502 *Asteraria*
- 16503 *Acalypha*
- 16504 *Typha*
- 16505 *Chorob.*
- 16506 *Buddleia*
- 16507 *Asplenium*
- 16508 *orchid*
- 16509 *Blechnum*
- 16510 *Pteris*
- 16511 *Passiflora ligularis*
- 16512 *Rivina*
- 16513 *Centropogon*
- 16514 *hepatic*
- 16515 *hepatic*
- 16516 *Phorodendron*
- 16517 *Piper*
- 16518 *Sida*
- 16519 *Piper*
- 16520 *Pycnostegon*

F among rocks
 V herb. cor. q. w.
 S 10-12'
 H coarse with pet. y.
 H droop. bran. pet. r.
 H coarse with ant. o.
 H woody juice cor. br. r.
 V.
 H very fleshy
 T 10-15' cor. tube & sep. pale y. g.
 H coarse cor. tube g. lobes w.
 H 5-8'
 V herb.
 H
 S 6-10'
 V woody sta. r.
 S 10-15' fr. o.
 F on tree trunk
 on rocks cal. g. spotted with deep brown,
 S 10-15' pet. w.
 S 8-15'
 H 5-10' h.
 V herb. cal. pale g. y.
 S 10-12' pet. y. in, pale g. out
 F among rocks
 H " "
 F " "
 F.
 V herb.
 S 10-15' cor. sty, sty, or, sta, w.
 V woody cor. p.
 on soil along streams
 " " "
 " " "
 F S.
 S 12-15'
 H coarse pet. y. striped with deep r. in. prox.
 H 3-5' ant. y.
 S 4-8'
 V herb. cor. w.

Jan. 4 rocky hillside
 wooded hillside

vic. of Surota 16-1800

field
 wooded hillside

deep woods in stream bed.
 wooded hillside

deep r. in. prox.

2

08131
 08132
 08133
 08134
 08135
 08136
 08137
 08138
 08139
 08140
 08141
 08142
 08143
 08144
 08145
 08146
 08147
 08148
 08149
 08150
 08151
 08152
 08153
 08154
 08155
 08156
 08157
 08158
 08159
 08160

16521 *Polygala paniculata*
 16522 *Melastoma*
 16523 *Vernonia*
 16524 *Eupatorium*
 16525 *Bauhinia*
 16526 *Hibiscus*
 16527 *Passiflora cuneata*
 16528 *Bauhinia*
 16529 *Spongia*
 16530 *Calilia*
 16531 *Solanum*
 16532 (caup.)
 16533 *Eupatorium*
 16534 (caup.)
 16535 *Mauettia*
 16536 *Melastoma*
 16537 *Salsosoga*
 16538 *Castilleja*
 16539 *Alauada*
 16540 *Oxalis "accedera"*
 16541 *Solanum*
 16542 *Cufca*
 16543 *Fusclia cordulata*
 16544 *Miconia*
 16545 *Centropogon rosea*
 16546 (orchid.)
 16547 *Stenophyllus*
 16548 *Carex*
 16549 *Centropogon alba*
 16550 *Eupatorium*
 16551 *Elaphoglossum*
 16552 *Smilax*
 16553 *Vernonia*
 16554 grass
 16555 *Elaphoglossum*

H. 3-5' cor. w. to pu.
 H. 3-5' cor. deep. p.
 V. herb. cor. pale pu.
 H. 4-6' cor. w.
 T. 10-15' pet. w.
 S. 8-15' cor. y, becoming r. with age.
 V. herb. pet. w.
 S. 8-10' pet. w.
 V. herb. cor. p.
 T. 10-15' rays p. cor. q. y. sty. y.
 S. 4-6' cor. w.
 S. 5-8' ant. y. cor. y. sta. br.
 S. 6-8' cor. w. lobes + sty.
 stem 1/2 diam at base. li. p.
 H. 4-6' woody at base rays w. cor. q.
 V. herb. cor. q. w.
 H. 2-4' pet. deep. p.
 H. slender rays w, cor. q. y.
 H. br. q. deep r. at apex
 H. cor. o. p. fil. q. ant. y.
 H. succ. pet. y.
 V. herb. cor. w, sty. y.
 H. sub-pro. pet. li. p, q. y. at base
 V. woody cal. r. pet. pu. r.
 S. or small T. sty. + sty. + fil. r. ant. deep. r.
 S. 10-15' cal. q. w. fil. + pet. w.
 with cor. tube p. out. p. w. w.
 V. woody base. lobes p. "gyn." w.
 H. terr. fr. q.
 H.
 H. woody cor. pure w.
 S. or low T. cor, sty, ribs pu. pi
 S. 8-15'
 F. woody per. q.
 S. 8-10' bran. along sub-scan. pap. w.
 H. cor. w, lobes p.
 F.

Jan. 4. open slopes vic of Surata 16-1800
 wooded slopes
 open slopes
 Jan. 5 thicket
 exposed hillside, valley of R. Sur. above Surata 2000-2300
 rocky wooded slope
 dry hillside
 edge of woods
 dry rocky hillside
 edge of woods
 dense forest

- | | | |
|-------|--------------------------------------|--|
| 16556 | <i>Asplenium salicifolium</i> | F. |
| 16557 | <i>Dryopteris attenuata</i> | F. |
| 16558 | <i>Peperomea</i> | H. succ. |
| 16559 | <i>Piper</i> | H. terr. |
| 16560 | <i>Pilea serrata</i> | S. 6-8' |
| 16561 | <i>Pilea elongata</i> | H. succ. stem rooting at base |
| 16562 | (orchid.) | H. succ. becoming scan. to 15' long. |
| 16563 | <i>Asplenium dissectum</i> | E. H. fr. q. |
| 16564 | <i>Peperomea</i> | F. |
| 16565 | <i>Artthurium hastatum</i> | H. on trees |
| 16566 | moss | H. on trees terr. |
| 16567 | <i>Selaginella</i> | on decaying wood |
| 16568 | <i>Peperomea</i> | F. terr. |
| 16569 | <i>Polypodium</i> | H. terr. |
| 16570 | <i>Cocosepalum</i> | F. terr. |
| 16571 | <i>Hydrocotyle</i> | H. lax. cor. w, fr. br. b. |
| 16572 | <i>Peperomea</i> | H. slender, fr. li. q. |
| 16573 | <i>Artthurium coripatense</i> N.E.B. | H. repent. |
| 16574 | <i>Lantana</i> | H. on trees |
| 16575 | <i>Piper</i> | H. at base of trees |
| 16576 | hepatic | S. slender, fr. black |
| 16577 | moss | S. 3-4' |
| 16578 | hepatic | F. 8-12' |
| 16579 | <i>Sanicula</i> | on soil |
| 16580 | <i>Peperomea</i> | on soil |
| 16581 | <i>Cardamine</i> | on wood |
| 16582 | <i>Polypodium decurrens</i> | H. fr. q. |
| 16583 | <i>Psychotria</i> | H. succ. |
| 16584 | <i>Pilea alsinoides</i> | H. terr. |
| 16585 | <i>Polygala</i> | H. sub-succ. pet. w. |
| 16586 | <i>Piper</i> | F. |
| 16587 | <i>Syngramma</i> | T. 15-20' |
| 16588 | <i>Phyllodendron</i> | H. succ. repent at base |
| 16589 | (rub.) | H. erect slender pet. rich pur. keel p. w. |
| 16590 | <i>Cocosepalum glabrum</i> | H. 3-4' |

Jan. 5 dense forest valley of R. Surat

2000-
2300

det. T. Croat 1950

3

3

4

4

- 16591 Meibomia
- 16592 Piper
- 16593 Eupatorium
- 16594 Ochropteris
- 16595 Calceolaria
- 16596 Saurauya
- 16597 ~~(mat)~~ Siperuma
- 16598 Bacchistus
- 16599 Baccharis
- 16600 (leg)
- 16601 Xanthoxylum
- 16602 Phragonia?
- 16603 Splidacele
- 16604 Frusclia
- 16605 Crotolaria
- 16606 Cissampelos
- 16607 Passiflora mollis
- 16608 Bacchistus
- 16609 Venonia
- 16610 Centropogon
- 16611 ~~(mat)~~ Siperuma
- 16612 Rubus
- 16613 Erythrodies
- 16614 Solanum
- 16615 Peperomea
- 16616 Peperomea
- 16617 Psychotria
- 16618 Rubus
- 16619 Salvia "mastranso"
- 16620 Protea (sp?)
- 16621 Zilibodia
- 16622 Erythrina
- 16623 Cordia caracasana
- 16624 Erigeron
- 16625 Mounina

S 5-10' with elong. slender bran. stem + wood pale green
 T 20-25
 H woody at base cor. w. sty. w.
 F slope 1/2'
 H in marshy soil cor. y.
 T 40-50' pet. w.
 S 3-4' fr. r. pet. q. w.
 T 12-15' with elong. bran. suff. w.
 S 8-12'
 T with elong. subae. bran. pet. w. stem, str. with r. pu. at center.
 T 20-30' pet. q. w.
 T 20-30'
 S with erect stems cor. w.
 S 4-6' V woody cal. + cor. br. r.
 H 3-4' woody at base pet. y. stem, faintly lined prox.
 V herb. fr. q.
 V herb.
 S 10-12' with elong. bran. cor. w, sty. p.
 S 8-10' bran. elong. lobesp.
 V woody cor. rich p. + lobes
 S 8-12' cor. y. q. fr. r.
 V woody pet. w.
 H tem. per. w. throughout
 S 4-8' cal. lobesp. out, w. in.
 H on trees cor. p. pu.
 H " "
 S 5-6' pet. w.
 V woody pet. w.
 H ^{used to} ^{with insects} ^{in animals} cor. deep b.
 S cor. w.
 S cor. r. prox, p. dist.
 T 15-20' Calyx + Pet. red, ket. p. dist.
 S 5-7' calyx y-gr. an. y-gr.
 H Rays wh., often purple-tinged
 S slender Pet. deep blue
 S 7-8'

Jan 5 dense forest, valley of Suvata
 Keel whitish

2000-2300

edge of woods

center.

faintly lined prox.

3

W 5006

2

Jan. 6 dry hillside, vicinity of Suvata
 Valley of Suvata, above Suvata
 rocky bank
 dry hillside

1600-1800 ft

2000-2400 ft. X-2,3

16626	Comp.	Shrub-branched S 7-10'	Cor. golden-y.
16627	Escallonia floribunda	S 8-10' 10'-15' Small tree	Pet. to fil. wh., anther gr.
16628	Palisota Viburnum	T 15-20'	Cor. wh.
16629	Columnnea	H terrestrial	Calyx red, cor. pink
16630	Columnnea	H terrestrial	Bracts red, Calyx pink-red.
16631	Rub.	H 1-2'	Dr. olive-gr.; cor. y-gr.
16632	Asplenium	H	
16633	Commelinaceae	H succ., up to 5'	Out. sepal. purp., pale at tip
16634	Narcogonia	V woody, young branches Los Chichirpiles	appressed to tree trunk
16635	Erythroxides	H terrestrial, stem succ.	3 sep. gr., 2+ lip wh.
16636	Polypodium	H ter.	
16637	Peperomia	H on tree	
16638	Trichomanes	H on tree	
16639	Asplenium attenuata	H on tree	
16640	Carlodivia	H ter.	Spadix green
16641	Uncinia	H	
16642	Peperomia	H on tree	
16643	Tresine	S 4'	Infl. gr.-wh.
16644	Orchid	H on base of tree	Pr. green
16645	Orchid	H Epip.	All seg. light pi. ^{densely spotted} with dark purple.
16646	Orchid	H Epip.	
16647	Polypodium	H ter.	
16648	Stenorrhynchus	H ter.	3 sep. bright red, 2+ lip light pink
16649	Rub.	S 1' prostrate branch 5' long	
16650	Braehmetia	S 8-12'	fr. purplish
16651	Piper	S 6-8'	
16652	Asplenium	H ter. on trees	
16653	Polypodium	H ^{base of} trees	
16654	Erythroxides	H ter.	5 sep. wh., spur green
16655	Peperomia	H base of trees	
16656	Peperomia	H succ. on trees	
16657	Eupatorium	S 4-6' ^{at} succ.	Cor. deep pi., style light pi.
16658	Trichomanes	H on trees below 2'	
16659	Alsophila	fr. - 6', stipe 3' Canees level with ground	
16660	Piper peperomioides	H succ. 1-3' branches up to 6' long	

Jan. 6 edge of woods, Valley of Sumata River, above Sumata
dense forest

2000-2400 m.

inner wh. ; fr. black

1

1

1

1

2

1

1

4

2

3

16626
16627
16628
16629
16630
16631
16632
16633
16634
16635
16636
16637
16638
16639
16640
16641
16642
16643
16644
16645
16646
16647
16648
16649
16650
16651
16652
16653
16654
16655
16656
16657
16658
16659
16660

16696	Baccharis	S 8-15'	sticky	Heads wh.;
16697	Cassia	S 10-12'	compact	Pet. y.
16698	Senecio	S 3-5 ft.		Cor. & styles light y
16699	Albyrocline	H 2-4'	woody cut base	Heads y-g.
16700	Mplowlepis	H		
16701	Melastoma	S 10-15'		Pet. pink, anther y.
16702	Begonia pileifolia	S with spreading branches; 6-9' high		Pet. wh.; st. & anther y.
16703	Cystopteris	H		
16704	Hibiscus	S 7-9'		Pet. pinkish red
16705	Eupatorium	S 7-12'		Cor. gr-wh, lobes & styles ^{rich} pink
16706	Engenia	T 15-25'		Pet. & stem wh.
16707	Nimulus	H weak		Cor. y.
16708	Eleocharis	H		
16709	Juncus	H 3-4'		
16710	Hydrocotyle	H repent		
16711	Lichen			
16712	Mullein "perijil"	H used in soup		
16713	Satureja "mejorana"	H woody, used for digestion		Cor. wh.
16714	Rosmarinus "romero"	S 4-6'; used rheumatism		
16715	Geranium "geranio"	H		Pet. pink, purple streaked at base
16716	Geranium "aroma"	H		Pet. wh.
16717	Eupatorium "almoraduz"	S 6-8' to cure sick animals		Cor. & styles wh.
16718	Viola "violetta"	H		Pet. deep violet
16719	Dioscorea	V woody climbing to 20-30'		
16720	Piper	S or low tree 10-12'		
16721	Rubus glaucus	V woody; stem 8' much of very	glaucous	Pet. wh
16722	Piper	S 5-15'		spikes wh.
16723	Eupatorium	S with elongate branches, anthers		Cor. gr-wh, lobes purple, styles pink
16724	Jungia	V woody		Cor. wh, stem green
16725	Piper	S or almost an herb 1-2 ft. long		
16726	Piper	S " " "		
16727	Muhlenbergia	V woody		Cor. & styles gr-wh, anther gr.
16728	Rubus macrocarpus	V woody		Fr. black
16729	Miconia	S 8-12'		Pet. pi-wh, fil. bright y
16730	Priscotia	H ter.		Sep. wh? walled

Jan. 6	clearing Valley of Surata River, above Surata clearing edge of forest	2000 -2400 m.	
	among rocks, edge of forest edge of forest		
	marsh		
	mossy banks rocky banks		
7	Vicinity of Surata		Coll. by Eloy Amaya growing on limestone
6	edge of forest		
	dense forest		
			4 1 3
	mossy banks		

16731	<i>Equisetum</i>	H					
16732	<i>Elaphoglossum</i>	H					
16733	<i>Elaphoglossum</i>	H					
16734	<i>Histiopleris</i>	H		Stipe 3', fr. 3'			
16735	<i>Hymenophyllum</i> <i>Tichomanes</i>	H ter.					
16736	Grass	H					
16737	Orchid	H ter.					
16738	<i>Oenothera</i>	H		Pet. red to or.-red			
16739	<i>Salicourea</i>	S 8-10'		Cor. gr.-wh., lobes green			
16740	<i>Justicia</i>	H		Cor. rich pink			
16741	<i>Piper</i>	S with prostrate branches, 2-3' long					
16742	<i>Centropogon</i>	V woody		Cor. rich pink, pale within			
16743	<i>Viburnum</i>	T 8-15'		Cor. wh.			
16744	<i>Quercus</i>	T 40-50'		Sep. green			
16745	<i>Weinmannia</i>	T 15-25' (fl.)		Pet. & fil. wh., anther light green			
16746	lichen	Ter.					
16747	moss	"					
16748	<i>Polytrichum</i>	"					
16749	moss	"					
16750	<i>Juncus</i>	T 30-40'		Fl. blue			
16751	<i>Pleurorhalla</i>	H Epip.		Fls. pure white throat			
16752	<i>Epidendrum</i>	H Epip.		5 sep + lip wh., deep purpl.			
16753	<i>Anthurium</i>	H scandent on tree trunks		Spadix green			
16754	<i>Gomphrena</i>	H prostrate		Heads gr.-wh.			
16755	<i>Loureia</i>	N vine		Cor. wh., turning yellow when wilted			
16756	<i>Verbena</i>	H 1-2.5'		Cor. pinkish-bl.			
16757	<i>Sterculia</i> "malva"	H 1-4' coarse		Pet. rich pi., darker prof.			
16758	<i>Boussingaultia</i>	N vine		Pet. wh., becoming pink at tips of lobes			
16759	<i>Duranta</i>	S with elongate drooping br.		Cor. gr. pur., pale pi. ^{at lobes} at ^{deep} purple			
16760	<i>Schomburgkia</i>	H ter 4-8'		Sep. deep pi., lip light pi.			
16761	<i>Begonia</i>	S 4-6'		Sep. light pi., fil. & anther y			
16762	<i>Chrysanthemum</i>	H		Rays wh., cor. gr.-y			
16763	<i>Castilleja</i>	N woody at base 1-2'		Sep. (wh. br.) light r., hairy part			
16764	<i>Thibaudia</i>	S 6-15'		Br. & calyx red-pi., cor.			
16765	<i>Loureia</i>	S 2-4'		Fl. deep red			

Jan. 6 Wet field, Valley of Surata River, above Surata 2000
dry banks -2400m.

Jan. 7 dense forest
dry banks

edge of forest
dense forest

edge of forest

forest
edge of forest
dry banks
damp soil
dry banks

in park (cult.) Surata 1740m.

7 woods along stream. 1700m.
at very base; column y dist.

8 waste places
probably cultivated
waste places

purple thicket, between Surata & California 1740
-2000m.

at tips of lobes
nearly wh. at center ~~dist.~~ Open hillside, bet. Cal. & La Baja 2000
#603 Y-1

Style gr., stigma y
of cor. y-g, neat pi.
brown-red, light pi. lobes

16731
16732
16733
16734
16735
16736
16737
16738
16739
16740
16741
16742
16743
16744
16745
16746
16747
16748
16749
16750
16751
16752
16753
16754
16755
16756
16757
16758
16759
16760
16761
16762
16763
16764
16765

16766 *Vaccinium* S 4-6'
 16767 *Vaccinium* S 1-3'
 16768 *Proteaceae* S 8-12'
 16769 *Melastomaceae* H woody
 16770 *Peperomia glauca* S ± 10ft.
 16771 *Escallonia floribunda* T small, 10-15'
 16772 *Salvia* H coarse, 4-6'
 16773 *Cestrum* T 15-25'
 16774 *Stipa* H
 16775 *Piper* S 4-6'
 16776 *Fuchsia* S 10-12'
 16777 *Thibaudia* S 5-10'
 16778 *Rubus* V woody
 16779 *Centropogon* V woody
 16780 *Piper* S 6-8'
 16781 *Epidendrum album* H ter
 16782 *Acalypha* S 10-12'
 16783 *Epidendrum roseum* H ter
 16784 *Coriaria* T 8-12'
 16785 *Epidendrum* H ter
 16786 *Polygala* H prostrate, 2-3'
 16787 *Passiflora maximiliana* H twining vine
 16788 *Mimulus* H
 16789 *Croton* S 3-5'
 16790 *Phyllis* H coarse 3-5'
 16791 *Neurtha* V herbaceous
 16792 *Phaseolus* V herb.
 16793 *Piper* S 6ft.
 16794 *Lasiacis* V much branched
 16795 *Alluvia violacea* H coarse to 4'
 16796 *Morimia* H up to 3'
 16797 *Justicia* H 3-10' pubescent
 16798 *Acalypha* T 15-25' pet. & anthers y.
 16799 *Grass?* H 5' high or more low
 16800 *Orchid* H epiphyte

"milio"

Calyx gr., cor. light pi. lobes deep
 " light gr. cor. wh. ^{anthers} pi.
 Calyx & anther gr.
 Pet. gr.-y. st. & anther rich y.
 Cor. rich pi., st. wh., anther gr.
 Pet. & fil. wh., anther olive-gr.
 Calyx cor. red
 Cor. tube wh., lobes wh. margin
 Young apices gr.-wh.
 Calyx & pet. bright red, pet.
 Cal. dark gr., lobes light
 Pet. light pi. Sep. wh.-
 Tube rich pi., nearly wh.
 Spikes nearly wh.
 Seps. light pi. out, wh. in,
 Styles deep pinkish-red
 Seps. rich pi., lip, light pi., col.
 Anther y-g. Sep. deep purple
 Seps. pi. out, wh.-y. in.
 Pet. deep purple, fr. gr.
 See notes
 Cor. bright y.
 Sep. light gr., pet. fil., & anther wh.
 Cor. out purple base, wh. mid, lobes purple.
 Cor. light pi.
 See notes
 Pet. light or brown, base
 Sep. red-purple; pet. rich pi.
 Pet. deep purple
 Cor. deep pi. red, Cor. light
 S. gr. ; style, pi. red
 fr. green; used as popcorn
 but small
 See notes

Jan. 8 open hillside Between California & La Baja
 2000-2600m.
 thickets Vic. Surata
 1700
 -1800m.
 slightly lighter, open hillside, bet. California & La Baja
 Cor. tube deep red, prox., dist. & lobes green, fil. wh. ^{anther bright} pale dist.
 margined; st. wh. anther gr.
 Tube brown, col. br.-purple, lip wh., crown y. / rocky hillside
 open hillside
 lip purple. prox. gr.-y. dist., crown y. / rocky hillside
 purple open hillside
 col. purple-br., lips y.
 thickets
 marshy place, bet. Surata & California
 open hillside
 thickets
 Surata, sparingly cult.; from "Tierra Caliente"
 10 woods along streams, Surata
 1700m.

2000-2600m.
 1700
 -1800m.
 2000-
 2 Y-2
 Y-1
 1740-2000m.
 +
 2
 1
 2
 1700m.

- 16801 *Chenopodium* "paico" H 2-3' Plant y-g.
- 16802 *Plantago* ~~"elamitais"~~ ~~"plantain"~~ H medicinal for inflammation
- 16803 *Tapeinidium* H epip.
- 16804 *Diplazium* H epip.
- 16805 *Begonia* H epip. suc. P. sep. wh. ♀ Pet. light pi.
- 16806 *Thalassantia* H ter. Per. light pi.
- 16807 *Oreopteris* S epip. spikes gr.
- 16808 *Doryopteris* H ter. & epip.
- 16809 *Asplenium* H
- 16810 Moss On partly submerged rocks
- 16811 Rub? V herb Tube gr., lobes wh. hairs wh
- 16812 *Eugenia jambos* T 20-30' Pet. ostam. gr. - wh.
- 16813 *Zanthoxylum* S shrub 10-12' Pet. wh. many, gr. center
- 16814 *Solanum?* V herb. Fl. buds gr.
- 16815 *Peperomia "anthurionides"* H succ. on tree Spikes green
- 16816 *Dicliptera* H subscandent Calyx gr. pur, sep. dist. oblate, cor. pinkish-red
- 16817 *Polypodium* H ter. moist banks
- 16818 Moss On tree
- 16819 Moss On moist soil
- 16820 *Sambucus* "saico" T 8-10' used for ~~calorho~~ grippe
- 16821 *Scroph.?* V herb. Cor. tube wh. procs along lower side, otherwise
- 16822 *Caesalpinia* S on small tree, in dense clump, stem slender. woody below
- 16823 *Pouzolzia* H woody below
- 16824 *Eupatorium* S 9-12' pi. - tinged
- 16825 *Cestrum* S 8-12' along br. Cor. gr. - wh., styles light gr.
- 16826 *Adenaria* S 4-8' Cor. gr. - y.
- 16827 *Phaseolus* V herb. Pet. wh.
- 16828 *Cassia* T 12-20' See notes
- 16829 *Cordia floribunda* S 5-8' Pet. bright y
- 16830 *Bidens* H Ray wh., cor. gr. - y.
- 16831 *Hiraea* V herb. Pet. y
- 16832 *Mimosa* S or sm. T 10-15' Stam. gr. - wh. (wilted)
- 16833 *Salix (not S. Humboldtiana)* T 50-60' 2-2.5 diam. Aments gr.
- 16834 *Passiflora suberosa* V herb. Tube purple out base; grass gr.
- 16835 Grass H drooping over road.

Jan. 10 field *Sanata* 1700m.

woods along stream

with y-g thickets along stream

calyx tube pi. woods along stream

fls. var. gr.

open hillside

slower purple

Jan. 11 open hillside, perhaps escape

bet. *Sanata* & California

1800m.

1740

- 2000m.

perhaps introduced

- 16836 Rust on 16835
- 16837 Parosela
- 16838 Ipomoea
- 16839 Cissampelos
- 16840 Eugenia
- 16841 Euphorbia
- 16842 Datura
- 16843 Croton
- 16844 Cestrum
- 16845 Stipa
- 16846 Agrostis
- 16847 Syntherisma
- 16848 Andropogon
- 16849 Comp.
- 16850 Dryopteris
- 16851 Cheilanthes
- 16852 Mimosa
- 16853 Oxalis
- 16854 Phaseolus
- 16855 Albionia
- 16856 Borreria
- 16857 Notholaena
- 16858 Polypodium pauciculata
- 16859 Carya
- 16860 Caribea
- 16861 Asplenium
- 16862 Polypodium
- 16863 Cyperus
- 16864 Chaetochloa
- 16865 Gauthoxyllum
- 16866 Comp.?
- 16867 Anagallis
- 16868 Neiburgia
- 16869 Sterculia
- 16870 Sonchus

H 2.5-4', woody below
 V herb twining
 V herb twining
 T small
 T 10-15'
 H
 H 3-6'
 S low, up to 6'
 S
 H slender
 H
 H
 H semiprostrate
 H
 H
 S 5-10'
 H basal lvs suberect
 V herb on ground
 S 2-3'
 H
 H
 H slender
 H
 H
 H
 H
 H slender
 H
 H
 H
 H slender
 H
 H
 H slender
 H
 T 8-12'
 S 2-5', very glutinous
 H weak, prostrate
 H 3-5', lax
 H coarse
 H coarse 2-4'

Pet. all wh. prox. purp. dist.
 Cor. pi.-purp, lobes paler
 fls. green
 Pet. wh., fil. pi. prox.
 Infl. wh.
 Cor. pinkish-blue
 Pet. gr.-wh, fil. wh. anthers gr.
 Cor. gr.-wh.
 Bracts reddish
 Infl. reddish
 Infl. wh.
 Heads gr. wh.
 Bracts bright green
 fls. - deep to light pi, anthers
 Cor. Pet. y.
 Pet. deep blue, dist., wh. prox.
 fls. bluish-purp. anthers y-g
 Cor wh. to light pi.
 Sep. gr. wh. marg. Pet. wh. fil. tip dist.
 Br. gr. bristles purplish
 Pet. rich pi.
 Sep. gr. to deep purp.
 Pet. purplish-pi.
 Pet. gray
 Cor. wh. to pi.
 Pet. bright blue, darker at base
 Pet. pi-purp., paler prox.
 Pet. purpl.-pi.
 Ray florets y

Jan. 11 open hillside, Bet. Durata & California

gr. wh dist; anthers light brown

California

12 rocky hillside

8 thicket

12 open hillside, above California

Bet. Durata & California

fil. purp., anthers y

1700-2000m

+2000m

1700-2000m
2000-2400m

16836
16837
16838
16839
16840
16841
16842
16843
16844
16845
16846
16847
16848
16849
16850
16851
16852
16853
16854
16855
16856
16857
16858
16859
16860
16861
16862
16863
16864
16865
16866
16867
16868
16869
16870

1
2

1

2

1

16871 *Alousoa* H 1-2.5'
 16872 *Polygonum* H prostrate branches
 16873 *Oenothera* H
 16874 *Salvia* H ± 2'
 16875 *Miconia* S 2-4'
 16876 *Arietida* H
 16877 *Euphorbia salviaefolia* S 3-4'
 16878 *Pityrogramma tartarea* H
 16879 *Solanum sinuatum* H 1.5-2'
 16880 *Asplenium* H
 16881 *Eriochlaena* H
 16882 *Asplenium* H
 16883 *Eupatorium* H 1.5-2.5' high, woody below
 16884 *Miconia* T 10-12'
 16885 *Lippia* T 6-12'
 16886 *Cassia* T 8-15'
 16887 *Banisteria* S 6-10'
 16888 *Mimosa* S with elongate branches
 16889 *Passiflora bracteosa* V woody
 16890 *Hibiscus* S up to 12', branches drooping
 16891 *Solanum tenuipes* V woody
 16892 *Palicourea* S 2-4'
 16893 *Passiflora* V
 16894 *Centropogon* V woody
 16895 *Dichromena* H
 16896 *Bidens "cayton"* H coarse, branches prostrate
 16897 *Liabum* S 6-10'
 16898 *Solanum velutinum* S
 16899 *Sphaecle* S 6-10'
 16900 *Solanum hirsutum* H prostr. branches
 16901 *Miconia* S 4-6'
 16902 *Polypodium plerumula* H
 16903 *Polypodium "canaguala"* H ~~erect~~
 16904 *Hypericum* S 2-8'
 16905 *Eupatorium* S 4-6'

Cor. or-red
 Sep. gr. prox, wh. dist.
 Pet. y., or tinged at apex
 Cor. bright bl., anths. light gr.
 Calyx light gr., pet. & fil. wh.
 Infl. pi.-red
 Sep & pet. pi.-red, pale margin
 Cor. Spi.-wh., striped darker
 Bracts lustrous above.
 Cor. gr., lobes & style bright
 Pet., fil. & styl. wh.
 Cor. wh., tube gr. white
 Pet. bright y
 Pet. y
 Fil. light pi., anth. wh.
 See note
 Pet. red; anth. gr.
 Cor. wh., fil. gr., sep. streaked
 Cor. gr.-wh.
 Stems
 Cor. red interior, light pi. in
 Br. wh. prox, gr. dist.
 Achene purple.
 Rays bright y; fls. darker
 Cor. wh. purple-tinged out
 Cor. wh.; anth. y.
 Cor. wh.
 Cor. wh., midrib purple
 Calyx light gr.; pet. w.
 Pet. y; anth. 5 or more
 Cor., styles, stem. fine white

Jan. 12 open hillside, above California
 wooded stream
 open hillside
 anths. light gr.
 pi. anths. bright y
 pi.
 anth. gr.; fl. purple
 edge of woods
 anth. gr.-y
 open woods
 edge of woods
 Thickets
 both sides, anths. y
 anth. gr.-pi.; open woods
 edge of woods

2400-2800m.
 1
 2
 P₆
 2500-3000m.
 2
 1
 1

16881
 16882
 16883
 16884
 16885
 16886
 16887
 16888
 16889
 16890
 16891
 16892
 16893
 16894
 16895
 16896
 16897
 16898
 16899
 16900
 16901
 16902
 16903
 16904
 16905

16906 *Sanecis*
 16907 *Vaccinium*
 16908 *Meriania*
 16909 *Psychotria*
 16910 *Arcytophyllum*
 16911 *Cyathea*
 16912 *Passiflora*
 16913 *Oralis "accedera"*
 16914 *Elephoglossum*
 16915 *Brassica*
 16916 *Viburnum tomentosum*
 16917 *Polytrichum*
 16918 Lichen
 16919 Hep.
 16920 Moss
 16921 Lichen
 16922 Lichen
 16923 Lichen
 16924 Moss
 16925 Moss
 16926 Hep.??
 16927 Moss
 16928 *Centropogon*
 16929 *Eupatorium*
 16930 *Psychotria*
 16931 *Viburnum*
 16932 *Hydrocotyle*
 16933 *Saurauja*
 16934 *Solanum "arbol de cocua"*
 16935 *Pomarea*
 16936 *Paspalum*
 16937 *Asplenium*
 16938 *Polypodium*
 16939 *Vitis*
 16940 *Agrostis*

S 6-8'
 S 4-6'
 S 4-10'
 S 6-8'
 S low, *sempervivens*
 Franchetia
 Candy 2' high, 8" diam.
 H
 H succ.
 H ter.
 T 10-15'
 T 10-15'
 On banks
 Dry branches
 Damp tree trunks
 On trees
 On rocks
 On banks
 On banks
 On dry banks
 On rocky banks
 V woody
 S 4-8'
 S 2-4'
 T slender, 10-12'
 H rep.
 T 12-15'
 S 10-12'
 V woody
 H
 H epib?
 V herb.
 Slender grass

Heads y
 Buds wh., Cor. pi.
 Pet. mag. pi., fil. reddish
 Ripe fr. black
 Cor. wh.
 Per. deep violet, fil. o. ant. y
 Pet. y.
 Fls. white, gr. wh.
 Buds green, fls. wh.
 Cor. red, opt, pale pi. in
 Cor. gr. w., lobes, stem, rich pi
 Infl. deep greenish - y
 Fr. gr., not ripe?
 Infl. gr.
 Pet. wh., ant. y
 Cor wh. green underneath, ant. y
 See notes
 Fr. y-gr., stem purple
 Pet. y-gr.

Jan. 12
 edge of woods, above California
 auth y.
~~open woods~~
~~edge of woods~~
 edge of woods
 open woods
 edge of woods
 open woods
 open woods (cult.?)
 open woods
 open hillsides

2800
 -3000m.
 3
 2400-
 2800m.
 3000m.
 2

16906
 16907
 16908
 16909
 16910
 16911
 16912
 16913
 16914
 16915
 16916
 16917
 16918
 16919
 16920
 16921
 16922
 16923
 16924
 16925
 16926
 16927
 16928
 16929
 16930
 16931
 16932
 16933
 16934
 16935
 16936
 16937
 16938
 16939
 16940

16941 Comp.
 16942 Lycopodium
 16943 Davilla
 16944 Elaphoglossum
 16945 Centropogon
 16946 Castilleja
 16947 Solanum
 16948 Solanum
 16949 Solanum "turno"
 16950 Moss
 16951 Parietaria
 16952 Cestrum "minigua"
 16953 Piper
 16954 Eriochloa
 16955 Verbenaceae
 16956 ~~Cupressus~~
 16957 Solanum
 16958 Scroph.
 16959 ? "tamapaco"
 16960 Rubus
 16961 Eupatorium
 16962 Rust on 16961
 16963 Rubus glaucus
 16964 Polystichum
 16965 Asplenium
 16966 Stipa
 16967 Balceolaria
 16968 Carex
 16969 Paspalum
 16970 Solanum
 16971 Salvia
 16972 Comp.
 16973 Salvia
 16974 Iresine
 16975 Peperomia

S 10-12'
 H repent
 T 8-12'
 H ter.
 S low, branches
 S scandent
 H 1.5-2'
 S 2-4'
 H 3-4'
 S 4-6'
 dry banks
 H
 S 10-15'
 S 12-20'
 H
 T 15-20'
 H matted
 H 1-1.5', woody at
 base
 H 6-15 inches
 T 12-15'
 S 2-4'
 S 2-4'
 S 5-8'
 H
 H
 H
 H + succulent
 H
 H
 H
 V woody H 2-5'
 V woody
 H
 S 8-12' ± viscous
 V herb
 H succ. epiphyt. repent

Pappus gr. wh.
 Spikes wh.
 Fr. reddish-br.
 Cor. red out, pi.-wh in
 Br.-gr. prox, y, dist.
 Cor. gr. wh., anther y
 Cor. pale pi., purple out
 Cor. light blue,
 Per. o br. gr.
 Cor. or.
 Spikes green
 Cor. gr.-wh.
 Fr. gr.
 Cor. wh. marg., purp. cent.
 Cor. wh., ~~br.~~ y-g at
 throat
 Pet. pi.-wh., anther reddish
 Pet. light pi.
 Cor. o style, pure wh.
 Pet. light pi. to wh.
 Cor. y.
 Cor. wh., ^{see notes} whitish pi., anther y
 See notes
 Rays pi. wh., cor. gr.
 See notes
 Infl. gr.-wh.

Jan 12 open hillside above California
 lobes red
 Cor. bright red.
 at middle
 anther y.
 edge of woods
 open woods
 edge of woods
 open woods
 throat within, edge of woods
 edge of stream
 dry bank
 open woods
 open woods
 edge of woods

3000 m.
 3000 - 2500 m.

16901
 16902
 16903
 16904
 16905
 16906
 16907
 16908
 16909
 16910
 16911
 16912
 16913
 16914
 16915
 16916
 16917
 16918
 16919
 16920
 16921
 16922
 16923
 16924
 16925
 16926
 16927
 16928
 16929
 16930
 16931
 16932
 16933
 16934
 16935
 16936
 16937
 16938
 16939
 16940
 16941
 16942
 16943
 16944
 16945
 16946
 16947
 16948
 16949
 16950
 16951
 16952
 16953
 16954
 16955
 16956
 16957
 16958
 16959
 16960
 16961
 16962
 16963
 16964
 16965
 16966
 16967
 16968
 16969
 16970
 16971
 16972
 16973
 16974
 16975

16976 *Marchantia* On wet rocks
 16977 *Marchantia* " " "
 16978 *Hep.* " " "
 16979 *Lichen* Pl. bright orange
 16980 *Lichen*
 16981 *Schwartzia* ? "flor de Plata" H ter. 8-20'
 16982 *Lippia* T 10-15'
 16983 *Solanum* S 4-5'
 16984 *Anthurium* H ter
 16985 *Polypodium* H ter
 16986 *Polystichum* H ter
 16987 *Miconia* S 4-6'
 16988 *grass* H
 16989 *Pilea alacioides* H weak, waxy below
 16990 *Pilea dauceudora* H stem red, succ.
 16991 *Polypodium* H ter.
 16992 *Anthurium* H ter?
 16993 *Centropogon* V woody below
 16994 *Blechnum* H
 16995 *Centropogon* V woody
 16996 *Cyathea* *puberula* (Bl.) *tree fern* Caudex decumbent or subterranean.
 16997 *Marchantia* Wet rocks
 16998 *Alternanthera* H *subcaudant* br. up to 6' long
 16999 *Lichen*
 17000 *Dichsonia* Caudex decumbent or subterranean, stipe 1-1.5'; frond 4-6'
 17001 *Peperomia* H epip.
 17002 *Phoradendron* S epip.
 17003 *Cestrum* S 6-8'
 17004 *Richardia* V herb
 17005 *Coreopsis* S low
 17006 *Borreria* H ter. prostrate
 17007 *Browallia* H
 17008 *Momina* H 3-5'
 17009 *Adiantum* H ter.
 17010 *Asplenium* H

See notes
 Cor. wh.
 Cor. wh. anther y
 Spadix dark gr., spathe light gr.
 Pet light pi., fil. reddish pi., anther y, red dorsally
 achenes light gr.
 Pet ofed. purple, spathe gr. margin, br. center out, pi. in., young spathe deep purp
 Cor. rich pi. out, pi. in
 Cor light red, pale purp, lobes darker (out); pi. in. stipe ± 1'
 Heads rich purple
 Spikes yellowish
 Cor. gr. - y.
 Gr. purp ~~at base~~ at base, deep bright y; cor. gr., lobes or
 Cor. wh., lobes faint tinged
 Tube pi out, lobes bright blue
 Pet. rich blue

Jan. 12 woods above California

rocky banks
 woods

Pet light pi., fil. reddish pi., anther y, red dorsally
 achenes light gr.
 Pet ofed. purple, spathe gr. margin, br. center out, pi. in., young spathe deep purp
 Cor. rich pi. out, pi. in

Cor light red, pale purp, lobes darker (out); pi. in. stipe ± 1'

13 open hillsides near California

3000-2500m.

2500-2300m.

2000m. 1900-2000m.

16976
 16977
 16978
 16979
 16980
 16981
 16982
 16983
 16984
 16985
 16986
 16987
 16988
 16989
 16990
 16991
 16992
 16993
 16994
 16995
 16996
 16997
 16998
 16999
 17000
 17001
 17002
 17003
 17004
 17005
 17006
 17007
 17008
 17009
 17010

- 17011 Solanum
- 17012 Selaginella
- 17013 Lasiacis
- 17014 Pilea sp. nov.
- 17015 Begonia
- 17016 Peperomia
- 17017 Phlox lutea
- 17018 Paspalum
- 17019 Asplenium
- 17020 Aster
- 17021 Aster
- 17022 Grass
- 17023 Polygonum
- 17024 Plant(?) on 17023
- 17025 Pilea
- 17026 Polypodium ?
- 17027 Nasturtium "berro"
- 17028 Pityrogramma tartarea
- 17029 Tachyphoria
- 17030 Craterium "mosquero"
- 17031 Justicia
- 17032 Piptopteris
- 17033 Myrica
- 17034 Melast.
- 17035 Eleocharis
- 17036 Marchantia
- 17037 Moss
- 17038 Asplenium
- 17039 Mimulus
- 17040 Palm
- 17041 Compositae
- 17042 Justicia
- 17043 Polypodium
- 17044 Acalypha
- 17045 Epidendrum

✓ herb.
 H
 ✓ herb.
 H succ.
 H
 H Epip.
 + woody br. 4-6'
 H perulate on ground
 H
 H
 H
 H long. branches
 H repeat below
 H succ. weak
 T 15-25'
 H repeat
 H
 S 5-12'
 S 2-5'
 H 2-3'
 H
 S 5-15'
 H
 H repeat at base
 on wet rocks
 on wet logs
 H
 H 3-4'
 Frunk 1/2 in. P. 6-10'
 H fr. semiprot.
 H 2-2.5'
 H
 S 6-10'
 H 6-8'

Cor. wh., anth. y.
 Cor. wh., anth. y.
 Ray white; cor. deep y.
 Sep. wh.
 Bract (only) greenish wh.
 Pet. light green wh.
 Cor. gr. wh. with stiff wh. hairs; fr. pure wh.
 Pet. light gr., stam. wh.
 Cor. deep reddish, pi. at base
 Fr. gr.
 Pet. wh.
 Fruit wh.; cor. gr. wh., pale dist.
 Fr. or y. with black skin
 Fr. bl.
 Cor. dark red
 Numerous spikes gr. wh.
 See notes

Jan. 13 Woods near California
 edge of stream

1900
-2000m.

2

2

2

2600
-2350m.

1

17071
 17072
 17073
 17074
 17075
 17076
 17077
 17078
 17079
 17080
 17081
 17082
 17083
 17084
 17085
 17086
 17087
 17088
 17089
 17090
 17091
 17092
 17093
 17094
 17095
 17096
 17097
 17098
 17099
 17100

17046	<i>Panicum platycaula</i>	V herb. twining	Fls. as before	Jan 13 woods	near California	2000 -2550m.	
17047	<i>Iponoea</i>	V herb	Cor. wh. ^{lobes} peris, pi. dist.	lobes purple			2
17048	<i>Habenaria</i>	H	3 nts sep. gr. 2 in br +				1
17049	<i>Piper</i>	S or low 8-12'	head wh.				
17050	<i>Rust</i>		Spikes wh.				
17051	<i>Autopogon</i>	V ± woody	Cor. red pi. out; nearly wh				
17052	<i>Eupatorium</i>	H 4-6' (?)	br. gr. dist pur. wh. dist.				
17053	<i>Mesaspis paniculata</i>	T 12-20'	Cor. pi. tinged; styles gr.				
17054	<i>Eclipta</i>	V woody	Heads gray-a				
17055	<i>Viburnum</i>	S 8-12'	Cor. y				
17056	<i>Clethra? (Edmonnumia?)</i>	T 12-20' slender	Cor. wh.				
17057	<i>Piper</i>	S 3-4'	Cor. (pt) wh.				
17058	<i>Habenaria</i>	H	Seps gr., wh. ^{toothed} marg.				2
17059	<i>Viburnum</i>	T 10-12'	Rays wh., heads deep gr.	connecting dist			
17060	<i>Castilleja</i> Comp.	S 8-12' slender	br. sep. red, dist	by upper margin			
17061	<i>Meibomia</i>	V herb	Pet. blue	lip to			
17062	<i>Stenorrhynchus</i>	H suc.	3 sep. pi. red out,	paler in; lip wh.			3
17063	<i>Anthurium</i>	H ter	See notes				
17064	<i>Anthurium</i>	H ter					1
17065	<i>Anthurium</i>	H ter a pip	Spad. pink, spathe gr.				2
17066	<i>Commelinac.</i>	H suc. 3-4'	See notes				
17067	<i>Anthurium</i>	H ter?	Spathe golden-br. out,	rose red with y veins in; spad. red br., fr. ^{light gr apex} red distal			2
17068	<i>Tradescantia</i>	H suc. 1-2'	br. gr.				
17069	<i>Hibiscus</i> Moss	on dec. logs	Pet. reddish pi.				
17070	Moss	" " "					
17071	Moss	" " "					
17072	<i>Marchantia</i>	" wet rocks					
17073	<i>Drymaria</i>	H weak, comp prot.	Pet. gr. wh.	woods		2400 -2000m.	
17074	Rub.	S 8-12'	Cor. red				
17075	<i>Asplenium</i>	H					
17076	Orchid	H epip.	Fr. gr.				
17077	Orchid	H ter	See notes				
17078	<i>Peperomia</i>	H epip.					
17079	<i>Columnnea</i>	H Ter Stem ± suc.	Cor. gr. wh. in out, out	around with red hairs			2
17080	?	S	Cor. wh., gr-tinged				

17081 *Anthurium*
 17082 *Malaxis*
 17083 *Viburnum*
 17084 *Polystichum*
 17085 *Duranta*
 17086 *Clavija*
 17087 *Myrsinaceae?*
 17088 *Asplenium*
 17089 *Tapeinidium*
 17090 *Pilea parietaria*
 17091 *Centropogon*
 17092 *Rub.*
 17093 *Tropaeolum*
 17094 *Ruellia*
 17095 *Heliconia canna*
 17096 *Gleichenia* "láclinpo"
 17097 *Solanum* "cocúa"
 17098 *Eleusine?*
 17099 *Justicia Spigelia*
 17100 *Peperomia*
 17101 *Eupatorium*
 17102 *Jodaria*
 17103 *Peperomia*
 17104 *Phytolacca*
 17105 *Adiantum*
 17106 *Mimulus*
 17107 Moss
 17108 "
 17109 "
 17110 "
 17111 "
 17112 "
 17113 "
 17114 *Anthurium*
 17115 *Tillandsia*

H Epip?
 H Epip See notes
 S 8-12' Cor. wh.
 H ter.
 S 12-20' slender Jr. cr.
 T 8-10' trunk erect, 1" diam. Jr. sep.
 S 15-20' in crown summit Jr. or. red
 S slender Cor. light pi.
 H Epip.
 H Epip.
 H sup. rooting stem below
 V herb Cor. rich pi out, pale
 H ± woody below Jr. scarlet
 V herb. Calyx y-garben & lobes
 H pi. red below; pet. or fil. deep
 H tall Bracts pale
 H Sep. purple prox, gr. above
 S 10-12' Cor. wh, gr. tinged out
 H 2-4' Jr. wh.
 H Cor. rich pi.
 H sep. tan?
 ? Cor. gr.-wh, lobes deep pi.
 S 5-8' Pet. wh., fr. gr. styles light pi.
 H 1-2.5' Sep. rich pi. at base
 H gr. else, styles red pi.
 H coarse 3-5' Cor. gr., lobes pi. tinged
 Moist banks
 Wet logs
 " "
 " "
 " " } *repitua*
 " "
 " "
 H ter.
 H Epip.

Jan. 13 woods near California

2400
-2000m.

stream bed

purple, anth. gray-pi.

fil. red-purp.

anth. y.

styles light pi.

Anthurium coripetense N. S. Br. det. D. Croat 1990

17081
 17082
 17083
 17084
 17085
 17086
 17087
 17088
 17089
 17090
 17091
 17092
 17093
 17094
 17095
 17096
 17097
 17098
 17099
 17100
 17101
 17102
 17103
 17104
 17105
 17106
 17107
 17108
 17109
 17110
 17111
 17112
 17113
 17114
 17115

17116	Mesquite	V herb.	Young heads gray wh.
17117	Pisum?	H 1-1.5'	St. wh. purpl streaked
17118	Melastom.	H woody	Pets. & anthers bright y
17119	Carex	H	
17120	Euphorb.?	H 2-3' S	
17121	Eupatorium	H 2-3'	Cor. gr.-wh., lobes o
17122	Phytolacca	H coarse succ	style deep pi. open banks
17123	Mupia	S 8-12'	Sep. & styles rich pi.
17124	Alsophila	S 8-12'	Dr. gr.
17125	Eriolaena	Caudex 1', semi-decumbent; stipe 2-3', fr 6-10'	
17126	Sauveteria	H	
17127	Piper	S 8-10'	Dr. black
17128	Lycopodium	S 8-15'	Spikes gr. sep.
17129	Eupatorium	H trailing over banks	lobes wh. to light pi.
17130	Eupatorium	S 8-12'	
17131	Comp.	S branches herbaceous	Cor. apparently wh, but with
17132	Tiliaceae	H	heads or rays y.
17133	Verbesina or Coreopsis?	T 12-20'	Pet. gr. y, but young
17134	Cuphea	S 8-12'	Ray bright y; cor. y-or
17135	Cinchona	H	Calyx red-purp; Pet. pi.
17136	Muehlenbeckia tamnifolia	T 20-25'; trunk slender, 3" diam	Cor. pinkish, wh. in.
17137	Castilleja	V herb woody below	Per. y-g.; fr. y-g.
17138	Hypericum	H woody	Br. y-g. sep. red, y. app
17139	Grass	H woody	Pet. y
17140	Castilleja (= 17137??)	woody below	Colony as in 17137
17141	Escallonia floribunda	T 10-20'	Pet. wh
17142	Meibomia	H demipustate	Pet deep blue
17143	Psoralea	S 10-15'; much branched below	Pet. bright blue.
17144	Centropogon	V woody	Cor. red
17145	Myrtilaceae foranck	T 15-20'	Fr. light gr.
17146	Alsophila	Caudex decumbent or subter.; stipe 2', fr. 4-5'	
17147	Rubus	V woody	Pet. wh.
17148	Passiflora mixta	V woody	See notes
17149	Parietaria	H erect	Per. gr. wh.
17150	Salvia	H fr. app. erect	Cor. deep blue

Jan. 13 wood near California
 14 open banks ~~near California~~ La Baja

Thickets
 styles deep pi. open banks

fr 6-10'

lobes wh. to light pi.
 Cor. apparently wh, but with
 heads or rays y.
 Pet. gr. y, but young
 Ray bright y; cor. y-or
 Calyx red-purp; Pet. pi.
 Cor. pinkish, wh. in.
 Per. y-g.; fr. y-g.
 Br. y-g. sep. red, y. app
 Pet. y
 Colony as in 17137
 Pet. wh
 Pet deep blue
 Pet. bright blue.
 Cor. red
 Fr. light gr.
 Pet. wh.
 See notes
 Per. gr. wh.
 Cor. deep blue

thickets north of La Baja

shaded bank
 clearing open

± 2000m
 2000
 -2600m.

2000
 -2900m.

2
 1
 2
 2

17151 *Asplenium* H
 17152 *Asplenium* H
 17153 *Pestuca* H
 17154 *Erodium* H
 17155 *Agrostis* H
 17156 *Solanum* S 8-12'
 17157 *Eupatorium* S 5-8'
 17158 *Saracha?* H?
 17159 *Echinocystis* V herb
 17160 *Rumex conglomeratus* H
 17161 *Passiflora* H
 17162 *Pteris* H
 17163 *Jacmeffortia* T low or S 10-15'
 17164 *Polypodium incisum* H ten. repeat
 17165 *Polypodium glaucophyllum* " " "
 17166 *Ruellia* or *Splachnaceae*
 17167 *Ripis* S 5-6'
 17168 *Ficus* on bank with bamboo
 17169 *Cypripedium* S ec. herb
 17170 *Crotalaria* H
 17171 *Stevia* S 8-10'
 17172 *Guajacaceae* H
 17173 *Lobelia* H
 17174 *Thibaudia* S 8-15'
 17175 *Pellaea* H
 17176 *Dryopteris* H
 17177 *Alsophila* Caudex subter. stem 2-3', fr. 2'
 17178 *Lebanon* S 8-15'
 17179 *Polygala galwides* H 2-3'
 17180 *Melastomaceae* T 20-30'
 17181 *Cyathus* what?
 17182 *Ruellia*
 17183 *Comp.*
 17184 *Eupatorium* S 6-10'
 17185 *Centropogon* V weed

Cor. wh., anther y
 Cor. gr. wh., lobes rusty
 Cor. wh., purp. cent. in
 Cor. wh.

Per. gr.
 Same as 17117

Cor. gr. wh., fr. wh.

Pet. y
 Per. bl
 Cor. wh. used for inflammation
 Pet. y

Cor. light bl.
 Cap + lower 2/3 cor brighter upper 3rd cor. lobes pale pi

stem 2-3', fr. 2'

Ray wh
 Pet. pi.
 Pet. wh.

Ray wh lobes y
 Cor. lobes rusty
 Cor. bright red

Jan. 14 shaded bank above La Baja

2700
2400m

clearing open hillside

2

upper part
 white y

2

1

shaded bank
 open hillside

shaded bank
 open hillside

1

1/2

1

woods

17186	<i>Stenorrhynchos</i>	H sec ter	3 net sep red, 2 in. pi. 'lip' wh.
17187	<i>Bomarea</i>	V herb	See notes
17188	<i>Pilea lauciodora</i>	H sec	
17189	<i>Elaphoglossum</i> <i>Elaphoglossum</i>	H ter.	
17190	<i>Elaphoglossum</i>	H ter.	
17191	<i>Solanaceae</i>	S with much - gnarled branch	Cor. pi-w, anther y.
17192	<i>Solanum</i>	H woody below	Cor. light bl, " "
17193	<i>Epilobium</i>	H	See notes
17194	<i>Transeria</i>	S 8-12'	Cor. gr.-y.
17195	<i>Vernonia?</i> or <i>lyp</i>	V woody	Pappus wh.
17196	<i>Passiflora mollis</i>	V herb	
17197	" <i>ligularis</i>	V herb woody	See notes
17198	mos	on banks	White
17199	mos	on banks	
17200	<i>Passiflora rugosa</i>	V woody	See notes
17201	<i>Alseophila</i>	Caudex subter -	stipe 1-2', fr. 2'
17202	<i>Centropogon</i>	S 2-4'	Cor. deep red, pi. wh.
17203	<i>Eupatorium</i>	S 4-6'	Tube, lobes, & style, pi.
17204	<i>Bidens</i>	H woody below	Cor. gr., tube lobed
17205	<i>Eupatorium</i>	H woody below	Cor. style, wh.
17206	<i>Miconia</i>	S on tree	Dr. wh. pure
17207	<i>Tillandsia</i>	H epip.	Calyp. lvs. gr. rust
17208	<i>Centropogon</i>	V woody	red fls.; buds orange
17209	<i>Psychotria</i>	S 8-10'	Tube red out, 2-pi in.
17210	<i>Eschscheria</i>	H 1.5-3'	See notes
17211	<i>Eriochloa</i>	H	Cor. wh.
17212	Orchid	H	Inf. wine-color
17213	<i>Castilleja</i>	H	See notes
17214	<i>Senecio</i>	S 4-8'	bracts bright red. ^{advent} fls.
17215	<i>Daultheria</i>	S 2-4'	Heads y.
17216	<i>Eupatorium</i>	S 4-5'	Calyp. gr., pi. tint, tube
17217	<i>Defaria</i>	S 1-2'	Cor. pi-w, lobes & sty. deep
17218	Lichen	on dry twigs	Cor. ul. at base, rich pt.
17219	<i>Trichomanes</i>	H epip.	
17220	<i>Hymenophyllum</i>	H epip.	

Jan. 14 ~~Stratford~~ woods above La Baya

2700
-2900m

rocky bank

clearing

open hillside

woods

15. " above California on road to Paramo Rico 3000-3500m.

open hillside

light pi., lobes deep pi.
light pi.; anther light gr. fls. viscous

woods ^{w. slopes} edge of Paramo Rico

3600
+4000m.

Vertical stamp on the right edge of the page, containing a series of numbers and possibly a date, which is mostly illegible due to the angle and fading.

17221 *Hymenophyllum*
 17222 *Odontosoria*
 17223 *Columnea*
 17224 *Cestrum*
 17225 *Castilleja*
 17226 *Calceolaria*
 17227 *Arnica*
 17228 *Verbesina*
 17229 *Melastom.*
 17230 *Eupatorium*
 17231 *Eupatorium*
 17232 *Fern (like Polystichum)*
 17233 *Cestrum*
 17234 *Alousoa*
 17235 *Passiflora nixta*
 17236 *Juchisia*
 17237 *Lupinus*
 17238 *Barnadesia*
 17239 *Alnus*
 17240 *Scaevtheria*
 17241 *Pleurothallis*
 17242 *Orchid*
 17243 *Eupatorium*
 17244 *Verbesina*
 17245 *Echeveria*
 17246 *Digitalis*
 17247 *Stelia*
 17248 *Marrubium*
 17249 *Solanum*
 17250 *Cheilanthes*
 17251 *Elaphoglossum*
 17252 *Vicia*
 17253 *Calceolaria*
 17254 *Polylepis*
 17255 *Hypericum*

H epip
 Vire
 H ter?
 S low
 N wood below
 S low
 H 6-10' coarse
 S 6-10'
 S low
 S 6-90'
 S
 H
 S
 H woody
 V woody below
 V
 H 2-2.5'
 S 9-12'
 S 20-25'
 S 15' (2)
 H epip.
 H epip.
 S 2-4'
 S 6-8'
 H aca.
 H
 S 1-2' mucous
 H 6-8' longish
 S 6-12'
 H
 H ter
 V herb
 S 1.5-4'
 S 3-4' drying
 S 1-2'

Br. gr. entate base, ret
 Calyx gr., Cor tube purple
 Br. red, gr. pub
 Cor. y
 Rays of florets bright purp
 Rays y, florets deep
 ?
 See notes
 Cor. tube gr. wh., lobes o
 styles wh, pi. tinged,
 Tubed deep pur, lobes gr.
 Cor. or.-red.
 See notes
 Tube o sep. pi, deeper pur
 pet. red
 Pet. bright bl, paler out
 rays pi. wh. cor
 pi. pub, broken dist.
 Cor. rich pi. slightly
 all parts of fls
 brown-rt.
 See notes
 Br. purple, Cor. gr. w
 purple pi. dist. o lobes reb
 Rays of florets y
 Pet. pi. pale, y, gr. tinged
 See notes
 Cor. atyls pi to wh
 Cor. pi wh, blue dotted
 Cor. wh. anthy.
 See notes
 Cor. bright y
 Pet. y; st. ± 50

paramillo w. sl.
 woods. edge of Paramo Rico

3600
 +4000 m.

round margin
 lobes, anth. & stigma green

anths purple-black

with purple.

(3) edge of woods, Bet. California & Vetas

2500
 -3500 m.

styles, wh. prox, pi. dist

(1) 16 open, mostly rocky, hillside, Vic. Vetas

3100
 -3250 m.

17256 Agrostis H
 17257 Eragrostis? ~~stuebeli?~~ H 2-3'
 17258 Elaphoglossum H
 17259 Asplenium H
 17260 Asplenium H
 17261 Fern (like Polystichum) H
 17262 Oxalis H matted or root
 17263 Cestrum S 2-6'
 17264 Eupatorium S 3-6' lvs rather fleshy
 17265 Urtica nsp. S 2-3' drooping & branched
 17266 Malvastrum H caespitose; lvs flat on ground
 17267 Solanum S 1-2'
 17268 Cereus S 4-8'
 17269 Stevia H woody
 17270 Centropogon S 2-4'
 17271 Centropogon S 4-7'
 17272 Nicotiana S 4-6'
 17273 Permettja S 4-8'
 17274 Rafania S 2-3'
 17275 Geranium H
 17276 ~~Muehlenbeckia~~ ~~Polystichum~~ ✓ herb
 17277 Polystichum H
 17278 Peperomia H Epip'
 17279 Bomarea ✓ herb
 17280 Hibandia S 8-12'
 17281 Hibandia S 6-8'
 17282 Moss On banks
 17283 " " " "
 17284 Lichen " "
 17285 Sphagnum Moist soil
 17286 Peperomia H Epip'
 17287 Peperomia H herb
 17288 Eriochlaena H
 17289 Elaphoglossum H
 17290 Lycopodium H

heads gr. wh mag, y-g cent.
 Pet. y
 Inbided, pump, lobes en, paler gray margin
 Cor. ^{not} other part wh.
 Pet. pale pi, nearly wh.
 Cor. wh., anther y.
 Heads light y.
 Cor. & style light pi
 Cor. bright red, pale pi in
 " " " " "
 Pet., st. rather w
 Cor. wh.
 Cor. & fil. red-pi anther y
 Pet. pi.
 Cor. y-g.
 See notes
 Calyx brown, gr. mag; Cor. deep red, lobes pi
 Species wh.
 Spikes gr.
 Infl. purple-red.
 Pet. bright blue in, out

u. 16 open, mostly rocky, hillsides, Via Velas

3100
-3250m

2



