



Title	Field notes of Galápagos Vegetation Studies in 1970 and 1978
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1. EASTERN ISLANDS

San Cristobal
Espanola and Gardener
Floreana
Santa Fe

Ascending trip on the south side of Isla San Cristobal, accompanied by Jonas Lawesson. Aug. 17, 1986.

Altitude 170 m. Agricultural area and 3 farmer's houses. Hen and chick. Immediately down here, *Psidium galapageium* and *Pisonia floribunda*. White filamentous lichens on branches of guava at 10 m lower in altitude from this point. Also pendent lichens seen on tree branches at probably ca. 50 m altitude. *Opuntia* cacti in the coastal lowland seen from here.

Leave alt. 170 m, 12.20 p.m.

Pendent lichen, *Usnea* or *Ramalina*. *Clerodendrum molle*, *Tournefortia pubescens*, *Melia azedarach*.

Between alt. 170-180 m, pendent lichen disappeared; upper limit of Transition Zone.

Alt. 200 m. Banana, papaya, guava, *Melia azedarach*, *Tournefortia rufo-sericea*. Lunch. No brown liverworts on guava branches.

Alt. 250 m. Green and brown liverworts on guava branches.

Alt. 270 m. Only brown liverworts on guava branches. *Cedrela odorata*.

Alt. 320 m. Brown liverworts abundant on branches of guava. *Kalanchoe pinnata*, *Pteridium aquilinum*.

Alt. 350 m. Abundant brown liverworts, Brown Zone. Guava trees 10 m high.

Alt. 360 m. One specimen of *Miconia robinsoniana*.

Alt. 380 m. Guava trees 2-3 m high. Brown liverworts abundant; *Kalanchoe pinnata* infrequent.

Alt. 420 m. Guava trees.

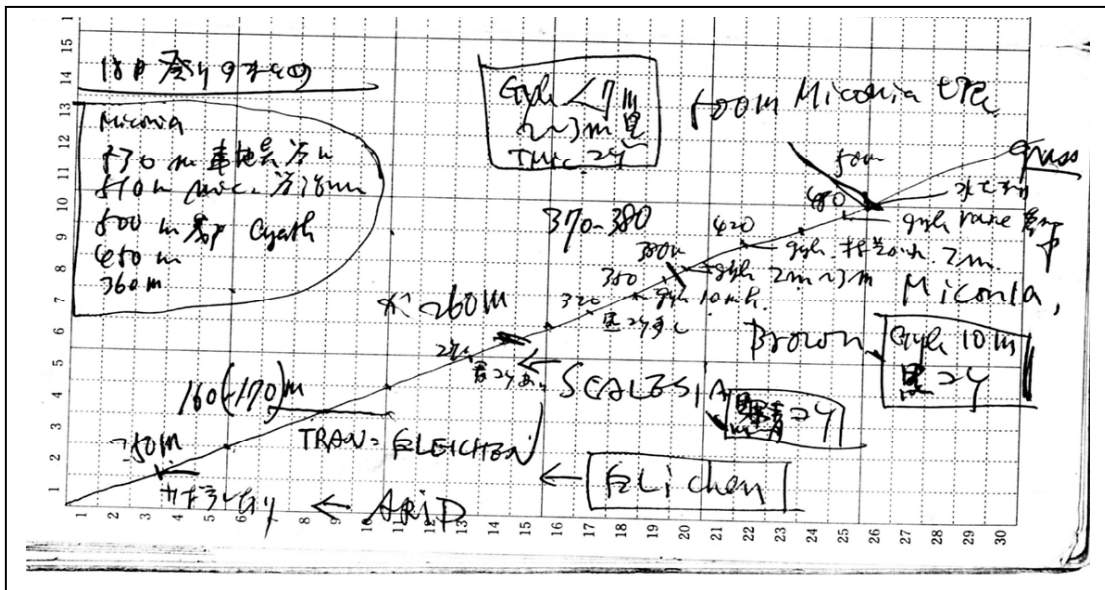
Alt. 500 m. Dense thicket of *Miconia robinsoniana*. *Cyathea weatherbyana*.

Alt. 510 m. Artificial reservoir for fresh water supply. Guava trees scattered in grassland.

Alt. 520 m. Road. Guava and *M. robinsoniana* scattered in grassland.

Alt. 530 m. Water pool.

The south side of the island has been completely destroyed and converted to agricultural land. The vegetation zonation, which had been once realized before exploitation, could be imagined based on epiphytic mosses and herbaceous plants found there.



The zonation could be summarized as below.

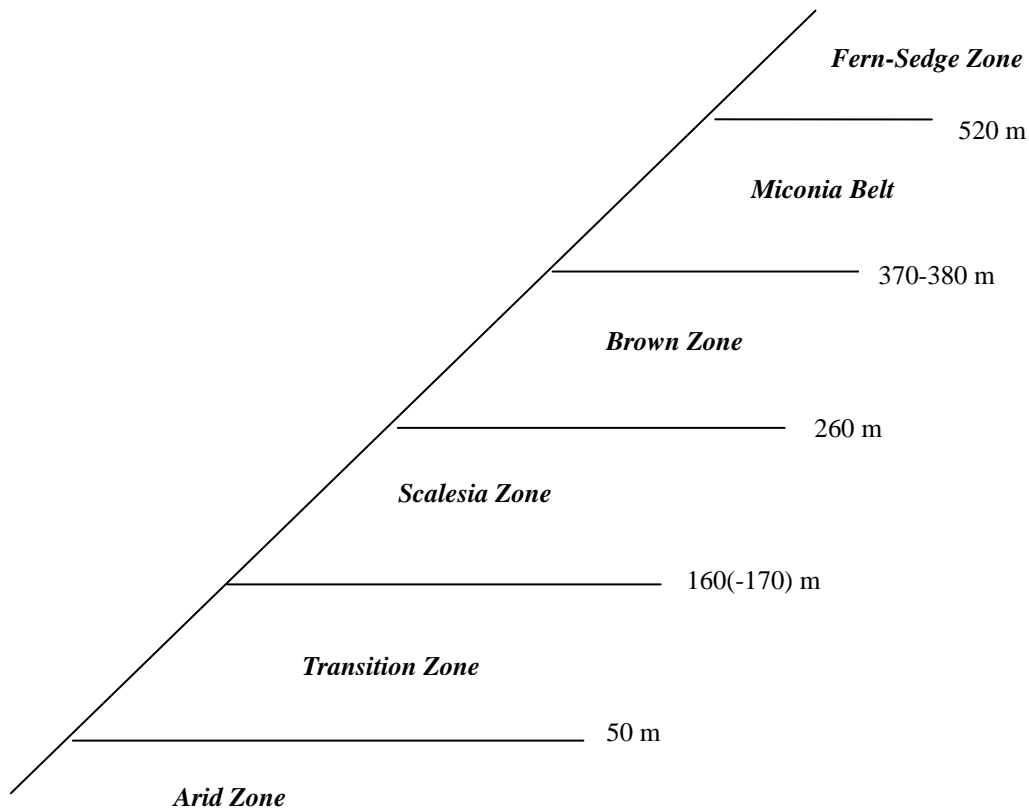


Table 1.1 Woodland of *Bursera graveolens* in lowlands of north (1-3) and south (4) coast of Isla San Cristobal. June 3-5, 1970.

No.	1	2	3	4
Record No.	60305	60307	60401	60501
Location	Terrapin Road	Cerro Brujo	Isla Lobos	Whale Cove
Altitude (m)	5	5	5	15
Topography	Flat	Flat	Flat	Flat
Percentage of lava (%)	90	100	90	90
Tree layer: Height (m)	6	6	7	6
Total cover (%)	20	50	60	60
Shrub layer: Height (m)	1.5	1.5	1.5	2
Total cover (%)	40	50	20	40
Herb layer: Height (m)	0.7	0.8	0.7	0.8
Total cover (%)	30	40	20	70
(Tree layer)				
<i>Bursera graveolens</i>	1.2	3.2	4.3	4.3
<i>Piscidia carthagenensis</i>	1.2	1.2	.	1.2
(Shrub layer)				
<i>Croton scouleri</i>	3.2	3.2	1.1	+
<i>Gossypium barbadense</i>	+	+	1.1	.
<i>Cordia lutea</i>	.	0.2	+	1.2
<i>Cordia anderssonii</i>	.	0.2	1.2	+
<i>Waltheria ovata</i>	1.1	.	.	.
<i>Castela galapageia</i>	0.2	.	.	.
<i>Tournefortia psilostachya</i>	.	.	.	1.2
<i>Maytenus octagona</i>	.	.	.	1.1
<i>Scutia spicata</i>	.	.	.	1.2
(Herb layer)				
<i>Rhynchosia minima</i>	+	+	.	+
<i>Lantana peduncularis</i>	1.2	3.4	.	.
<i>Cardiospermum corindum</i>	+	0.2	.	.
<i>Chamaesyche punctulata</i>	0.2	.	+	.
<i>Cryptocarpus pyriformis</i>	.	+	1.2	.
<i>Polygala galapageia</i> var. <i>insularis</i>	+	.	.	.
<i>Alternanthera filifolia</i> ssp. <i>glaucescens</i>	1.2	.	.	.
<i>Evolvulus glaber</i>	.	.	.	1.2
<i>Bastardia viscosa</i>	.	.	.	4.4

60305: Terrapin Road on the north coast. Lava block 20-50 cm in size.

60307: Cerro Brujo. 100 m from the coast.

60401: Isla Lobos.

60501: Whale Cove on the south coast.

Table 1.2 *Miconia robinsoniana* scrub at Cerro San Joaquin, Isla San Cristobal. June 4, 1970.

No.	1	2
Record No.	60411	60411A
Location	San Joaquin	San Joaquin
Altitude (m)	590	590
Slope aspect	SE50	SE50
Slope steepness	5	5
Shrub layer: Height (m)	1.6	1.6
Total cover (%)	60	60
Herb layer: Height (m)	0.3	0.3
Total cover (%)	60	60
(Shrub layer)		
<i>Miconia robinsoniana</i>	4.3	4.4
(Herb layer)		
<i>Blechnum polypodioides</i>	3.4	2.3
<i>Pteridium aquilinum</i>	2.1	1.1
<i>Gentella asiatica</i>	2.3	1.3
<i>Pityrogramma calomelanos</i>	0.2	.
<i>Echinochloa colonum</i>	+	.
<i>Psidium guajava</i>	.	+

Table 1.3 Heavily grazed (1-7) and trampled (8-11) vegetation at El Junco (1-5), San Joaquin (6-9) and Progreso (10-11), Isla San Cristobal. June 4, 1970.

No.	1	2	3	4	5	6	7	8	9	10	11
Record No.	60402	60403	60404	60405	60406	60409	60410	60407	60408	60416	60417
Location	El Junco	El Junco	El Junco	El Junco	El Junco	San Joaquin	San Joaquin	San Joaquin	San Joaquin	Progreso	Progreso
Altitude (m)	680	680	680	680	680	640	640	640	640	550	550
Slope aspect	NW30	NW30	NW30	NW30	NW30	NW	NW	NW	NW	?	?
Slope steepness	15	15	15	15	15					10	10
Percentage of lava (%)	0	0	0	0	0	0	0	0	0	0	0
Herb layer: Height (cm)	10-15	10-15	10-15	10-15	10-15						
Total cover (%)	90	90	90	90	90	90	90	90	90	90	90
<i>Echinochloa colonum</i>	3.3	4.4	4.4	5.5	4.4	5.4	3.3	.	.	1.2	5.5
<i>Axonopus compressus</i>	.	.	.	.	.	.	1.2	5.4	5.4	5.5	5.5
<i>Paspalum</i> sp.	2.2	1.2	+	+	.	1.2	.	+ .2	1.2	+ .2	.
<i>Gentella asiatica</i>	3.2	3.4	2.3	+	1.2	2.3	2.3	.	.	.	3.3
<i>Pteridium aquilinum</i>	1.1	+	+	2.1	1.1	2.1	3.2	.	.	.	.
<i>Cyperus brevifolius</i>	2.3	3.4	4.4	1.2	.	2.2	1.2	.	1.2	.	.
<i>Verbena sedula</i>	1.1	1.1	1.2	2.2	.	+ .2	.	.	.	.	.
<i>Phyllanthus caroliniensis</i>	+	.	+	.	+	+	+	.	.	.	+
<i>Commelina diffusa</i>	+	.	+ .2	.	+	.	.	.	.	.	+ .2
<i>Drymaria cordata</i>	.	.	.	+	.	+	.	.	.	.	2.2
<i>Oxalis corniculata</i>	+	+	.	.	.	.	.	.	.	.	.
<i>Stenotaphrum secundum</i>	.	.	.	.	+ .2	.	.	.	.	.	.
<i>Blechnum polypodioides</i>	.	.	.	.	.	.	+ .2	.	.	.	.

Table 1.4 Heavily grazed (1,2,8,9) and trampled (3-7) vegetation at San Joaquin (1-4) and El Junco (5-9), Isla San Cristobal. Feb. 23, 1978.

No.	1	2	3	4	5	6	7	8	9
Record No.	78152a	78152b	78156a	78156b	78158a	78158b	78159	78163	78167
Location	San Joaquin	Btw. Joaq & Junco	Btw. Joaq & Junco	Btw. Joaq & Junco	El Junco	El Junco	El Junco	El Junco	El Junco
Altitude (m)	550	550	550	550	550	550	570	620	570
<i>Axonopus compressus</i>	2.3	.	5.5	5.5	5.5	5.5	4.4	2.2	2.3
<i>Ageratum conizoides</i>	1.1	2.2	+	1.1	+ 2	1.2	1.2	+ 2	1.2
<i>Jaegeria gracilis</i>	1.2	2.2	1.2	+ 2	1.2	+ 2	1.2	2.2	1.2
<i>Verbena sedula</i>	1.2	+ 2	1.1	1.2	1.2	2.2	+ 2	+ 2	1.2
<i>Cupha carthagenensis</i>	+	+	+	1.1	+	1.1	1.1	+	+
<i>Drymaria cordata</i>	1.2	2.2	+	+ 2	+	+	2.2	1.2	.
<i>Centella asiatica</i>	4.4	+	.	3.3	+ 2	+	2.2	3.2	2.2
<i>Commelina diffusa</i>	+	+	+	+	.	.	+	1.2	1.2
<i>Cyperus brevifolius</i>	+	1.2	.	+	+	+ 2	1.2	.	+ 2
<i>Pteridium aquilinum</i>	1.1	.	.	.	+	.	1.1	2.2	3.3
<i>Diodia radula</i>	.	.	.	+	+	+	+	+	.
<i>Echinochloa colonum</i>	1.1	2.2	.	.	.	.	+	1.1	.
<i>Panicum sp.</i>	.	+	.	.	.	.	1.2	1.1	1.1
<i>Psidium guajava</i>	2.1	+	.	.	.	.	.	.	1.1
<i>Hydrocotyle galapagensis</i>	+	.	+	+	.	.	.	.	.
<i>Hypoxis decumbens</i>	.	.	.	+	+	.	.	+	.
<i>Phyllanthus cdaloniensis</i>	.	+	.	.	.	.	.	+	.
<i>Dichondra repens</i>	.	.	.	.	.	.	+ 2	.	.
<i>Setaria geniculata</i>	.	.	.	.	.	.	.	1.1	.

Pta. Swarez, Isla Espanola. Feb. 5, 1970

(Record no.20501)

Distance from the tide line, 10 m; Alt. 3 m. Cover percentage of lava on the ground surface, 100 %.. *Cryptocarpus pyriformis* dominant (4.4).

(Record no.20512)

Distance from the tide line, 150 m; Alt. 7 m. Coverage of lava, 95 %.

(Shrub layer: 1 m, 50 %)

Prosopis juliflora 3.3, *Lycium minimum* 2.2, *Cryptocarpus pyriformis* 1.2

(Herb layer: 0.5 m, 10 %) Grasses dominant but all dead.

(Record no.20510)

Alt. 40 m. Percentage of lava 90 %.

(Shrub layer: 1.5 m, 30 %)

Prosopis juliflora 2.3, *Cordia lutea* 1.2, *Cryptocarpus pyriformis* 1.2.

(Herb layer: 0.5 m, 20 %) Grasses dominant but all dead.

(Plants noted in the Pta. Suwarez area, Espanola. Asterisks are specimens collected.)

(Shrubs) *Prosopis juliflora*, *Cryptocarpus pyriformis*, *Lycium minimum*, *Grabowskia boerhaaviaefolia**, *Cordia lutea*.*

Table 1.5 Vegetation at bird nesting site, Pta. Suwarez, Isla Espanola.
Feb, 05, 1970

No.	1	2	3	4	5	6	7
Record No.	20502	20503	20504	20505	20506	20507	20508
Percentage of lava	-	-	-	95	90	85	90
Vegetation cover (%)	-	60	-	30	40	30	40
<i>Atriples peruviana</i>	3.3	0.2	2.3	.	.	3.3	1.2
<i>Cryptocarpus pyriformis</i>	.	2.2		2.2	2.2	.	.
<i>Capsicum</i> sp. (dead)	.	1.2	2.2	.	.	1.2	.
<i>Heliotropium crassavicum</i>	.	.	0.2	.	.	.	.
<i>Lycium minimum</i>	.	.	.	1.2	2.2	+	1.2
<i>Sesuvium edmonstonei</i>	.	.	.	0.2	.	.	.
(Dead grasses)	1.2	0.2	1.2	1.1	0.2	1.2	0.2

Isla Gardner near Espanola.

March 12, 1970.

(Record no. 31201)

Altitude 15 m. Percentage of lava, 95 %.

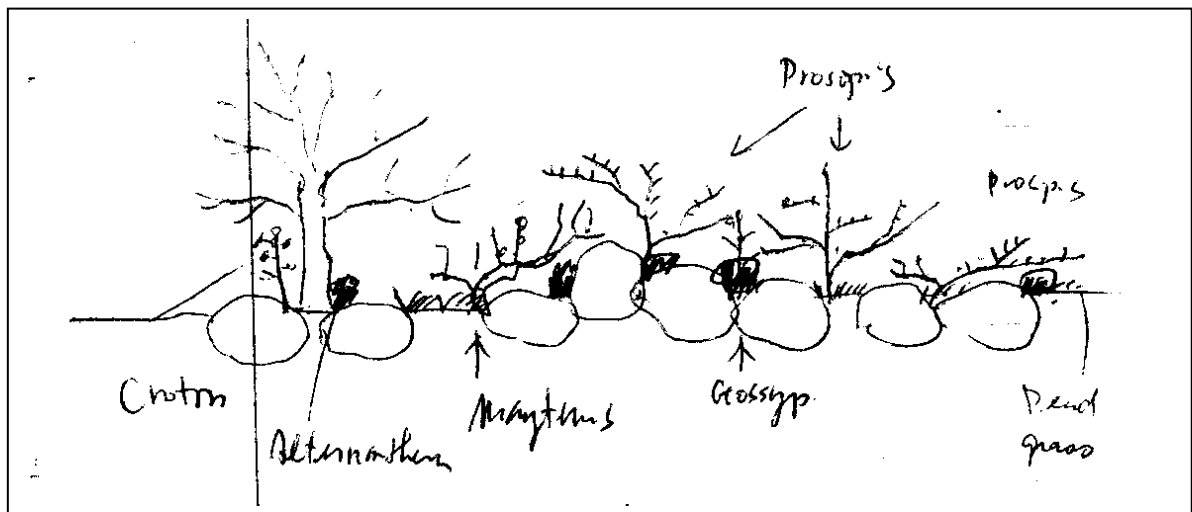
(Shrub layer: 2.0 m high)

Prosopis juliflora 2.2, *Maytenus octagona* 1.2 *Croton scouleri* 1.1, *Lycium minimum* +.2, *Bursera graveolens* +.2.

(Herb layer)

Alternanthera filifolia ssp. *filifolia** 2.2, *Gossypium barbadense** +.2, *Alternanthera echinocephala** +, Dead grasses 1.2.

Vegetation profile of No. 31201



(Record no. 21202)

Altitude 20 m. Percentage of lava 40 %.

(Tree layer: 4 m, 40 %)

Bursera graveolens 3.2.

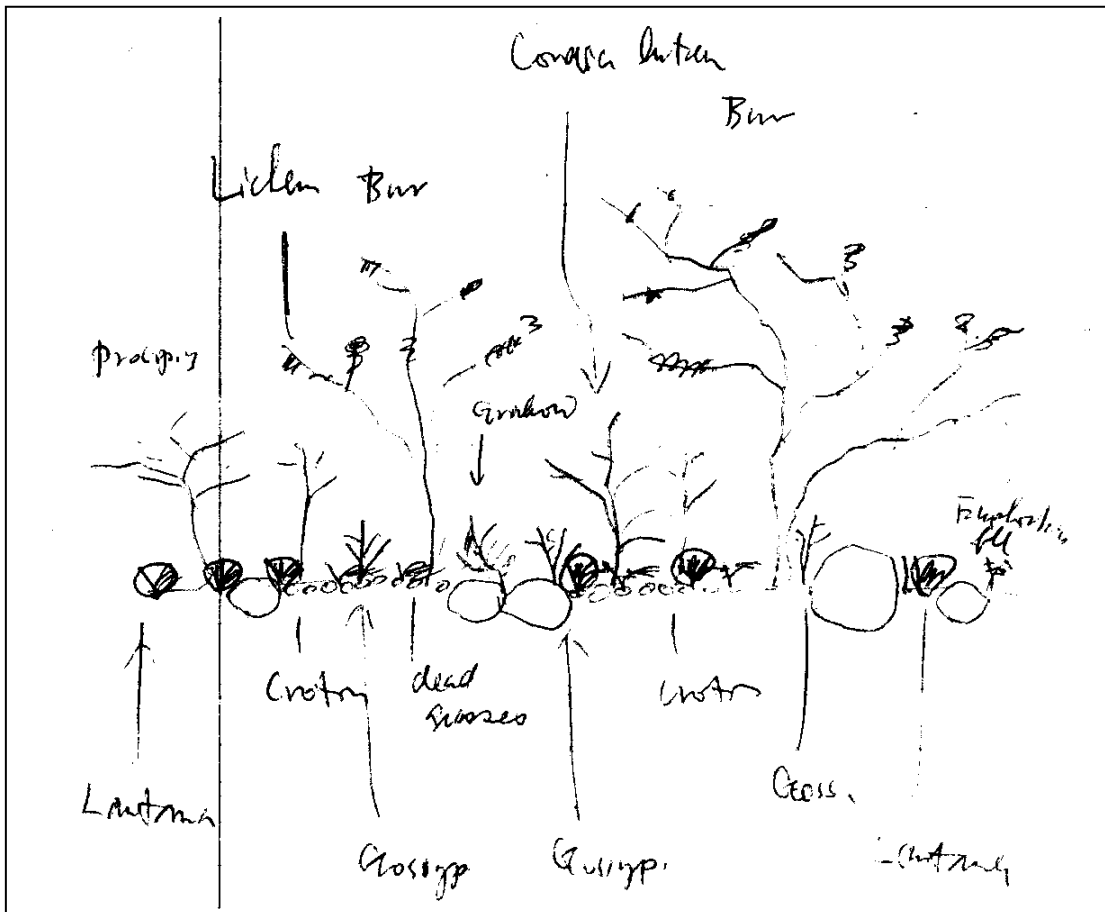
(Shrub layer: 1.5 m, 70 %)

Grabowskia boerhaaviaefolia 2.2, *Croton scouleri** 1.2, *Lantana peduncularis* (dead) 2.3, *Cordia lutea* 1.2, *Lycium minimum* +.2.

(Herb layer: 0.5 m, 70 %)

Dead grasses 3.3, *Gossypium* sp. 1.1, *Alternanthera echinocephala* +, *Chamaesyche recurva** +, *Abutilon depauperatum** +.

Vegetation profile of Record no. 31202



(Record no. 31203).

Altitude 20 m. Percentage of lava 50 %.

(Tree layer: 5 m, 30 %)

Bursera graveolens 2.2, *Prosopis juliflora* 1.2.

(Shrub layer: 1.0 m, 70 %)

Lantana peduncularis (dead) 4.4, *Cordia lutea* 2.2, *Croton scouleri* 1.1, *Waltheria ovata*

+

(Herb layer: 0.5 m, 50 %)

Aternanthera filifolia +.2, *Chamaesyche* sp. +, Dead grasses 3.3.

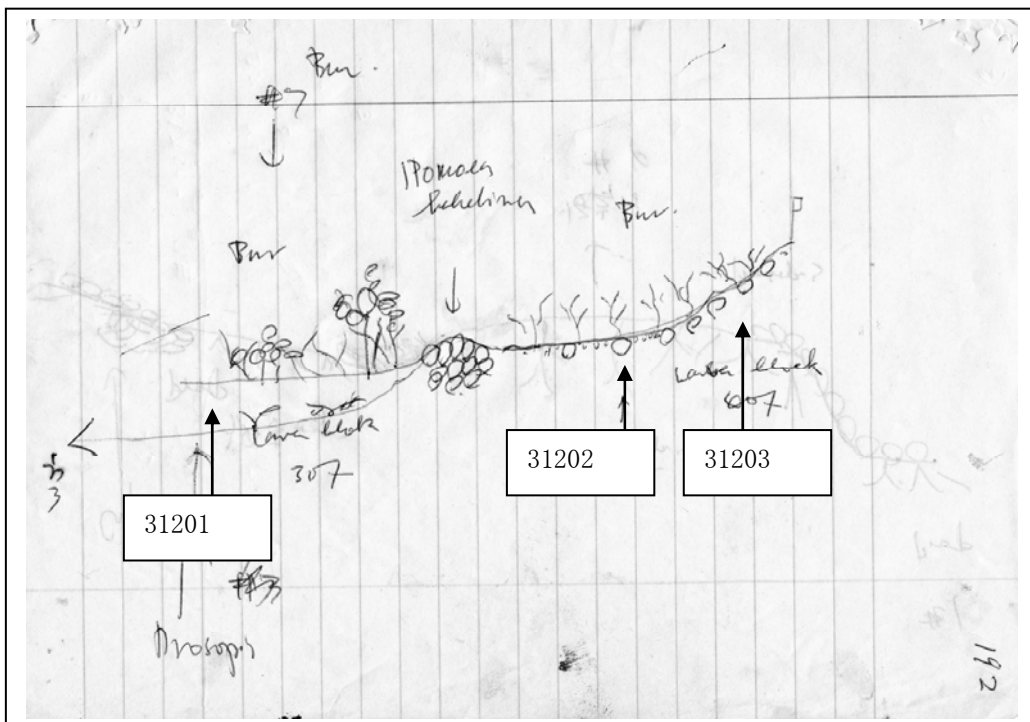


Table 1.6 Isla Champion near Floreana.

No.	1	2	3
Record no.	20601	20602	20603
Altitude (m)	10	10	10
Slope aspect	N	N	N
Slope steepness	15	20	10
Percentage of lava (%)	30	50	70
Tree layer: height (m)	4.5	3.0	6.0
total cover (%)	20	10	15
Shrub layer: height (m)	1.0	1.5	1.5
total cover (%)	10	15	25
Herb layer: height (m)	0.3	0.4	0.4
total cover (%)	60	50	30
(Tree layer)			
<i>Opuntia</i> sp.	2.2	1.1	2.2
(Shrub layer)			
<i>Scaevola villosa</i>	1.2	1.1	1.1
<i>Croton scouleri</i>	+.2	.	2.1
<i>Jasminocereus thouarsii</i>	1.1	.	.
<i>Cordia lutea</i>	+		
(Herb layer)			
Dead grasses	4.4	3.2	2.2
<i>Merremia aegyptica</i>	+	+.2	.
<i>Abutilon deauperatum</i>	+	.	.
<i>Portulaca howellii</i>	.	+.2	.
<i>Mollugo flavescens</i>	.	+	.
<i>Comocarpus tuberosus</i>	.	.	+

Table 1.7 Woodland of *Bursera graveolens* at Punta Cormorant, Isla Floreana. Feb. 6, 1970

No.	1	2	3	4	5
Record no.	20604	20605	20606	20607	20608
Location	On the hill, left of the berach	On the hill, left of the berach	On the hill, left of the berach	Near the lagoon	Near the lagoon
Altitude (m)	15	30	20	10	10
Slope aspect	W	W	W	Flat	Flat
Slope steepness	20	25	25	-	-
Percentage of lava (%)	0	0	0	100	100
Tree layer: height (m)	6	6	6	6	5
total cover (%)	10	5	10	20	10
Shrub layer: height (m)	1.5	1.5	1.5	1.5	1.5
total cover (%)	20	5	20	20	20
Herb layer: height (m)	0.5	0.5	0.5	0.5	0.5
total cover (%)	20	20	20	5	10
(Tree layer)					
<i>Bursera graveolens</i>	1.2	1.2	1.2	2.2	1.2
<i>Jasminoceereus thouarsii</i>	.	.	.	+	.
(Shrub layer)					
<i>Scalesia villosa</i>	1.2	1.2	2.2	.	.
<i>Lecocarpus pinnatifidus</i>	1.2	+ .2	1.2	.	.
<i>Prosopis fuliflora</i>	1.2	.	.	2.2	1.2
<i>Waltheria ovata</i>	+ .2	.	+ .2	.	.
<i>Tournefortia pirostachya</i>	+ .2	.	.	.	.
<i>Cryptocarpus pyriformis</i>	.	.	.	1.2	+
<i>Acacia rorudiana</i>	+	.	.	.	.
<i>Parkinsonia aculeata</i>	.	+ .2	.	.	.
<i>Cordia lutea</i>	.	.	.	.	+ .2
<i>Maytenus octagona</i>	.	.	.	.	+ .2
(Herb layer)					
<i>Mollugo floriana</i>	+	+	.	.	.
<i>Lantana peduncularis</i>	.	.	.	+ .2	1.2
<i>Galactia veltina</i>	.	.	.	+ .2	+
<i>Alternanthera filifolia</i>	.	.	.	+ .2	.
<i>Ipomoea habeliana</i>	.	.	.	+	.
<i>Lycium minimum</i>	.	.	.	+ .2	.
<i>Merremia aegyptica</i>	.	.	.	.	+
<i>Cyperus</i> sp.	.	.	.	.	+
Gramineae sp.	.	.	.	.	+

Punta Cormorant, Isla Floreana.

February 6, 1970

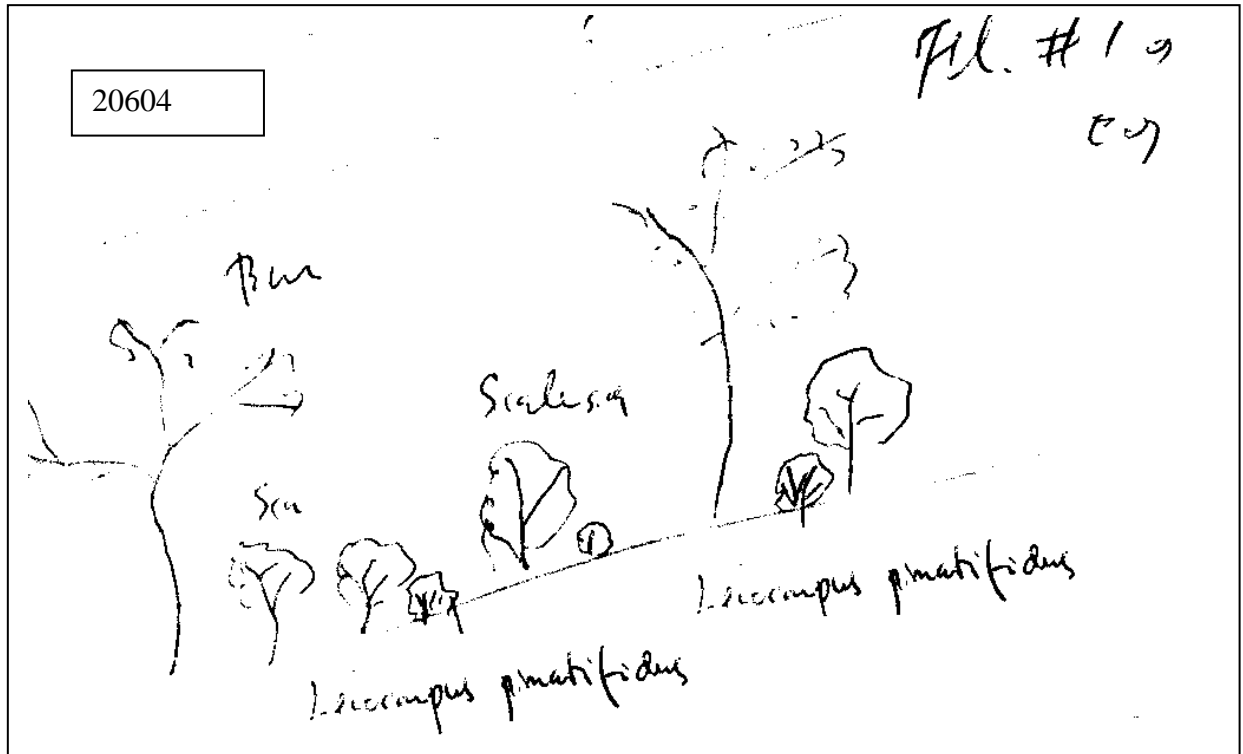


Table 1.8 Woodland of *Bursera graveolens* in the Playa Negra area, Isla Floreana, March 13-15, 1970.

No.	1	2	3	4	5	6	7
Record no.	31303	31304	31305	31501	31502	31503	31504
Location	Playa Negra	Playa Negra	Playa Negra	200 m inland of Playa Negra	700 m inland of Playa Negra	1.5 km inland of Playa Negra	1.5 km inland of Playa Negra
Altitude (m)	90	100	60	10	15	20	20
Slope aspect				Flat			
Slope steepness							
Percentage of lava (%)	100	100	0	100	100	100	100
Tree layer: height (m)	7	8	6	5	6	6.5	6
total cover (%)	40	30	5	20	20	40	30
Shrub layer: height (m)	2	1.5	4	1.5	1.5	2	2
total cover (%)	40	20	50	10	20	60	40
Herb layer: height (m)	0.7	0.5	0.7	0.7	0.7	0.7	0.7
total cover (%)	30	30	70	30	60	70	60
(Tree layer)							
<i>Bursera graveolens</i>	3.2	2.2	+	2.2	2.2	3.2	3.2
<i>Jasminocereus thouarsii</i>	+	.	.	+	.	.	+
<i>Prosopis juliflora</i>	.	.	.	.	.	1.2	+
(Shrub layer)							
<i>Tournefortia psilostachya</i>	2.3	0.2	2.2	.	+2	1.2	1.2
<i>Scutia spicata</i>	+2	.	+2	+2	+2	3.3	3.4
<i>Waltheria ovata</i>	2.3	2.2	.	1.2	2.2	1.2	.
<i>Croton scouleri</i> var. <i>brevifolius</i>	2.1	2.1	+	+	+	.	.
<i>Scalesia affinis</i>	1.2	1.1	.	+2	1.2	.	.
<i>Chamesyche vivinea</i>	+2	+2	.	1.2	+2	.	.
<i>Macraea loricifolia</i>	.	1.2	+2	+2	+2	.	.
<i>Chicocca alba</i>	.	+2	.	+2	.	+2	+2
<i>Cordia revoluta</i>	+2	+2	.	1.2	.	.	.
<i>Lantana peduncularis</i>	2.2	2.2	.	.	.	.	.
<i>Clerodendrum molle</i>	+2	.	1.2	.	.	.	.
<i>Castela galapageia</i>	.	.	1.2	+2	.	.	.
<i>Maytenus octagona</i>	.	.	.	+2	.	+2	.
<i>Opuntia</i> sp.	.	.	.	.	+	+	.
<i>Cryptocarpus pyriformis</i>	.	.	.	.	.	+2	2.3
<i>Cordia anderssonii</i>	.	.	3.2	.	.	.	.
<i>Parkinsonia aculeata</i>	.	.	.	+2	.	.	.

(Continued)

(Herb layer)							
<i>Asclepias curassavica</i>	2.2	2.2	.	1.2	2.2	.	1.2
<i>Galactia velutina</i>	+	+	.	+	+	+2	.
<i>Ipomoea habeliana</i>	+	.	.	.	1.2	2.3	1.2
<i>Lecocarpus pinnatifidus</i>	.	+2	.	1.1	2.2	.	+
<i>Boerhaavia caribaea</i>	+	.	.	+	+	.	.
<i>Alternanthera filifolia</i> ssp. <i>nudicaulis</i>	+2	.	.	.	.	.	+2
<i>Chamesyche</i> sp.	.	+	+	.	.	.	.
<i>Plumbago scandens</i>	.	.	.	.	+	1.2	.
<i>Commicarpus tuberosa</i>	.	.	.	.	+	+	.
<i>Cassia picta</i>	.	+	.	.	.	.	.
<i>Tiquilia</i> sp.	.	.	+2	.	.	.	.
<i>Rhynchosia minima</i>	.	.	.	.	.	.	+2
Dead herbs and grasses	2.3	3.2	3.3	3.3	3.3	4.4	4.4

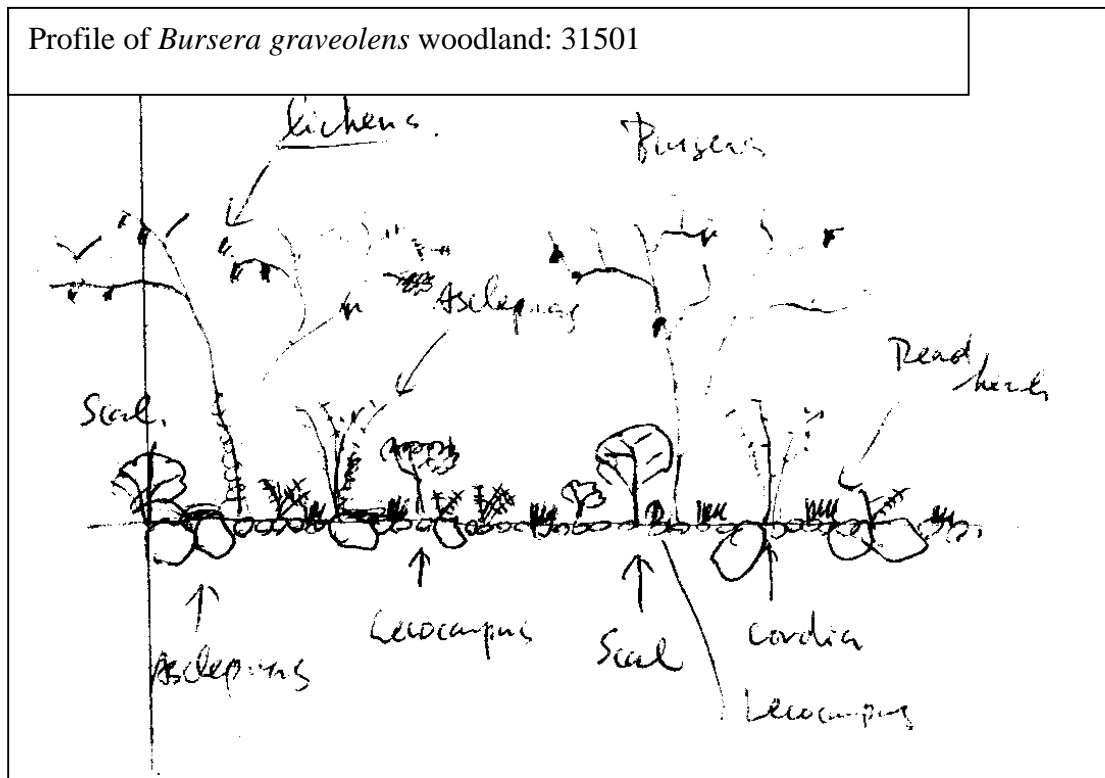


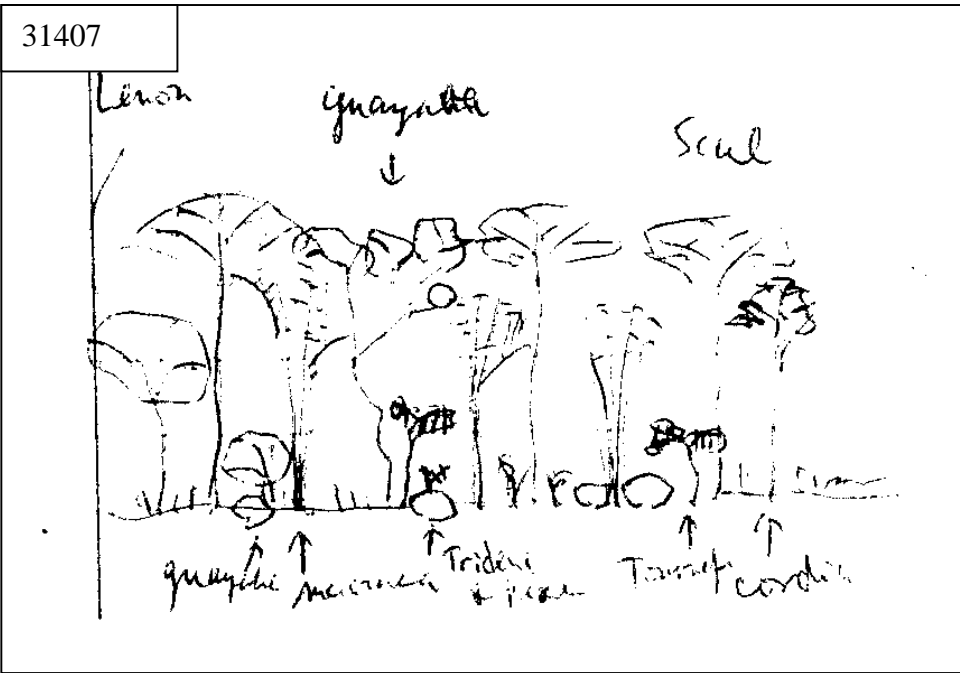
Table 1.9 *Scalesia pedunculata* forest in the Cerro Pajas area, Isla Floreana. March 14, 1970.

No.	1	2	3
Record no.	31407	31412	31413
	Between Wittmer's farm and Pampa	Basin of Cerro Pajas crater	Outside of Cerro Pajas crater
Altitude (m)	330	390	360
Slope aspect			Flat
Slope steepness (degree)	5	15	
Percentage of lava (%)	25	50	
Tree layer: height (m)	5	7	6
total cover (%)	60	70	50
Shrub layer: height (m)	1.7	2	2
total cover (%)	20	60	20
Herb layer: height (m)	0.5	0.7	0.7
total cover (%)	40	70	30
(Tree layer)			
<i>Scalesia pedunculata</i>	3.2	4.4	4.4
<i>Psidium guajava</i>	2.3	1.2	2.3
Lemon tree	1.1	.	2.2
<i>Croton scouleri</i> var. <i>gandifolius</i>	1.1	.	.
<i>Pisonia floribunda</i>	+2	.	.
(Shrub layer)			
<i>Cordia anderssonii</i>	+	2.2	+2
<i>Zanthoxylum fagara</i>	+	1.2	1.1
<i>Macraea laricifolia</i>	2.2	+2	.
<i>Tournefortia rufo-sericea</i>	1.2	+2	.
<i>Croton scouleri</i> var. <i>brevifolius</i>	.	1.1	1.2
<i>Psidium guajava</i>	1.2	.	.
<i>Baccharis stetzii</i>	+	.	.
<i>Lippia salcifolia</i>	.	+2	.
<i>Psychotria rufipes</i>	.	2.2	.
<i>Tournefortia psilostachya</i>	.	+2	.

(Continued)

(Herb layer)			
<i>Salvia occidentalis</i>	+	+	2.2
<i>Polypodium tridens</i>	1.2	2.2	
<i>Heliotropium angiospermum</i>	+	.	+2
<i>Dicondra repens</i>	+	.	+2
<i>Peperomia</i> sp.	+	1.2	.
<i>Cissampelos pareira</i>	.	+2	+
<i>Plumbago scandens</i>	.	+2	1.2
<i>Stachytarpheta cayenensis</i>	+	.	.
<i>Trachypteris pinnata</i>	.	1.2	.
<i>Asplenium formosum</i>	.	1.2	.
<i>Acalypha paruvula</i>	.	+	.
<i>Tillandsia insularis</i>	.	+2	.
<i>Galium galapagensis</i>	.	+	.
<i>Doryopteris pedata</i>	.	+	.
<i>Polypodium dispersum</i>	.	+2	.
<i>Darwiniothamnus tenuifolius</i>	.	+	.

Profile of *Scalesia pedunculata* forest



Isla Santa Fe.

Santa Fe Bay at NE corner of the island.

Feb. 7, 1970.

Herbs and grasses, as well *Lantana peduncularis*, were completely dead due to extreme dryness this year. Goat droppings scattered on the ground.

Plants noted were (Asterisks were collected):

Bursera graveolens, *Opuntia echios* var. *barringtonensis*, *Cordia lutea*, *Lantana peduncularis* (dead)*, *Croton scoulerii**, *Castela galapageia**, *Scutia spicata*, *Scalesia helleri* subsp. *helleri**, *Waltheria ovata*, *Cryptocarpus pyriformis*, *Alternanthera echinocephala*, *Tiquilia galapagoa**, *Acalypha parvula**, *Galactia striata**, *Rhynchosia minima**, *Heliotropium angiospermum*, *Tephrosia decumbens*.

Table 1.10 Woodland of *Bursera graveolens* at NE corner of Isla Santa Fe. Feb. 7, 1970.

No.	1	2	3
Record no.	20705	20706	20707
Location	30 m from the coast	100 m from the coast	200 m from the coast
Altitude (m)	< 10 m	< 10 m	20 m
Slope aspect	Flat	Flat	Flat
Slope steepness	-	-	-
Percentage of Lava (%)	50	70	60
Tree layer: height (m)	4	4	3
total cover (%)	30	5	30
Shrub layer: height (m)	1.0	1	1.5
total cover (%)	40	20	30
Herb layer: height (m)	0.2	0.5	0.3
total cover (%)	30	1	10
(Tree layer)			
<i>Opuntia echios</i>	+	1.1	1.1
<i>Bursera graveolens</i>	1.2	1.2	1.2
<i>Cordia lutea</i>	3.3	1.2	2.2
(Shrub layer)			
<i>Lantana peduncularis</i>	1.2	3.2	1.2
<i>Castela galapagensis</i>	+2	+2	.
<i>Croton scoulerii</i>	.	+2	+2
<i>Scutia spicata</i>	.	.	+2
(Herb layer)			
<i>Alternanthera echinocephala</i>	.	+2	+2
<i>Acalypha</i> sp.	.	+	.
<i>Galactea veltina</i>	.	+	.
<i>Tiquilia fusca</i>	.	+	.
Dead grasses	.	.	1.1