RECORD

Collection and Field Notes Book

No. 12

(June 12, 1946 - July 11, 1946)

(25445-25525)

EXPLANATION

25445-25449	.....	Kota Island Airport
25450-25454	.....	Kota Island, Kona
25455-25459	.....	Highest Hill on Kona near Kahala
25460-25464	.....	Near Kahala, north end of Kona
25465-25469	.....	Kona, Kona
25470-25474	.....	North end of Kona
25475-25479	.....	East of Kahala, Kona
25480-25484	.....	Near airport, Kona Island
25485-25489	.....	Description of Kona Island
25490-25494	.....	Kona, Kona
25495-25499	.....	Kona, Kona
25500-25504	.....	Kona, Kona
25505-25509	.....	Kona, Kona
25510-25514	.....	Kona, Kona
25515-25519	.....	Kona, Kona
25520-25524	.....	Kona, Kona
25525-25529	.....	Kona, Kona
25530-25534	.....	Kona, Kona
25535-25539	.....	Kona, Kona
25540-25544	.....	Kona, Kona
25545-25549	.....	Kona, Kona
25550-25554	.....	Kona, Kona
25555-25559	.....	Kona, Kona
25560-25564	.....	Kona, Kona
25565-25569	.....	Kona, Kona
25570-25574	.....	Kona, Kona
25575-25579	.....	Kona, Kona
25580-25584	.....	Kona, Kona
25585-25589	.....	Kona, Kona
25590-25594	.....	Kona, Kona
25595-25599	.....	Kona, Kona
25600-25604	.....	Kona, Kona
25605-25609	.....	Kona, Kona
25610-25614	.....	Kona, Kona
25615-25619	.....	Kona, Kona
25620-25624	.....	Kona, Kona
25625-25629	.....	Kona, Kona
25630-25634	.....	Kona, Kona
25635-25639	.....	Kona, Kona
25640-25644	.....	Kona, Kona
25645-25649	.....	Kona, Kona
25650-25654	.....	Kona, Kona
25655-25659	.....	Kona, Kona
25660-25664	.....	Kona, Kona
25665-25669	.....	Kona, Kona
25670-25674	.....	Kona, Kona
25675-25679	.....	Kona, Kona
25680-25684	.....	Kona, Kona
25685-25689	.....	Kona, Kona
25690-25694	.....	Kona, Kona
25695-25699	.....	Kona, Kona
25700-25704	.....	Kona, Kona
25705-25709	.....	Kona, Kona
25710-25714	.....	Kona, Kona
25715-25719	.....	Kona, Kona
25720-25724	.....	Kona, Kona
25725-25729	.....	Kona, Kona
25730-25734	.....	Kona, Kona
25735-25739	.....	Kona, Kona
25740-25744	.....	Kona, Kona
25745-25749	.....	Kona, Kona
25750-25754	.....	Kona, Kona
25755-25759	.....	Kona, Kona
25760-25764	.....	Kona, Kona
25765-25769	.....	Kona, Kona
25770-25774	.....	Kona, Kona
25775-25779	.....	Kona, Kona
25780-25784	.....	Kona, Kona
25785-25789	.....	Kona, Kona
25790-25794	.....	Kona, Kona
25795-25799	.....	Kona, Kona
25800-25804	.....	Kona, Kona
25805-25809	.....	Kona, Kona
25810-25814	.....	Kona, Kona
25815-25819	.....	Kona, Kona
25820-25824	.....	Kona, Kona
25825-25829	.....	Kona, Kona
25830-25834	.....	Kona, Kona
25835-25839	.....	Kona, Kona
25840-25844	.....	Kona, Kona
25845-25849	.....	Kona, Kona
25850-25854	.....	Kona, Kona
25855-25859	.....	Kona, Kona
25860-25864	.....	Kona, Kona
25865-25869	.....	Kona, Kona
25870-25874	.....	Kona, Kona
25875-25879	.....	Kona, Kona
25880-25884	.....	Kona, Kona
25885-25889	.....	Kona, Kona
25890-25894	.....	Kona, Kona
25895-25899	.....	Kona, Kona
25900-25904	.....	Kona, Kona
25905-25909	.....	Kona, Kona
25910-25914	.....	Kona, Kona
25915-25919	.....	Kona, Kona
25920-25924	.....	Kona, Kona
25925-25929	.....	Kona, Kona
25930-25934	.....	Kona, Kona
25935-25939	.....	Kona, Kona
25940-25944	.....	Kona, Kona
25945-25949	.....	Kona, Kona
25950-25954	.....	Kona, Kona
25955-25959	.....	Kona, Kona
25960-25964	.....	Kona, Kona
25965-25969	.....	Kona, Kona
25970-25974	.....	Kona, Kona
25975-25979	.....	Kona, Kona
25980-25984	.....	Kona, Kona
25985-25989	.....	Kona, Kona
25990-25994	.....	Kona, Kona
25995-25999	.....	Kona, Kona

Collection and Field Note Book

No. 15

(June 19, 1946 - July 11, 1946)

(24942 -25526)

MARIANAS ISLANDS

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* * *

*Miniature
Account Book
No. S 136*

UNIT RULED

Journal
Cash Book
Record (29 Lines) .
Ledger, Double Entry
Ledger, Single Entry

Made in 200 and 300 Pages

Made in U.S.A.

TO REORDER, SPECIFY NUMBER,
RULING AND THICKNESS INDICATED
ON BACKBONE OF THIS BOOK.

Collection number book
of F.R. Fosberg #15

Nos. 24942 - 25526

Descriptive passages
reographed for file 1974
B. Decker

1946 - Marianas Is.

June 19 - Rota I. airport

limestone flat

24942

*Eragrostis*common, widespread
on island

43

*Ispornoea*common, covering ground,
widespread on island"föfgo" juice squeezed and used to
cure cracked feet, both human and cows,

June 19 noon, Rota I.

low isthmus, formerly
site of town, destroyed
during war. Many
~~plants~~ ^{trees} such as *Delonix*,
Acalypha wilkesiana, etc.

44

Polanisia icosaandra ^{cleome} ^{disca}common weed in old cultivated
ground

45

Acalypha indica L.common weed in old cultivated
ground

46

Cyperus rotundus L.dense patch in old
cultivated ground

47

Guettarda speciosa L."páno" wood used as
building material.

Rota

native names and information
from John ^{through}
Juan Perez as interpreter - several
others incl. Commissioner Ben
in conference.dense small tufts
"tza-guan sabana"extensive prostrate
vine, flowers
blue, ^{tubing} ^{rough} still open
at about 11 a.m.

tips crushed and applied to cuts.

persisting.

limestone soil.

Triphasia trifolia forms
dense thickets everywhere.herbage strong scented, flowers
yellow. "munqus paluma"
= bird food. seeds eaten by birds.
styles whiteroots bearing
tubers. "humatae" tubers
chewed for toothache.
clump of stump
sprouts around large
stump, flowers white.

- 24998 *Pithecellobium dulce*
common everywhere
"kamachili" bark used for
tanning; fruit eaten; leaves
used crushed as emetic for drunk-
enness, leaves chewed as remedy
for toothache.
- 49 *Mucuna gigantea*
common, climbing
in trees
"badyogu ngadzi" vines used
medicinally "to refresh insides" and
cut sections to supply drinking water.
- 50 *Cassytha filiformis* L.
occasional, parasitic
on bushes of various kinds.
- 51 *Lepturus repens* var. *subulatus* Fosb.
common, covering ground
- 52 *Morinda citrifolia* L.
common
"lata" wood used as building material;
root for dyeing clothes tan, fruit and
root used medicinally, mixed
with other plants in backache remedy.
- 53 *Messerschmidia argentea*
occasional near beach
"huni" wood used for diving goggles, leaves
boiled and water used as remedy in case of poisoning
from fish (tagafi, skipjack) which have eaten poisonous seaweed.

- small tree 6 m. tall
fls. greenish white,
fruit pendent on
long peduncle.
pink edged and
twisted when fresh
- large vine, older
stems woody,
up to 2 cm. or more
in diameter, nodes
pendent.
- leafless, stems
yellow-green, flowers
white, fruit immature
"mai agai" included in a rheumatism
remedy.
- loose, spreading
by runners. "lasagafini"
used as cattle feed.
- small tree 4 m. tall,
flowers white, fruit
ripening unevenly,
part of fruit sometimes
white while apex is
still flowering.
- small tree 4 m. tall;
leaves fleshy, silvery green;
developed fruits fleshy.

24954 *Clerodendron*
abundant, forming
tangles between trees

55 *Albizia lebbek*
common, possibly
planted, but probably not.
"kalaskas" (because of noise it makes.
bark smelled to make one sneeze,
wood used for construction.

56 *Melanolepis multiglandulosa*
common in thickets
"alum" young tips eaten; bark
used medicinally "to refresh insides"

57 *Scaevola frutescens* (Mill.) Kr.
common near beach

58 *Lophora tomentosa*
occasional near beach

59 *Fimbristylis*
very common, these plants
from shade

60 *Premna obtusifolia* R. Br. (painted loc.)
occasional
"ab gan" wood used for firewood and
construction, leaves medicinally for

61 *Psychotria mariannensis*
rare "aplu kati" wood used
as building material, ripe fruit eaten by birds

low scrambling shrub,
up to 1.5 m. tall; flowers
white with purple
stamens. "lodugan" leaves very
bitter, used for backache remedy.

Tree 5 m. tall; flowers
fragrant, with stamens yellow
toward base, green
distally; pods rattling

small tree 4 m. tall,
~~raceme~~ raceme of fruit
pendent

rounded shrub 1 m.
tall, flowers white.
"nanaru" ripe fruit used for sore eyes.
shrub 3 m. tall,
fruit dry, brittle

dense clumps, leaves
rather stiff

"tutopu sabana" roots used medicinally,
juice squeezed and used in baby's
mouth for coated or cracked tongue.

shrub 2.5 m. tall,
flowers green, aromatic.

"refreshing insides or releasing heat."

shrub 1 m. tall. fls.
white; fruit red with green calyx.

24962 *Nostoc*common along shaded ~~trail~~ ^{trail}63 *Barleria cristata*

rare, persisting from cultivation

June 20, same.

64 *Portulaca oleracea* L.common around camp
in cultivated ground
"budu lagas" fed to pigs
and boiled and eaten by
humans.65 *Amaranthus spinosus* L.

common in disturbed places

66 *Grewia*

around dwellings

67 *Eragrostis amabilis* L.common especially on sandy
disturbed soil.68 *Euphorbia hirta* L.very common in abandoned
cultivated ground.partially dried when
collected, collapsed.shrub, 1 m. tall;
flower ~~B~~ violet, corolla
readily falling.plant prostrate,
fleshy; flowers
yellow, about 1 cm.
across, open in
morning, petals
deeply emarginate;
stamens 12-15.stems ascending
"kilitis" young growth
eaten by humans or
fed to pigs.small tree 5 m. tall,
flowers green, slightly
fragrant.
spreading tuftsspreading ascending,
arching at tips."golondrina" used with "abas" or
Psidium guajava and *Phyllanthus*
niruri for vaginal astringent

- 24969 *Phyllanthus niruri* det. G. L. We Rota, 1955
common everywhere in
disturbed places

- 70 *Hippobroma longiflora*
rare in abandoned cultivated
ground.

- 71 *Chloris radiata*
common everywhere
in cultivated ground,
roadsides, etc.

June 20 - n.w. coast
of ~~main~~ west end of
main part of Rota Island
~~the~~ ~~benches~~ of coral
limestone separated
by cliffs.

- 72 *Ficus*
near base of cliff

- 73 *Ximenesia americana*
thicket on second terrace

"maigo lalo" used with
Euphorbia hirta as vaginal astringent
also to relieve rectal itching
leaves mashed and inserted.
sap milky; flowers
pure white.

sheaths strongly
flattened.

on second terrace the
soil is brown and very
thin. The Japanese raked it
up into windrows to get
depth enough for sweet
potatoes and Manihot.

spreading banyan
type tree, fruits green.

low tangled shrub,
1.5 m. tall, fruits
yellow when ripe,
fleshy, rather sour,
not of especially good
flavor. "pint" fruit eaten
by children when ripe.

24974

Manihot esculenta Crantz
persisting from cultivation

75 *Hirsutella citiformis* Spear (det. P. L. Lentz)
on dead insect "Ropalides marginatus"

76 *Jasminum marianum* DC.
twining in thicket on
second terrace.

77 *Ficus tinctoria*
in thicket on second terrace

78 *Caesalpinia* ^{major (Medic) Excell. Dandy} ~~sappan~~
thickets on cliffs

79 ~~Intsia~~ *Intsia bijuga*
common on lower terrace

8

80 1 *Bambusa vulgaris* Schrad. ex Wendl. det. F. A. McClure
one clump seen on lower
terrace, probably planted

shrub 1 m. tall, with
tuberous roots, these
with latex in the rind.
flowers reddish
green, somewhat fragrant.
"mändiroa" root
eaten, not poisonous. (poisonous
var. has velvety petioles).

scandent shrub,
flowers white,
fruit immature.

~~small~~ small tree 5 m. tall,
ripe fruit deep yellow.
"hodda" fruits eaten, made
and made into cakes during war.
vine climbing through
trees. "pácao" seeds crushed
and used internally for medicine,
very bitter. large branch with leaves
tree 8 m. tall | used to catch
"ifit" wood used for flying foxes
buildings, furniture, ties, etc.
sap used as a black-colored paint.
close clump, culms
small, only 4 m. tall,
sheaths hanging reversed
by middle. "píao"

June 20 - same
series, mostly unicates, collected
at direction of John
as vouchers for economic and
ethnobotanic data. Can be
correlated with ^{other numbers with} sets of duplicates
is ~~often~~ in most cases.

24981 Two Terraces and cliffs between
Gymnosporia thompsonii Merr.
thicket on second terrace

82 *Hibiscus tiliaceus*
thickets

83 *Abutilon indicum*
roadsides

84 *Cassia*
roadsides

90 *Cyperus*
common everywhere

91 *Sida*
general in disturbed

bush 2 m tall, fruit
reddish green. "lulubod"
tips used as medium
wood for ladle handles.

bushy tree "pago"
bark used for rope,
wood used for rubbing
to make fire.

"madbas" used medicinally
to release mucus from
lungs in asthma.

"amot tumaga"
medicine for diarrhea
accompanying teething
in babies. juice sucked
or boiled out.

"sasa" used medicinally
to stop vaginal bleeding,
also to cure irritation
of eyes.

"iscobigan adamelong"
tips eaten, also mashed and
used as poultice for boils.

74992 *Casuarina equisetifolia*
common on lower terrace

93 *Thespesia populnea*
common on lower terrace

94 *Asclepias curassavica*
general in disturbed places

95 *Barringtonia asiatica*
common on lower terrace

96 *Ricinus communis*
common on lower terrace

small tree

"gagu" wood used for building material, telephone poles, bullock carts, firewood etc. rots quickly in ground.

tree, "banalo"

"one of 5 plants mixed to use to cause abortion."

Wood used for building and fencing material.

"calyx greenish, corolla red, crown orange."

"floss aseracion"

thread made from fiber of seeds.

tree. "puting" nuts and bark used to poison fish. bark boiled and used as remedy for poisoning by fish.

shrub 2 m. tall, "agaliga" oil from seeds used ~~as~~ as lubricant, as medicine and as hair oil. seeds strung on wire and burned for illumination.

- 24997 *Terminalia catappa*
common
- 98 *Colubrina asiatica*
common in thickets
- 99 *Callicarpus*
thickets ^{at base of} cliffs
- 25000 *Davallia solida*
climbing on trees on
first terrace
- 01 *Psidium guajava*
common in thickets

- Tree "talissai" wood
used as building material
lasts longer in water
than "ifil" (*Intsia bijuga*)
fruit eaten, both pulp
and nut.
- scandent shrub.
"gasoso" medicine to
"release heat from inside"
roots used as soap and
shampoo during Japanese
occupation.
- shrub, flowers purple,
fruit black. "hamlag"
leaves used as medicine.
- "pugua machena"
leaves crushed and
used for ~~the~~ medicine
for sore tongue in babies,
chewed in place of
betel nut.
- small tree or shrub.
"apas" leaves boiled
and used as vaginal
astringent; fruit
eaten, ~~the~~ tops (toy) made
from wood.

25002 *Hedyotis* ^{foetida var.} *marianensis*

03 *Phyllanthus*
common on first terrace
and cliffs

04 *Ficus*
occasional

05 *Bilbilis marianensis*
cliffs, common

06
thickets

sub-shrub, foetid when
broken, fls. white;
"pao dedo" medicine
for "maipi" a disease
believed to be contracted
in the jungle and caused
by anger of the spirits
of the ancient Chamorroans.
Characterized by pain,
fever, swelling and delirium
at night.

shrub up to 1.5 m.
tall; "gaagao uehan"
medicine for backache.
banyan-type tree, fruit green.
"nunu" used mixed
with vinegar for
internal pains or to
cure cuts. roots used
as cordage. wood
used as firewood in
lime kilns.

shrub with white
flowers. "gan sali"
wood used for
trunks and firewood.
"anglao" (pronounced
angilo) used for
fodder for cattle.

25007

- 08 shade at base of cliffs
Ipomoea alba L.
 common near beach

- 09 *Hernandia virgens*
 common on lower terrace

- 10 *Pandanus fragrans*
 common in forest

- 11 *Ochrosia* *Ochrosia oppositifolia*
 common in woods

- 12 *Polypcias*
 rare on lower terrace
 in thickets

"sasa" not used.

"alalag" leaves used
 as poultice to cure
 backache, also as
 cattle feed.

tree 8 m. tall, leaves
 glossy, flowers
 greenish.

"monnag" wood
 used for building
 material and canoes.

tree up to 5 m. tall.

"pahong" roots made
 into rope. pulp not
 eaten but nut
 eaten, has good
 flavor. going out to
 gather and crack
 these nuts is a

favorite pastime of
 boys & girls on Sunday.

small tree. "fago"
 wood used as building
 material. nuts
 eaten.

shrub 2 m. tall, ripe fruit
 blue.

"pepiga" cattle feed.

25013 *Piper*
woods in ravine on cliff

14

forest on cliff

15

Pandanus tectorius
common in forest

16

in forest

17

weed in fields

18

Delingia amaranthoides
forest on cliffs

19

Eugenia palumbis
forest on second terrace

shrub 1 m. tall

"~~populus~~ *populus* *arite*"
root used to cure
gonorrhea.

shrub "sumag"

used medicinally.

wood used for axe handles,
etc.

small tree, "~~trappa~~"

"caffo" or "kafu" leaves
used in basketry,
fruit and nuts eaten.

juice. "katod" juice
said to cause severe
skin irritation and
rash, but said
to be used to cure boils.

shrub "sadafu"

bark used for cordage.

"péchalai" root
used in mixture

"to refresh insides"

low shrub, fruit
red. "agatelong" wood
very flexible, used for
axe handles, posts for
bullock carts, etc.

fruit eaten.

25020

in forest

21 *Guamia saffordii*
in forest on second terrace

22 *Euphorbia heterophylla*
weed in abandoned field

23 *Pencaena glauca*
common everywhere

24 *Calophyllum inophyllum*
Japanese temple ground

4. "lalaha" wood
very good for firewood
trunks, etc., burns
readily without
smoke.

small tree "paipai"
wood very flexible,
used for handles for
utensils, tongues for
bull carts, building
materials, etc.

bracts red at base
"flore hagon"

latex irritating to skin.
shrub 1-3 m. tall

wood "talntangan"
wood used as firewood
& building material.

seeds used during war
as coffee substitute but
caused loss of hair,
leaves good pig feed.

Tree "derog" wood used
for building material,
bull-cart wheels,
and boats. lasts well
in water.

June 21 highest hill on island,
near Sabana, Rota
old excavations, eroded
places and roadsides in
soil of weathered volcanic tuff,
generally grass covered,
but with extensive
growth of *Acacia confusa*.
probably planted. 490 m.

25025 *Cyperus*

eroded place

26 *Hypoxis capitata* Jacq.
eroded place

27 *Cyperus*
eroded place

28 *Miscanthus ^{floridulus} japonicus*
gregarious on open slopes

29 *Cyperus*
eroded place

30 *Pennisetum purpureum*
roadsides, commonly
planted and persisting
everywhere

31 *Lycopodium cernuum*
on walls of excavation

small tufts

erect herb 1 m. tall

large clump, leaves
and bracts white
beneath.

deep tangled masses,
inflorescences roseate
when young, spikes
verticillate

small tufts

deep masses, 2 m.
tall

pendent

- 25032 *Gleichenia linearis*
common on banks of
excavation
- 33 *Paspalum orbiculare*
common on roadsides and
floor of excavation,
general on island
- 34 *Histiopteris incisa*
~~common~~ on walls of excav-
ation
- 35 *Bechnum orientale* L.
banks and walls of excavation

June 21, 3/4 mi. e. of Sabana
Rota I. 450m.

dense forest on makatea
or dissected coral limestone
forest mixed, *Elaeocarpus*,
Artocarpus, *Hernandia*, etc.
epiphytes abundant,
underbrush sparse.

- 36 *Piper*
common in undergrowth
- 37 *Polypodium*
epiphytic, on tree trunks

other clumps seen
much deeper.

isolated culms and small
tufts.

rhizome erect.

shrub up to 1m. tall,
mature spikes red.
root with only slight
effect on tongue when chewed.
rhizome buried in
mass of roots, fibers,
dead leaves, etc.

25038

Ardisia

occasional

39

Asplenium

epiphytic on tree trunks

40

Asplenium

common, epiphytic on tree trunks

41

Freyzinetia

common

42

Asplenium nidus

very common, mostly epiphytic

43

~~*Phyllanthus*~~ *Claoxylon*

common

44

Dioscorea bulbifera

occasional

45

Hernandia labyrinthica Turyana

common in forest

small tree, fruits
bright red, fleshy,
spherical, pleasantly
acid, in pendent
racemes.

rhizome with licorice
odor when cut.

vine climbing up
tree trunks, leaves
3-ranked, all seen sterile.
rosettes with
ascending leaves

tree 5 m. tall flowers
whitish

vine, climbing
on tree trunks

small tree 5 m. tall
(others much larger)
fls. & fruit pale green,
fruit inflated

25046 *Macaranga*
common

47 *Elaeocarpus*
common

48 *Eugenia*

49 *Laportea*?
occasional

50 ~~Adiantum~~ *Andisia*
occasional

(see
25056)

June 21 - along n. coast
4 mi. e. n.e. of Sonson
coral flats, abandoned cultivated
ground. 5 m.

51 *Polypodium scolopendria*
common on ground on
coral

52 *Achyranthes*

53 *Pipturus argenteus*
common

54 *Pipturus ~~obtus~~ argenteus*
common

55 *Agave sisalana*
persisting from cultivation

tree 10 m. tall, flowers
greenish

large spreading
tree, flowers white

tree, sterile

small tree - sap said to
cause rash on skin.

fruit immature

fronds erect.

plant depressed
branches and spikes erect.
shrub 2 m. tall,
fruit white, fleshy

shrub, fls. greenish

rosettes of leaves 1 m. long,
inflorescence 4 m. tall, fls. erect.

June 21 - see after 25050

25056

Boerlagiodendron~~tree 10 m. tall branches~~
rare in forestJune 22 - ~~for~~ Rota (Donsen)
Rota I. 1-2 m.coral flats back of
beach and beach
between dissected
fragments of low coral terraces

57

Allophyllus

thicket

58

Deeringia amaranth kinds
thicket

59

*Triphasia trifolia*thicket shaded by trees
very common

60

Cyperus stipifolius javanicus
common in openings

61

Hymenocallis littoralis
common in low places
(also along top of beach)tree 10 m. tall, branches
ending in large rosettes,
infl. and fruits dark
red. scarcely any
seen when leaves or
branches are broken.mixed strand trees,
persisting cultivated
trees, openings, bushy
thickets etc.

bush 1 m. tall, fls. white.

scandent shrub,
flowers whitish, fruit
crimson red.bush 1.5 m. tall; flowers
white, fragrant, petals
recurved; ripe fruit
red.

dense clump

plants ~~to~~ 1 - 1.5 m. tall,
flowers white.

- 25062 *Thuarea involuta*
~~top of~~ beach
- 63 *Phyllanthus*
 top of beach, under trees
- 64 *Excoecaria agallocha*
 top of beach
- 65 *Pemphis acidula*
 on dissected coral remnants,
~~common~~ abundant
- 66 *Leucaena glauca*
 common in thickets
- 67 *Cassia occidentalis*
 common in open places
- 68
 occasional in open places
 (abundant higher on island)
- 69 *Chrysopogon aciculatus*
 common in openings
- 70 *Cenchrus ~~cerechinatus~~*
 common in openings
- 71 *Dactyloctenium aegyptium*
 common in disturbed places
- 72 *Bidens pilosa* L.
 occasional, locally common

- forming a dense
 soft ~~mat~~ carpet
 depressed shrub
- tree 7 m. tall, branches
 drooping, lactiferous.
 bush 1 m. tall,
 flowers white.
 leaves slightly acid-bitter
 and astringent
 shrub 1 m. tall
- herb 1 m. tall, flowers
 yellow.
- bush 1 m. tall, flowers
 pinkish
- forming a mat, tightly
 adhering to ground,
 scapes erect.
- long geniculate culms
 spreading from crown
 and rooting at nodes.
 culms prostrate
 to ascending, radiating
 from crown.
 heads yellow, discoid

- 25073 *Hibiscus tiliaceus*
common in thickets
and secondary woods
- 74 *Muntingia calabura*
rare in thickets
- 75 *Citrus limon*
persisting from cultivation
- 76 ~~*Thespesia*~~ *populnea*
common
- 77 *Sida*
common in openings
- 78 *Ipomoea*
common everywhere
in openings.
- 79 *Passiflora foetida* var. *hispida* (Dc.)
abundant everywhere

- small tree, 6 m. tall,
flowers pale yellow
with maroon center,
yellow turning reddish
in afternoon
(see 24982)
- ~~tree~~ tree 5 m. tall,
branches ascending,
appearing distichous,
flowers white, ripe
fruit ^{fleshy} pinkish.
- tree 5 m. tall, lemons
very large, almost
smooth.
- small tree 5 m. tall
(others much larger)
- gray bush 1 m. tall
- prostrate vine,
flowers blue, open
in morning, ~~also~~ turning
pink and closing in
afternoon.
- herbaceous vine
tangled over everything,
flowers white, lower
half of corona filaments
and hairs on corona disc
purple.

1946 Marianas Is.

25030 *Abutilon indicum*

occasional

81 *Cyperus*

rare in excavated coral sand

June 22 - lower terrace
east of Sonson, Rota82 *Dodonaea viscosa* L.
common locally on
coral flatJune 22 - slopes above
As Malote,83 *Annona muricata*84 *Erythrina*85 *Elalostema*86 *Cox lachryma-jobi*

Rota

bush 1.5 m. tall, flowers
yellow (see #24983)
tufts, leaveserect shrub up to 3 m.
tall, slender, branches
strongly ascending
fruit inflated mostly
2-winged, occasionally
3 in same cluster, pale
green, not reddish.

stems fleshy

fruits first green,
then blue-black,
then pearl gray

June 22 same
slopes of ^{weathered} volcanic breccia
underlying limestone
cliffs. slopes grass-
covered, badly eroded
in places, both by
water and slippage,
showing evidence of
burning over. 250 m.

25087 *Myrtella benningensis*
local on eroded place

78 *Sphenomeris*
eroded places

89 *Fraxina*
muddy seep

90 *Colocasia esculenta*
planted in moist places

91 *Elephantopus scaber*
common along trail

92 *Dryopteris gongilodius* ?
common

Cyrtopodium cernuum
+ *Gleichenia linearis*
common on eroded places,
Miscanthus japonicus
dominant on slopes

dense bushy shrubs
up to 0.7 m. tall, fls.
white, fruit reddish
black when ripe.

stipes red, panicle
athery.

erect stems sharply
pentagonal.

leaves dull, with a
bluish cast.

25093
~~25093~~*Oryza sativa*in small muddy place
above trail94 *Fimbristylis*
occasional95 *Bidens pilosa* var. *minima*
rare along trail96 *Scaevola frutescens* (Mill.) Kr.
occasional97 *Heteropogon contortus*
rare98 *Emilia sonchifolia*
rare along trail99 *Cassia*
rare along trail25100 *Rynchospora*
occasional in eroded
places01 *Eleocharis*
~~in~~ muddy seeps02 *Synedrella nodiflora*
disturbed place03 *Euphorbia*
eroded places, occasional04 *Curculigo*
eroded burned place
common locally

panicle drooping

stiffly erect tufts.

heads with white
rays.low shrub; flowers
white, fruit white,
fleshy.

flowers purple.

herb up to 1 m. tall,
flowers yellow.
slender tufts

flowers yellow

strictly erect, tip nodding,
flowers white.
flower yellow.

- 25/05 *Bidens glauco-gyne tenuifolia*
eroded places, common locally
- 06 *Notholaena*
eroded places, occasional
- 07 *Tacca*
eroded place, seen only here
- 08 *Wikstroemia elliptica*
eroded place, rare
- 09 *Geniostoma micranthum* var. *micranthum*
eroded place, one plant seen

June 23 Sonson (Rota) Rota I.
around mined townsite

- 10 *Jatropha curcas*
roadside
- 11 *Heliotropium*
old field, abundant
- 12 *Ficus*

~~13 *Pisonia*~~

- ~~hedge - *Maytenus thompsonii* Merr.~~
- 13 *Maytenus thompsonii* Merr.
hedge row

- 14 *Ocotea oppositifolia*
persisting from
original vegetation in corner of
grounds of camp.

heads yellow, radiate.

stem 1 m. tall, bracts
blackish purple, perianth purplish
distally

shrub 1 m. tall,
flowers greenish yellow,
berries red.
(several plants represented)

shrub 1.5 m. tall,
flowers white

small tree 5 m. tall.

plant gray-green,
flowers white.

tree, fruit green
~~shrub 2 m. tall~~

shrub 2 m. tall,

small tree 4 m. tall,
flowers white, fruit
yellow when ripe.

June 23 - n.w. coast of
west end of island, about
1 mi. n.e. of Sonson (Rota)
strand forest at top of
and back of beach,
on lowest terrace and

25115 *Premna obtusifolia* R. Br. (pointed lvs.)
edge of opening

16 *Callicarpa*
edge of opening

17 *Davallia*
on lower part of cliff

18 *Hedyotis foetida* var. *marianensis*
base of cliff and among rocks

19 *Flagellaria indica*
common in edges of
forest and thickets

20 *Mucuna urens*
occasional in forest

21 *Bikbia*
~~and~~ common on cliff,
this plant among great
rocks shaded by trees

cliffs back of terrace

shrub 2 m. tall;
flowers pale green, aromatic;
fruit immature.

shrub 1 m. tall,
sparsely branched;
flowers purple; inf
fruit black.
rhizome creeping.

shrub 0.7 m. tall, woody,
foetid when broken,
flowers white; fruit
green.
scandent, slender

large vine climbing
over trees, pods mostly
on dead portions, pendent.
shrub 2 m. tall,
flowers white.

- 25122 *Procris pedunculata*
epiphytic on tree trunks
just back of beach
- 23 *Cyclophorus*
~~epiphytic~~ epiphytic,
common on branches
and trunks of trees just
back of beach
- 24 *Digitaria* ^{*gaudichaudii* (Kuntz) Ham.} ~~*marianensis*~~
common on rocky beach
and base of cliffs
- 25 *Flemingia nuda*
under edge of great rock
- 26 *Clerodendron*
on base of cliff
- 27 *Claoxylon*
forest, common
- 28 *Claoxylon*
forest, common
- 29 *Hernandia*
one of commonest trees
in forest.

fronds thick, coriaceous

tufts, stiffly erect
to spreading.

stems fleshy
— no stinging hairs.
scandent shrub
flowers white with
purple stamens and
style.

small tree 4 m. tall
perianth (?) accrescent,
soft & spongy, ~~see~~ pale
green, surrounding yellow
fruit.

— small tree 4 m. tall,
fls. pale greenish white
— tree 10 m. tall, flowers
white, fruit ^{perigon} inflated.
~~perigone~~ white, ovifid
circular (not toothed or lipped)

- 25130 *Rhoeo discolor*
escaped and well established
locally at base of cliffs
- 25131 *Canthium odoratum* var. *tinianse*
sloping face of great
limestone boulder near
edge of water
- 32 *Terminalia samoensis* Rech.
sloping face of great
limestone boulder
near edge of water
- 33
sloping face of great
limestone boulder near
edge of water
- 34 *Hedyotis albido-punctata*
common on rocks near
water
- 35 *Wedelia biflora* var. *canescens* (Griseb.) Fosh.
rocky upper beach
- 36 *Psilotum nudum*
~~poor~~ rough perpendicular
limestone face.
- 37 *Dryopteris*
base of cliff, in shade

- leaves purple beneath,
flowers white, filaments
pilose, petals 3, equal.
- 5 m. small shrub 0.5 m.
tall, spreading, leaves
pale beneath, fruit
immature.
- 5 m. small shrub 0.5 m.
tall, ripe fruit red,
almost terete.
- 5 m. prostrate shrub
- 2 m. prostrate; leaves
fleshy; flowers
white, lobes ~~narrowly~~
oblong-lanceolate.
- prostrate, extensive,
branches ascending;
heads yellow.
tips pendent.
- rhizome buried 2-3 cm.,
prostrate.

25138

common along base of
cliff in shade

39

Nephrolepis

occasional on face of cliff

40

Asplenium

occasional on face of cliff

June 23 - second terrace
from top ^{1 mi.} east of Sabana
Rota?

rain forest on gently
sloping rough coral
(makatta)

41

Hernandia lalysinthica Tuyenan

common tree

(flowers and developed fruits
in same clusters)

42

Fagraea var *ludronica* Post.

rare tree, strangling
a *Hernandia* tree. (but
small tree observed
growing in ground)

rhizome short, erect.

fronds pendent,

fronds arching

tree 15 m. tall ⁵ dm. thick;
flowers white, fruiting
perigone inflated, slightly
2-lipped, white.

tree 15 m. tall, evidently
developed from seedling in
crotch of *Hernandia*, large
roots so surrounding
trunk of *Hernandia* that
it is difficult to distinguish
them; flowers very fragrant,
cream white, turning
dull orange; fruit practically
spherical, bright
orange when ripe.

- 25143 *Alyxia*
epiphytic in large tree
- 44
abundant, epiphytic on
tree trunks.
- 45 *Pipturus incanus*
common in forest
- 46 *Pandanus*
common in forest
- 47 *Guarnia saffordii*
common in forest
- 48 *Clerodendron speciosissimum*
persisting in tiny abandoned
clearing; Japanese camp site.
- 49 *Solanum nigrum*
tiny abandoned clearing
- 50 *Alyxia*
tiny abandoned clearing
- 51
epiphytic on tree trunk, rare.

- woody vine, buds
and green fruits only.
— rarely fruiting.
- small tree, leaves
dark green above;
fruit very juicy, white,
— achene on surface.
- tree 4 m. tall, leaves
spirally arranged,
fruit not quite ripe.
- tree 4 m. tall, bushy,
leaves dark green,
fruits green, turning
red, then black when
ripe.
- herb 1 m. tall, flowers
scarlet, fruit immature
greenish black.
- herb up to 1 m. tall,
flowers white, ripe
fruit blue-black.
- semi-saraculent shrub
flowers dull salmon
color.
- flower dull white.

1946 Marianas Is.

- 25152 *Pandanus*
common in forest
- 53 ~~*Pandanus*~~
occasional in forest

- 54 ~~*Haplophragma*~~ *Belvisia spicata*
rare, epiphytic on tree
trunks

June 23 - coconut grove
beyond phosphate mill,
on road to As Malote

- open cultivated land
- 55 *Paspalum*
- 56 *Digitaria pruriens* var. *pruriens*
- 57 *Paspalum conjugatum*
common generally
except along coastal plain

June 24 - near the airstrip,
near east end of Rota I.
small patch of ^{old} woods
in scrubby second-growth
on terrace

- 58
very abundant in scrub

Rota

61

tree 5 m. tall, fruit
still green.
— small tree, twigs
fleshy, leaves soft,
— not stinging.

— erect
— spreading

shrub 3 m. tall, young
leaves whitish from pubescence,
flowers deep pink.

25159 *Ficus*
not common in forest

60 *Randia cochinchinensis*
~~*Randia*~~
rare in forest

61 *Achyranthes aspera*
edge of patch of woods

62 *Canthium*
in edge of patch of woods

63 *Eugenia palumbis* Merr.
in edge of patch of woods,
rare.

see also p. 86

nos. 25212-25214

large spreading
banyan, fruits yellow,
of two sizes, one rarely
~~many~~ several times as
large as other.

— tall slender tree 15
m. tall, fruit dark
red.

— tangled herb 2 m.
tall,

— slender shrub 1.5
m. tall, ripe fruit
deep purplish red,
~~quite to~~ more or less didymous
subglobose, soft fleshy
pericarp; flowers white.
(differs significantly from
C. odoratum in base of
fruit, texture and color of
fruit, smaller flowers.)

— slender shrub 1 m. tall,
fruit red with greenish
calyx.

there
generally
slope toward
the ocean.

Rota is a series of coral limestone terraces, about five of them (the second from the top is a bit confused when viewed from the north), with a low tip of volcanic tuff projecting thru the middle of the topmost, and a considerable exposure of volcanic breccia on the southeast side, this capped by a thick layer of limestone. The third main terrace is the most extensive, and is where the air strip is situated. Actually there may be several more minor terraces than the 5 mentioned, but they are hard to separate.

The island has more vegetation than Tinian, apparently because there is less arable soil. On exposures of ~~the~~ malate the original forest persists in fairly undisturbed

condition. Patches of this occur on all terraces and on the breaks between them where they are not vertical cliffs. On the upper terraces this is real rain forest with an abundance of small leaf epiphytes. The tree cover is thick, with a fair growth of epiphytic ferns and a few orchids, and with but little undergrowth. The rocks are covered by mosses, etc. Principal trees are *Hernandia* sp. (differing from the strand species in the non-peltate leaves, smaller fruit in proportion to the size of the perigone, ovifer hour-glass shaped instead of circular, and some flower differences.), *Guettarda*, *Pandanus tectorius* (?), *Elaeocarpus* sp. (large tree), *Ficus* sp., *Artocarpus* sp. (entire leaves), *Pipturus argenteus*, *Laportea* (??), *Eugenia*

Pisonia
umbellifera
Premna
in openings
chiefly

stelecantha(?), *Guam*
saffordii, *Macaranga* sp.,
Claoxylon(???)^{*Tarenna glabra*}, with *Premna*,
Ardisia sp., *Piper* sp.,
as shrubs. *Mucuna*
gigantea and (more rarely)
M. urens, are tangled
in the trees. *Flagellaria*
indica and *Freycinetia*
are common climbers.
Taqraea sp. is not common.
It has a strangling habit
as in *Ficus* and *Clusia*.

It is hard to tell if this
forest was what was found
on the parts of the upper
terraces where soil was
most abundant or not.
These places have been
cleared. Wind breakers and
patches of *Acacia confusa*
have been planted. Under
these nothing grows. Most
of the cleared land is now
abandoned. *Paspalum*
conjugatum, *P. orbiculare*
and *Solanum nigrum*
are abundant weeds,
as well as *Crotalaria*

saltiana. The exposure
of volcanic soil on the
top terrace is largely
covered with *Acacia*
confusa, but where
it is open, *Gleichenia*
linearis, *Lycopodium*
cernuum, *Dryopteris* sp.,
3 sp. of *Cyperus*, and,
above, all, tangled brakes
of *Miscanthus japonicus*,
are common. Napier
grass, *Pennisetum purpureum*,
persists everywhere,
both on volcanic and
calcareous soils. Patches
of *Saccharum* also persist.
The large third (?) terrace
has mostly been cleared.
Judging from the remnants,
the forest there was a rather
mesophytic type, ~~not~~
without many leaf
epiphytes. *Ficus* sp.,
Randia cochinchinensis,
Pandanus tectorius, *P. fragrans*,
were components, probably
many more. A shrub
or small tree of the *Sterculiaceae*

Paspalum
conjugatum
orbiculare

(25153) has come in in almost pure stand over large areas, forming a scrub 2-3 m. tall. In open places, *Passiflora foetida* or *Ipomoea* sp. (24943) or both form a dense mat over the ground.

On the lower terraces the strand character of the vegetation becomes more and more pronounced. The portions of the second and its associated terrace examined had been largely cleared, except for patches of scrubby forest. This had *Intsia bijuga*, *Ficus tinctorius*, *Ximenia americana*, *Gymnosporia*, *Pandanus fragrans*, *P. tectorius*, *Guamnia*, *Hibiscus tiliaceus*, *Allophylus* sp., and others. The Japanese had planted *Casuarina* in patches. Sweet potatoes, cassava, and papayas are persisting from cultivation. On places where the soil is ~~very~~ ~~very~~ very thin

Premna
Melastoma
Ochrosia

the Japanese had raked it up in windrows following the contours and planted on these. The coral bedrock ~~is~~ is exposed between these.

The lowest terrace forms a sort of coastal plain along the northwest coast, at least. It lies, here, about 2 m. above sea level. On the southeast coast it is much higher, 10-15 m. or more. On the isthmus it is variable. This apparently had, originally, a strand forest of *Hernandia* (sp. with peltate leaves), *Thespesia*, *Hibiscus tiliaceus*, *Barringtonia asiatica*, *Pandanus tectorius*, *Pandanus fragrans*, *Terminalia catappa*, *Claoxylon* (???), *Laportea* (?), *Macaranga*, *Premna*, *Ochrosia*, *Guettarda speciosa*, *Pithecellobium dulce* (an important component but probably introduced),

allophyllus, *Pipturus argentea*,
Morinda citrifolia, *Melanolepis*
multiglandulosa, occasional
Pisonia grandis, *Albizzia*
lebbek, *Grewia*, occasional
Muntingia calabura, *Ficus* 2 sp.,
Intsia bijuga (common),
 along the beach *Messerschmidia*
argentea, *Sophora tomentosa*,
Excoecaria agallocha and
 abundant *Scaevola frutescens*
 undergrowth of *Phyllanthus*
jasmminum, *Clerodendron*
colubrina asiatica,
Callicarpa, and,
 above all dense thickets
 of *Triphasia trifolia*, the
 whole forest entangled
 in *Mucuna gigantea*
 and, more rarely, *M. urens*
 (or *pruriens*), with *Sporobolus*
alba near the ocean.
 In openings are many
 weeds - *Phyllanthus*
niruri, *Acalypha* sp.
Euphorbia hirta, *E. thymifolia*,
Cassia occidentalis, *Sida*
 sp. (aff. *rhombifolia*), *Eleusine*
indica, *Chloris radiata*,
Solanum nigrum, *Solanum*

icosandra, grass (24942),
Digitaria sanguinalis,
Cyperus rotundifolius
 forming dense patches,
C. stuppeus in isolated
 tufts, common, *Lepturus*
repens near the coast,
Thuarea just at top of beach.
Asclepias curassavica, *Euphorbia*
heterophylla

On cliffs and big rocks
 near ocean *Pemphis*
acidula (only right near
 ocean), *Bilbia*, *Terminalia*
 sp., *Canthium* sp.,
Clerodendron, *Wedelia*,
Digitaria marianensis,
Davallia solida, *Asplenium*
 sp., *Psilotum nudum*,
Hedyotis albida-punctata,
 and at bases of cliffs
Hedyotis foetida var. *marianensis*,
 and a fern (25138), a large
Dryopteris (25137). On the
 branches of trees *Hyppomelasma*
spicata, *Davallia solida*,
 and *Procris pedunculata*, and

a sterile *Elaphoglossum* grow epiphytically.

On the higher terrace on the south coast

Podonala viscosa is common, also *Paspalum conjugatum*.

Coconuts have been common along most of the coast, but except for one or two places only stumps remain. Where any trees remain they are very seriously affected by a weevil.

Cultivated plants of various sorts persist on the lower terrace - *Citrus limon*, *C. aurantiifolia*, *Acalypha wilkesiana*, *Agave sisalana*, *A. americana* (?), *Calophyllum inophyllum*, *Rhoeo discolor*, *Polyscias guilfoylei*, ~~Bacca~~ *Phyllanthus nivosus*, *Codiaeum variegatum*, *Ricinus communis*, *Carica papaya* (one of the most abundant weeds), *Bougainvillea*, *Delonix regia* (common), etc.

On the south coast above the village of As Malote, is an extensive slope of a deeply weathered volcanic breccia. ~~the~~

This is open country, frequently burned, and with large erosion and slippage scars.

It has a distinctive flora. The dominant plant is *Miscanthus japonicus*.

Other things are chiefly found in and around erosion ^{and wet seeps} scars - *Bidens* sp.,

Rynchospora sp., *Fuirena* sp., *Fimbristylis* sp., *Curatella* sp., *Euphorbia* sp., *Heteropogon contortus*, *Eleocharis* sp.,

Notholaena sp., *Sphenomeris* sp., *Tacca leontopodioides*,

and shrubs of *Wikstroemia elliptica*, *Geniostoma* sp., and especially #25087.

Synedrella nodiflora is a prominent weed in cultivated areas in this region. In a small marshy place was a

numerous
small
streams
flow down
this slope.

stand of rice. Small farms here have patches of Zea, 2 types of *Alocasia*, one the ordinary *A. macrorhiza* with almost erect, bright green leaves, the other with a distinct angle between blade and petiole and dull glaucous green leaves. *Colocasia* is cultivated here also. *Artocarpus* and *Mangifera* surround the houses. This seems to be the only active agriculture on the island at present.

June 27 - Kannate edtot
(Valley of Ants), 3 km. e. of
Apetna Pt., Saipan I.
small vally, abandoned
coffee plantation, with
Passiflora foetida smother-
ing out the coffee trees.

25164

Erythrina

occasional

65

*Aglaia*occasional, at foot of
cliff, on talus.

67

Cynometra~~small tree~~ at foot of cliff
common locally.

66

Melanolepis multiglandulosa
common

68

*Alyxia*common on face of
limestone cliff.

69

Coffea arabica L.

plantation, formerly cultivated

70

Acacia confusa

planted as windbreak

71

Intsia bijuga

common in valley

Saipan

coral limestone with
some soil on it.

tree 5 m. tall, with
small prickles.

tree 6 m. tall, leaflets
~~tree~~ tending to droop;
flowers orange,
fruit orange when ripe.
small tree, fruit
immature.

shrub 2 m. tall,
fruiting spikes pendent
pendent shrub
corolla lobes yellow,
tube orange
small trees 3 m. tall,
ripe fruit red.

tree 6 m. tall, rounded,
bushy, flowers
yellow, fragrant.

tree 8 m. tall, flowers
with green calyx, single
petal white with pink ^{center} and claws
stamens and style purple.

25172 *Passiflora foetida* var. *hispidula* (DC.) Killip
very abundant everywhere

73 *Leucaena glauca*
very abundant ~~in open places~~
in thickets and
invading openings

74 *Cynodon dactylon* var.
very abundant in openings

75 *Albizia lebbek*
common everywhere
this specimen in ravine

June 27 - south ridges
of Mt. Tapotchau (highest
mountain on island), Saipan.
rough limestone knob
and slopes below it.
thickets and openings

76 *Psychotria mariannensis*
occasional on bushy slope

77 *Phyllanthus*
very common on rocky
slopes and bluffs.

78 *Claoxylon* (?)
occasional in thickets

79 *Cyperus*
common on open slopes

Saipan

herbaceous vine
climbing over everything,
fruit orange.

~~forming a deep~~
~~mat about 3 dm. deep~~
shrub 1-2 m. tall.

forming a ~~deep~~ soft, loose
mat about 3 dm. deep.
small tree 5 m. tall,
spreading, flowers
cream yellow

shrub 1.5 m. tall, flowers
white, ripe fruit
red. (2 plants in coll.)

shrub up to 1 m. tall
flowers greenish white.

shrub 3 m. tall fruit
green, fleshy.
culms solitary,
spikelets yellow-green

- 75180 *Jasminum marianum* DC
common in thickets
- 81 *Chloris radiata*
common in road
- 82 *Deeringia, amaranthoides*
occasional in thickets
- 83 ~~*Miscanthus floridulus*
dominant to~~

June 27 ridge
south of Mt. Tapotchuan
~~open ridge~~ ~~thru~~ Laipan?
open ridge covered with
tall grass, Miscanthus
soil a deep red to brown
clay overlaying limestone

- 83 *Miscanthus ^{floridulus} japonicus*
dominant plant over a
large area
- 84 *Indigofera tinctoria* L.
single shrub in grass
near road
- 85 *Trema orientalis* var. *argentea*
occasional along road
- 86 *Chrysopogon aciculatus*
bare spots

ascendant shrub
fruits black, shiny,
didymous.

Love Lumps

scandent, forming a
low tangle, fruits
turning pink

Small Casuarina trees
common, but many
of them dead or dying.

2-3 m. tall, forming
dense brakes.

shrub 2 m. tall,
flowers brown, odor unpleasant.

small tree 4 m. tall,
leaves distichous, ripe
fruit purple.

creeping, adhering closely to ground, forming dense mat, scape erect.

- 25187 *Curculigo*
common along old road
- 78 *Fimbristylis*
~~is~~ common in eroded spot
- 89 *Rynchospora*
common in eroded spot
- 90 *Heteropogon contortus*
common in eroded spot
- 91 *Fimbristylis*
common in eroded and
bare spots
- 92 *Pectaria*
common along road
- 93 *Bidens pilosa* var. *minor*
small patch along road.
- 94 *Echinochloa colonum*
occasional along road
- 95 *Bidens pilosa*
rare along road
- 96 *Aeschynomene* *Sebania cannabina*
occasional along road
- 97 *Pueraria* *Calopogonium mucunoides* Desv.
rare along road
- 98 *Cassia*
rare along road

Saipan.

flowers yellow.

caespitose, heads tan.

Tufts

weak stemmed

somewhat caespitose, culms erect.

rays white.

spreading to prostrate

disk yellow, rayless.

slender herb 1 m. tall,
fls. yellow, standard
outside.

flowers yellow.

June 28 - sea cliffs east
of Mt. Pitoanbana, n. end
of Saipan Island
cliffs and steep slopes
mostly of a tuff that
is largely composed of
light gray pumice
in a white crumbly matrix

25199 *Wedelia biflora* var. *canadensis*
bush on limestone slope

25200 *Scaevola frutescens* (Mill.) Kra.
open tuff cliffs, common

01 *Bikkia*
on ledges on tuff cliffs

02 *Heteropogon contortus*
dominant in spots where
Miscanthus is absent

03 *Fimbristylis cymosa*
common in open places
on cliffs

04 *Vicia*
forming a mat at top of
limestone cliffs

this in lateral contact
with coral limestone,
the tuff mainly open
slopes with *Miscanthus*
and *Heteropogon*, the
limestone with bushy
forest, the contact sharply
delineated.

scrambling herb, leaves
with a frosty appearance,
flowers yellow.

low spreading shrub,
leaves fleshy; flowers
dull white; fruit white,
fleshy.

shrub 2 m. tall; leaves
fleshy; flowers white,
strongly valvate conduplicate
in bud, lobes becoming
recurved late in anthesis.
loose bunches

densely caespitose,
leaves stiff.

prostrate, flowers
violet.

- 25205 *Bidens glauco-gyne tenuifolia*
rare on bare tuff slopes
- 06 *Sporobolus alba* L.
roadside, large patch
- 07 *Cantharospermum scarabaeoides* (L.) Baill.
climbing on shrubs on
open tuff slopes
(seen also but sterile
with #25133-25198)
- 08 *Alyxia*
ledges on tuff cliffs
- 09 *Portulaca quadrifida* L.
edges of tuff cliffs
- 10 *Zoysia ^{tenuifolia Trin.} ~~matrella~~*
open tuff slopes and ledges
- 11 *Hedyotis albidopunctata*
crevices and ledges in
tuff cliffs

June 24 - same as 25110-25114.

- cultivated ground in doorway
- 12 *Euphorbia thymifolia*
- 13 *Pilea microphylla*
densely covering ground
- 14 - parasitic on *Euphorbia thymifolia*

rays yellow, short.

prostrate, extensive,
flowers white, closed
at 10:30 a.m.

- twiner, leaves strongly
reticulate, gray beneath,
flowers dull yellow.

climbing on bushes,
flowers lemon yellow
with orange tube, fragrant.
- prostrate, fleshy,
flower yellow, about
15 mm. across.

- ~~prostrate~~ erect tufts
spreading by prostrate
rhizomes.

- prostrate, fleshy,
flowers white.

Rota

prostrate, purplish.

causes normally prostrate
plant to grow upright.

June 28 - just south of
Garapan, on coastal plain
weedy roadside

25215

Ipomoea

- 16 *Forghum halepense*
weedy low roadside
abundant over most
of island except uplands

June 28 - at base of
cliffs north of Mt. Marpi,
north end of Saipan?
rocky ground, dense
brushy forest against
cliffs, thinning outward

17

Cerbera manghas dilatata
occasional,

- 18 *Emilia sonchifolia*
common weed in ~~open~~
open places.

- 19 *Abutilon indicum*
occasional in open

extensive vine covering
ground and bushes.
tufts with heavy
rhizomes.

spreading rounded tree
5 m. tall, flowers
white with yellow
eye, fragrant; only one
carpel developing
into fruit, this pendent.
flowers purple, scarcely
exserted.

herb 1 m. tall, flowers
yellow, closed by
10 a.m.

25220 *Cyperus stuppeus*
open ground

21 *Ficus*
edge of forest

22 *Randia cochinchinensis*
edge of forest

23 *Laportea*
edge of forest

24 *Ficus tinctoria*
on a large limestone
boulder.

25 *Psychotria*
edge of forest

June 23 - south end of Saipan I.
near Kobler field

26 *Mucuna*
common in second growth brush.

small clump,
leaves glaucous.

~~B~~ spreading tree
3 m. tall, rounded
figs immature, turning
purplish.

shrub 1.5 m. tall,
buds white, ripe
fruits purple.

small tree with soft
wood, flowers green.
leaves do not sting,
but the open flowers
sting most painfully,
the sensation lasting for
hours.

pendent shrub
fruits green, when
ripe becoming only
slightly yellowish.
shrub 1.5 m. tall,
flowers white, ripe
fruit red. leaves dull-
glossy.

extensive vine, covering
ground and vegetation
flowers pale green.

1946 Marianas Is.
June 28 slopes e. of Mt. Tapotchau
Saipan

25227

Ficus tinctorius

on top of large coral
boulder

same - knoll of deeply
weathered volcanic material
covered with *Paspalum*
conjugatum

28

Phyllanthus ^{*debilis* Klein ex Willd.} ~~*minimus*~~

road cut talus

29

Phyllanthus niruri

road cut talus

June 28 slopes n. of Mt.

Tapotchau, Saipan

remnants of native
forest on limestone outcrops.

30

Alyxia

bushy slope under trees

31

Pisonia grandis R.Br.

occasional

32

Pandanus fragrans

common

spreading shrub,
fruit immature,
green with purplish cast.
a few ripe, dull reddish.

det. G. L.
Webster, 1955

erect, purplish-green.

erect, green.

scandent shrub,
corolla lobes yellow, tube
orange, somewhat inflated
above.

tree 12 m. tall, trunk 1.5-2 m.

through; flowers

green, fragrant.

tree 6 m. tall, leaves

spirally arranged,

fruit glaucous.

June 28 - just north of
Agingan Point, s. w.
corner of Saipan?

beach with dunes of
coral sand at one end
and low undercut
shelf of coral limestone
about 3 m. high at
other. Disturbed weedy
flats ~~below~~ of compact
soil behind this.

- 25233 *Euphorbia thymifolia*
weedy flats
- 34 *Acalypha indica* L.
rare on weedy flat
- 35 *Synedrella nodiflora*
common on weedy flat
- 36 *Terminalia catappa*
top of low cliff in thicket
- 37 *Amaranthus viridis*
top of beach below low cliff,
occasional
- 38 *Polypodium scolopendrium*
face of low limestone cliff.
- 39 *Premna obtusifolia* R. Br. (other loc.)
thicket at top of low limestone
cliff

prostrate, purplish.

erect, green.

erect, flowers yellow.

tree 6 m. tall, flowers
white.

erect herb up to 0.8 m. tall

fronds erect, rhizome creeping.
(soil being eaten by a small
larva.)

shrub 2 m. tall,
flowers green.

- 25240 *Vitex negundo*
dissected coral rock
common
- 41 *Messerschmidia argentea*
sand dunes, common
- 42 *Wedelia biflora* var. *canescens*
sand dunes
- 43 *Cassytha filiformis*
sand dunes, climbing
over and parasitic on
various shrubs
- 44 *Thuarea involuta*
top of beach
- 45 *Cenchrus echinatus*
common on dunes and
flats.
- 46 *Hernandia*
common tree along top of beach
- 47 *Tacca leontopodioides*
small colony ~~to~~ in
shelter of sand dune
- 48 *Euphorbia*
sand dunes
- 49 *Amaranthus spinosus* L.
sand dunes
- 50 *Vernonia cinerea*
sand dunes, common

- shrub hanging over
edges of rocks, flowers
lavender.
- shrub 2.5 m. tall,
leaves fleshy, silvery
green; flowers white.
- prostrate, branches
ascending, flowers
yellow.
- leafless vine, ~~green~~
yellow-green, fleshy;
flowers white,
fruit green.
- prostrate forming loose
mats
- loosely caespitose
- small tree 4 m. tall,
leaves glossy, flowers white.
sterile
- prostrate, pale green.
- herb 0.7 m. tall
- flowers purple

25251

Ipsomoea pes-caprae
beach

52

Malvastrum coromandelianum
common on dunes and flats

53

Euphorbia heterophylla
~~occasional~~ common on dunes

54

Sida
common on dunes and flats

55

Triumfetta procumbens
occasional on upper beach

56

Euphorbia hirta
common everywhere

57

Casuarina equisetifolia
common along upper
edge of beach

June 29. Tanapag, Saipan.
small mangrove swamp
partially filled in with rubble,
only one species of mangrove
seen, other associated
plants around edges,

prostrate, extensively
creeping vine.
flowers purple, closed
in afternoon

erect herb, bracts
scarlet at base.
bushy herb up to 0.8 m.
tall, flowers dull orange-yellow,
pale toward outside. (specimens
from several plants)

prostrate, flowers
deep yellow.

stems ascending,
arching at tips.

tree 10 m. tall, 25 cm. thick.
(these trees look quite
healthy, as do most
that are down along
coast, as contrasted
with those up in mountains)

Acrostichum aureum
clumps among
mangroves.

25258 *Bruguiera*
dominant plant in calcareous
tidal mud flat

59 *Hernandia*
common around edges of
mangrove swamp

60 *Thespesia populnea*
common around edges
of mangrove swamp

61 *Ipomoea*
along roadside

62 *Vigna ~~tata~~ marina*
edge of mangrove swamp
along roadides and rubble heaps

63 *Hibiscus tiliaceus*
edge of mangrove swamp

tree 5 m. tall with
~~B~~ blunt, knee-shaped
pneumatophores;
calyx bright red, glossy,
petals dull flesh-orange;
radical (?) & aerially borne
root) hexagonal in
cross section.

tree 7 m. tall, flowers
white, fruiting ^{perigone} inflated,
pale green, not quite
mature, borne in
clusters below flowering
clusters at flowering time.
ovary circular, ~~for~~ plugged
by fruit when immature.

small tree 4 m. tall,
flowers pale yellow
with deep purple-black
center.

vine, flowers purple,
small (2 cm. across)

prostrate, extensive,
peduncles erect,
flowers dull yellow.

1946 Marianas Is.

Charan Kanwa.

June 29 - west of Lake
Tusupe, Saipan I.

low ground on coastal plain

25264

fence row

- 65 *Pithecellobium dulce*
fence row, commonest
lowland tree.

- 66 *Terminalia catappa*
roadside

67

June 29 Lake Tusupe,
Saipan I.

lake of clear dark colored
water, almost fresh,
surrounded by marshes
of *Paspalum vaginatum*
and swamps of
principally *Acrostichum*
aureum, *Clerodendron* sp.
Hibiscus tiliaceus etc.
with a few large *Lumnitzera*

- 67 *Paspalum vaginatum*
pure stand forming
dense turf on wet ground

- 68 *Acrostichum aureum*
common in swampy
ground

shrub 1.5 m. tall.

rounded spreading
tree 8 m. tall with
fruit pendent, coiled.
Tree 6 m. tall, flowers
white, fruit very young.

large clumps, ponds
up to 2 m. tall, dimorphic.

25269 *Ipomoea*rare in *Paspalum* turf70 *Clerodendron*

abundant in swamp

June 29 - marshes and ponds
about 1 km. s. of
Lake Susupe, Saipan?

71 *Jussiaea*

abundant in water

72 *Cyperus*~~not~~ common in edge of water73 *Scirpus*

abundant in water

74 *Indigofera suffruticosa* Mill.

occasional near pond.

75 *Ipomoea reptans*

abundant in mud

June 29 - Afetna (Susupe) Pt.
Saipan).

dooryard

76 *Heliotropium indicum* L.flower ^{rose-}purple

semi-scandent shrub
forming large masses.

sprawling shrub

2 m. long, flowers

yellow, petals obcordate.

caespitose

culms terete

shrub 3 m. tall.

decumbent with ascending
tips, stems fistulose,
plants sterile.

fls. pinkish white.

The island of Saipan is much less simple in its topography than Rota or Tinian. Like them it is principally raised coral limestone, and a number of terraces are in places evident. There has been much erosion and probably other disturbance, resulting in a rather high mountain mass in the center (Mt. Tapotchau), continuing rather ruggedly to the north^{end} but sloping off rapidly to a low ridge in the south. Much of the western part, except in the north, is a broad coastal plain, variable in height but not more than 4 m. A lake of almost fresh water and a string of ponds and marshes lies along the inner edge of this coastal plain. Around the lake is an extensive swamp

foetida almost smothers everything out.

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Essentially as in the other Marianas, the flora was originally a strand flora, becoming more mesophytic with the higher altitudes and distance from the seacoast. The small ~~at~~ Micranthus area is an exception to this.

of *Acrostichum*, *Clerodendron* and *Paspalum vaginatum*. The marshes are filled with *Scirpus*, *Jussiaea*, *Ipomoea reptans*, etc.

This island is so disturbed and torn up that it is little more than a great weed patch. All of the lowland has been under cultivation or bulldozed except the extreme strand, and even this is not undisturbed in many places. Most of the ordinary tropical weeds characterize the lowlands, and are about the only thing there. Along the beach and occasionally inland are large *Casuarina* trees appearing quite healthy. *Triphasia trifolia* curses the island, forming thickets both in the low and middle altitudes. *Passiflora foetida* almost smothers everything out.

Here young
Casuarina is
common but
the trees are
mostly dying
with no
apparent cause.

One large ridge to the south of Mt. Tapochan is covered by *Miscanthus* and has a slight development of the volcanic soil flora. The soil is thick and clay-like, but underlain by limestone. Otherwise the middle altitudes are either cleared, or thickets of *Triphasia*, *Albizia* and *Acacia confusa*. Patches of remnants of native vegetation such as *Pandanus* (2 sp.) and *Ficus* sp. remain here and there, but most of the brush and woods are *Acacia* and *Albizia*, which are ~~can~~ apparently competing for complete possession of the island.

The *Acacia*, especially, forms a dense stand, permitting nothing to live beneath it. From a distance the mountains appear wooded, but most of it is these two species.

On the cliffs many native species persist, both actually on them

There is some acreage of sugar persisting in the higher hills of the northern part. In Kanat a little valley is a small coffee plantation, almost smothered by *Paspalum*.

and at their bases. Here are *Carbera*, ^{*Biklops*}, *Psychotria*, *Randia*, *Ficus*, ^{*Laportea*}, *Pandanus* (2 sp.), *Pipturus*, etc.

On the higher slopes of the main mountain mass are also some fairly good stands of native vegetation, both on rocky outcrops and slopes. *Phyllanthus*, *Biklops*, *Psychotria*, and a number of trees are here.

Intsia bijuga is scattered almost everywhere, as is *Cynometra*, but the latter only on rocky places. *Alysicia* is also common where a trace of native vegetation persists.

Volcanic material comes to the surface here and there in the mountains, but seems mostly covered by *Paspalum conjugatum*. A tuff exposure, gray pumice breccia, on the north-east side, has a poor development of the volcanic soil flora, mostly *Heteropogon* and *Miscanthus*. The boundary between forest and grass is very sharp on the contact.

July 1, Mt. Alutom, Guam
 eroded slopes of volcanic
 soil, generally covered
 by *Miscanthus japonicus*,
 but eroded spots and
 sheltered places have
 a peculiar flora, similar
 but with more numerous
 species than that on Rota
 on volcanic soil. Several
 sedges, *Scaevola frutescens*,
Wikstroemia, *Dianella* sp.,
Pityrogramma, *Blechnum*,
Pteris, *Glochidion*, *Bidens*
 sp., ~~to~~ several grasses

25277 *Scaevola frutescens*
 common

78 *Mitracarpum*
 common

79 *Euphorbia*
 common

80
 abundant

81 *Desmodium triflorum*
 common

82 ~~Bidens~~ *Glonogyne tenuifolia* exposed
 local, in crevices in
 red rock

Euphorbia sp., *Lycopodium*
cernuum, *Gleichenia*
linearis, etc. all
 characterize it, besides
 a number of weeds,
 as *Emilia sagittata*,
Stachytarpheta, ~~to~~ etc.

low shrub 1 m. tall,
 rounded; flowers white,
 fruit white, fleshy.
 - erect, flowers white.

erect, flowers white.

grayish green.

prostrate, flowers purple.

flowers yellow.

25283 *Cuculigo*~~est~~ bare soil84 *Wedelia biflora* var. *canbclaus.*

common

~~85 *Pityrogramma*~~85 *Pityrogramma*
occasional86 *Wikstroemia elliptica* Merr.
occasional87 *Geniostoma micranthum* var. *micranthum*
one bush seen88 *Gleichenia linearis*
common89 *Glochidion*
occasional90 *Dryopteris*
common91 *Phyllanthus*
local92 *Fimbristylis*
~~common~~ occasional93 *Elephantopus scaber*
common

94

occasional

95 *Pteris*

common

Guam

flower yellow

prostrate, ~~prostrate~~
branches ascending,
flowers yellow.shrub 1 m. tall,
flowers green.shrub 1 m. tall,
flowers white.forming dense low
tangles.

shrubs 1 - 1.5 m. tall.

erect, leaves sensitive.

erect

erect, flowers white.

low bush, 0.7 m. tall,

flowers white.

fronds erect from
buried rhizome.

25296 *Trema orientalis* var. *invidi*
rare

97 *Dianella*
common

98 *Rynchospora*
common

99 *Fimbristylis* *schoenoides* var.
common *boanea* (Kuhn.) Forb.

July 1 - Ritidian Point,
northern ~~end~~ ^{corner} of Guam
thick wet forest on
rough coral limestone
at top of high cliff

25300 *Cycas circinalis*
common in forest

photo # 5-10

01

common in forest

photo # 6-11, 5-12

02 *Ficus*

occasional, this specimen
on cliff rim.

03 *Aglaia*

occasional in forest

04

Bibbia marianensis

common ^{and below} on edge of cliff

shrub 2 m. tall,
leaves green beneath,
fruits purple when ripe.
— loosely caespitose,
flowers and fruit white.
— tufts

tufts.

cliff bordered by a
high rim of dissected
coral, about 4 m. high.

trunk 1.2 m. tall, leaves
ascending, cones erect,
bright tan, somewhat
immature.

tree 12 m. tall with
rounded crown and
drooping branches.

Bark with ~~peppery~~ peppery odor,
small tree 4 m. tall,
— ~~fruit~~ flower orange
shrub 1.5 m. tall, flowers
white.

25305 *Clavosylon*

- 25305 lichen acc. W.W. Dickl, sent to Claus.
on bark of dying branch
of *Aglaia* (25303)
06 *Clavosylon*
occasional in forest

- { 07 *Hedyotis foetida* var.
08 common on cliffs and
09 on limestone back of them
10 *Bibbia mariannensis* var.

- top of cliff
11 *Morinda umbellata* v. *glandulosa*
climbing in trees in forest

- 12 *Thuarea involuta*
~~prostrate~~ common on
level places

- 13 *Elatostemma*
on inner face of rim of
cliff

- 14 *Polypodium scolopendrium*
edge of cliff on rough limestone

- 15 *Cordia subcordata* Lam
inner face of rim of cliff

- 16 *Bibbia mariannensis*
just below edge of cliff

shrub 2 m. tall
like white purple.

black raised spots

- small tree, erect,
calyx accrescent, spongy,
pale green.
— small shrub, up to 0.8
m. tall, flowers white.
anther purple
plant foetid when broken.
— shrub 1.5 m. tall, fls. white.

woody vine, fruits
yellow when nearly ripe.
— prostrate, mat-forming

fronds erect

tree 5 m. tall; flowers
brilliant red orange,
fruit green.
— small shrub, flowers
white.

25317

occasional in edge of clearing
near rim of cliff

18

Eragrostis

in crevices of edge of cliff

19

Phyllanthus

common in rock crevices
on rim of cliff

20

Eugenia

on rim of cliff

21

Bickelia

just below rim of cliff

July 2 - just south of
Agfayan Bay, south of
Inarajan, Guam.
reef flat, slightly
exposed at low tide

22

very local

23

abundant all over reef flat

shrub 2 m. tall; flowers
pink, deeper at center.

spreading tufts.

compact bush 0.6 m. tall,
ripe fruit red with
green calyx.

shrub, flowers white
(photo)

sterile, rhizomes buried
in sand.

sterile, rhizomes deep in
sand, leaves distichous,
mostly pruned off at tips,
two lateral fibers
persisting after leaves
rot away

July 2 - plateau between
Ylig and Talafofs rivers,
northwest of Talafofs

100-150 m.

25324 *Hedyotis biflora*
shaded roadside

same - pools of mud
and water in depressions
on plateau, largely
filled with sedges -

25 *Eleocharis*
common ~~in mud~~ locally
in mud

26 *Rynchospora*
abundant in mud

27 *Heliotropium indicum* L.
common in mud

28
common in mud

29 *Fimbristylis*
common locally in mud

30 *Lygodium scandens*
one plant seen, climbing
in clump of *Miscanthus*

open country, red soil with
Miscanthus japonicus, but
large areas denuded and covered
by *Stachytarpheta*.

plant almost prostrate,
corollas white, minute.

Rynchospora, *Tripsacum* (Hosaka 3135)
Fimbristylis (2 sp.)

culms weak, erect
but supported by other
vegetation.

large dense clumps

flowers pinkish

caespitose, leaves equitant,
distichous; flowers
yellow.

caespitose, dense clumps.

very sterile pinnae
below, fertile above, becoming
more so upward.

same - abandoned
military camp.

25331

Ficus

persisting from former
vegetation, in yard

32

Emilia javanica

around buildings (with
E. sonchifolia - Hosaka 3125

33

Stachytarpheta indica (L.) Vahl

very common everywhere
in disturbed ground

34

Chloris inflata

occasional

35

Mitracarpum

common

July 3 - Togcha Bay,
east coast of Guam
sand flats back of
beach, some rough coral

36

Pemphis acidula

abundant

on rough coral rock,
"nigas" wood used for
canes or swagger sticks.

37

Triumfetta procumbens

sand flat, not common

large banyan with
many rather slender
separated trunks:

— figs green
sprawling ascending
annual, flowers dull
scarlet.

— flowers blue violet,
herbs 0.3 m. tall. with
white eye.

flowers white.

casuarina trees, Scaevola
bush, ground cover of
Ipomoea pes-caprae and
Vigna marina, *Pemphis*
acidula on coral rock.

— shrub 1.5 m. tall, other
much lower, flowers
white, leaves salty and
somewhat astringent
when chewed, fleshy.

— prostrate, extensive,
"ka'mang unai"

- 5338 *Wedelia biflora* var. *canadensis*
common on sand
- 39 *Leaevola frutescens*
common
- 40 *Messerschmidia argentea*
occasional on sand
- 41 *Fimbristylis*
occasional on sand
- 42 *Vigna marina*
abundant on sand
- 43 *Colubrina asiatica* L.
common in thickets
- 44 *Lesuvium portulacastrum*
rare on rocks
"chara" eaten cooked as a vegetable.
- 45 *Euphorbia Chamissonis* Boiss.
rare on sand

- "maiqiq" sometimes used
medicinally.
- prostrate, extensive,
with ascending branches.
shrub 2.5' m. tall
flowers white; fruit white
fleshy. "nanaso" root and bark used
to prepare a lotion.
- shrub 3 m. tall; leaves
silvery green, fleshy;
flowers white. "unig".
caespitose. leaves "lotsa
kantantasi".
somewhat stiffish.
- prostrate, extensive;
peduncles erect. flowers
yellow. "akankan mahlos"
medicinal for many ailments.
- semi-scandent shrub,
leaves glossy; flowers
yellow. "gasoso" used
medicinally for many ailments.
- prostrate, stems green;
leaves thick, fleshy;
flowers pink within.
- leaves white beneath
flowers greenish.
"betulagas unai"

July 3 - just south of
Ylig Bay, Guam
thickets mostly of
Triphasia on ^{coral} slope 50-65m

25346

Occhrosia oppositifolia

~~common~~ common
"fago" nuts eaten, trunk
used for fuel.

47

Pomoea

common in clearing
"fotgo" leaves fed to pigs. young tops
mashed and applied to bruises.

48

Solanum nigrum L.

common along roadsides
and in clearings

49

Capsicum frutescens

roadside "doni sali" fruits
leaves cooked with

50

Jasminum marianum DC.

in clearing

51

Eugenia palumbis

thicket

52

Guamia saffordii

occasional in thicket

wood used for firewood
and for handles for focinos
(local hoe like implements)
and axes.

tree 8 m. tall 20 cm. thick,
lactiferous; flowers small,
fruits yellow when ripe,
slightly reflexed, didymous.
vine, twining over ground
and bushes, flowers blue,
still open at noon.

herb up to 1 m. tall; ripe
fruits black, flowers
white.

small shrub; flowers
white; fruit red when ripe.
scandent shrub;
flowers white.

shrub 1 m. tall, flowers white.
"doni chaca"

small tree 4 m. tall,
leaves thin; flowers
greenish yellow, numerous
petals fleshy, rugose
within; fruits immature,
carpels radiating in
all directions. "pai pai"

eaten,
fish.

25353 *Planchonella*
occasional in thickets

54 *Gymnosporium*
rare in thickets

July 3 - valley just back
of Pago Bay, Guam
~~roadside~~ woods along 10 m.
roadside.

mainly *Hernandia* and
Hibiscus tiliaceus, covered
by vines.

55 *Hernandia*
common

"nora" leaves and cambium
applied fresh to boils, seeds
used by children for marbles.

56 *Hedyotis biflora*
common along small dirt road

57 *Hibiscus tiliaceus*

very common generally
"pago" bark of young shoots used for fiber
wood as ribs of boats; buds as medicine for boils.

small tree 4 m. tall,
fruits green. "nyolon"
wood used for house foundations.

semi-scandent shrub,
fruit reddish green.
"lalubut" used medicinally.

tree 12 m. tall, leaves
glossy; flowers white
3-4 merous, stigma
horse-shoe shaped; fruiting
perigone red, inflated,
when ripe, with round
orifice.

stems ascending;
leaves thin; flowers
white, corolla tube ~~swollen~~
swollen. "pan dedo" used
medicinally.

low shrubby tree 4 m.
tall; leaves dark green above;
flowers pale yellow with maroon.

July 3 just east of
Merizo, south end of
Guam. 0 m.
mud flat just
developing into a
mangrove swamp.

25359

25358 *Derris trifoliata*
common in thickets

July 3 just east of
Merizo, south end of
Guam 0 m.
mud flat just
developing into a mangrove

59 *Bruguiera*
common locally
"mangle" wood used for
rafters for houses, bark used
for dyeing fish nets and lines
dark brown so fish won't see them.

60 *Intsia bijuga* ^{Melice.} ^{= *Xylocarpus moluccensis* (Lam.) Krs.} det. Lynn Randerson
occasional along shore
6 Aug. 98

vine climbing over shrubs
leaves glossy; buds
pink. "bagin" vines used
for tying bundles of wood and for
weaving bamboo strips for
fish traps.

swamp.

small tree with
blunt knee-like
pneumatophores; calyx
shiny, red; corolla dull
flesh-orange; developing
radicle bluntly hexagonal
in cross section.

small tree 5 m. tall,
sterile.

"ifil" wood very valuable, used
for construction, flooring, furniture,
carving, also for charcoal.

25361

Thespesia populnea
common along shore
"banalo" or "kilulë"

bark boiled down and used by women for

62 *Rhizophora mucronata* Lam.
occasional in mud

63 *Casuarina equisetifolia*
common along beach

July 3 - just south of
Talafofo Bay, Guam
brushy slope tangled
with vines, brush
mostly *Triphasia*.

63a *Dioscorea*

common (wild variety)
"gado" roots eaten; leaves used for

64 *Cordia subcordata* Lam.
occasional

65 *Premna obtusifolia* L. (painted box.)
occasional

leaves used ~~in~~ medicinally
for diseases like pneumonia.

July 4 Inarajan, s.e. coast
of Guam
dissected rough coral
on edge of sea, mostly
covered by *Pemphix acidula*,

small tree 5 m. tall,
flowers pale yellow,
turning reddish.
wood used for house foundations.
fruit used by children to make tops.

lotion,
"white"
mangle
bark used to
fish nets.

small tree 3 m. tall,
with arched prop roots,
tree 8 m. tall, branchlets drooping,
"gago" very hard wood used
for foundations for houses, also
good for charcoal. "leaves" used for
smudging mosquitoes at
night.

vine tangled over
everything, sterile.
medicines for fatigue and stomach ache.

small tree 5 m. tall;
fruit immature.
wood used for house foundations.
small tree 4 m. tall,
leaves dull, much
affected by a gall; flowers
green. "agan" valuable wood,
as good as "ifil", termites don't like it.

Scaevola frutescens
also prominent.

25366 *Amaryllis*
gravelly flat back of rocky
edge of water

67 *Callicarpa*
fairly common on rough
coral

68 *Hedyotis albidopunctata*
in holes in rough coral

69 July 4 - Umataq, Guam
Lambucus ^{canadensis}
cultivated in village

July 4 - Merizo and vicinity
south end of Guam
moist coastal plain,
almost completely
under cultivation but
weedy and with thickets.
70 *Pandanus tectorius*
wadside

cluster of bulbs rooted
but exposed; flowers
with perianth segments
white with a rose-
purple stripe along
center.

depressed shrub,
flowers pink.

flowers white, lobes
patent, oblong-lanceolate

shrub 4 m. tall,
trunk 6 cm. thick, gnarled,
flowers white; fruit immature

tree 6 m. tall, fruit
ripe, orange-yellow,
rather unpleasantly fragrant,
nuts eaten but flesh
very irritating to mouth
and throat.

75371 *Ixora*

cultivated as an ornamental

72 *Momordica charantia*
weed around buildings
and thickets73 *Jatropha curcas*
in thickets74 *Eleusine indica* L.
common everywhere

Guam

shrub 2 m. tall, flowers
white.
vine, extensively climb-
ing, flowers yellow,
open in morning, closed
and dropping in
afternoon; fruits red-
orange, elastically dehiscent
at touch; said to have
been brought to Agaña
from Puerto Rico; then the
local priest, Father Marican
brought it to Merizo
before the war, planted
it around the church.
Now it has spread
into the surrounding
area.

small spreading tree,
latex thin, ^{abundant},
flowers green. fruits yellow
when mature; dry nuts
still hanging on tree.
"tuba tuba" sap used for
blowing bubbles; nuts
eaten but only in small
quantities, also strung
and burned in place of candles.
"chaguan kabajo"
fodder for cattle.

25375

Portulaca oleracea
disturbed ground

76

Cassia
probably planted, near
dwellings.

77

Vernonia cinerea
common weed

78

Paspalum
occasional in open

79

Euphorbia hirta
very common

80

Phyllanthus ^{*amarus* Schum. & Th.}
~~*viridis*~~ ^{det. G. L. Webster,} 1955
common everywhere in open

81

^{*Cleome viscosa* L.}
~~*Solanisia*~~ *icosandra*
common in disturbed ground.

82

Dioscorea
cultivated

Guam

fleshy, depressed to ascending,
flowers yellow, stamens
about 10. "bedulagas
dangculo" eaten cooked
as a vegetable.

shrub 1 m. tall, flowers
yellow, pods terete.

"amot turnaga"
leaves used medicinally.

flowers purple.
"chaquan Santa Maria".

"laha" for fodder

arching, "golondrina"
both leaves and roots
used medicinally to cure
cuts.

erect herb "maigo lalo"
used medicinally, plant
boiled in water and
water drunk for dysentery.

bushy herb, flowers
yellow. "mongos paluma".
used medicinally;
seeds eaten by pigeons.

vine climbing into lower
branches of trees. "mika"
tubers eaten. used
medicinally for stomachache.

- 25383 *Tacca leontopodioides*^{stal}
cultivated (occurs both
planted and wild)
- 84 *Hibiscus* .
occasional
- 85 *Pachyrhizus erosus*
cultivated
- 86 *Dioscorea alata*
cultivated
- 87 *Dioscorea alata*
cultivated
- 88 ~~Da~~ *Dioscorea alata*
cultivated
- 89
very common
- 90 *Urena lobata*
common weed in waste places
- 91 *Polypodium scolopendrium*
occasional

- "gab gab" tubers used
for making starch for
food for invalids
(~~planted and~~)
- "kamang" plant soaked
in water and ~~ex~~ mucil-
aginous extract drunk
for cooling effect by
people ~~is~~ working in
hot weather. also medicinal.
- vine, sterile. "hikamas"
tubers eaten.
- vine, ^{sterile}, "dago agaga"
(red yam). tuber eaten,
scraped and made into
pastry.
- vine, sterile; "dago haya"
(pronounced haija), ~~not~~
tuber eaten, one of best yams.
- sterile vine "dago apaca"
root eaten.
- extensive vine
"alamli" used as fodder.
- "dadangsi agaga"
leaves and roots boiled
and used medicinally.
- fronds erect from creeping
rhizome. "kahalao"
used medicinally.

25392 *Ficus tinctoria*~~Phyllanthus~~94 *Calophyllum inophyllum*
scattered95 *Colocasia esculenta*
cultivated in low place96 *Clerodendron*
^{low}
in thickets97 *Thevetia peruviana*
ornamental, semi-wild.98 *Colocasia esculenta*
cultivated in low places

99

Guam

small tree. "hoda" used
medicinally to treat children
with coated tongue and
throat as in diphtheria.

well-furned tree
"daog" or "palo maria"
wood used for bull-cart
wheel hubs and axles.
One of toughest woods
available. Often used for
carving.

petioles pale green
"suni pasencia" or
white taro; leaves and
~~corms~~ cooked and eaten.
— semi-scandent shrub,
"lodigan" boiled and
water drunk to remedy
fevers.

— small dense tree,
flowers bright yellow.
petioles deep red-purple.
"suni agaga" or red taro
mature leaves and
corm eaten.

— sterile clumps "mumutung"
~~palo~~ palawan" used
medicinally (distinct from 25406,

sharply
aromatic

25400 *Averrhoa carambola* L.
growing on edge of field, probably
planted

01 *Mangifera indica*
scattered in field

02 *Morinda citrifolia* L.
very common

03 *Mucuna gigantea*
common

04 *Heritiera littoralis*
rare in low thicket

05 *Bryophyllum calycinum*
-common along roadside

06

small tree with
red inflorescences of
rose purple flowers with
white edges; fruit with
5 strong ribs. "belembiner"
fruit eaten.

— large dense tree "carabao
mango" best of local
mangos; fruit large,
not fibrous. said to be
propagated by seed and
to come true.

— small tree, flowers
white; "lada" leaves
applied to ~~the~~ forehead
to cure headache.

— vine, sterile. "gayo"
used medicinally.

— shrub, sterile. "ufa"
wood used for bull-cart
hubs.

— erect, fleshy, sterile.
"semperviva" medicinal.

— erect clumps, somewhat
aromatic, "mumutung
lake" not used
(distinct from #25399,

25407 *Triphasia trifolia*
forming dense thickets
in fence rows, roadsides
and all uncultivated places.

08 *Abrus precatorius*
common in thickets

09 *Physalis lanceolata*
weed in cultivated ground

10 *Cyclophorus*
epiphytic on tree trunks

11 *Taeniophyllum*
epiphytic on tree-trunks

12 *Muntingia calabura*
common

deep tangles of very
spiny bushes, fruit
dark red when ripe
"limon de china" fruits
eaten when ripe by children
green fruits used for glue.
(a serious pest, making
walking very difficult
of the trails).

— vine climbing in
small trees, seeds
scarlet with black
end "kolales aniti"
(Devil's beads) used
for making necklaces.
— flowers pale yellow.

"tomate kaputi"
— fruit edible, used medicinally.
fronds fleshy. "galak"
(one of several plants of
this name) leaves and
roots, boiled, water
taken for stomach ache.

— green roots flattened
against tree trunk
"gamsan" (octopus grass)
used to cure pimples.

— tree 5 m. tall, flowers white,
fruit pink, sweet "manzanita"
series eaten.

25413

Leucaena glauca

very abundant in thickets
everywhere. used as fodder but

14

~~*Typhlocyba*~~ *Xanthosoma*

cultivated and spontaneous
in cultivated ground

15

common in open places

16

Pithecellobium dulce

very common

17

Cestrum nocturnum

cultivated around church

small tree 4 m. tall,

flowers white. "tagantangia"
make horse hair ball out, beans, used for
making necklaces and other ornaments.

leaves up to 1 m. or more
high, bluish green,
with a ~~stem~~ distinct
angle between petiole
and blade. "yautia"

tubers used for food, young
leaves also, as green vegetable,
older leaves boiled with
coconut milk and fed to pigs.
(generally believed to come
from Hawaii)

"chaquan fai" (several
grasses called this)
used for fodder.

tree 8 m. tall, spreading,
rounded, dense, flowers white
rare. "kamachili"
fruit edible; cows and
goats eat leaves; bark
used for tanning, wood
used for house foundations;
sometimes planted for
hedges.

shrub 4 m. tall, flowers
greenish white, very
fragrant at night.
"dama de noche"

- 25418 *Cassia occidentalis*
weed everywhere
- 19 *Stachytarpheta indica* (L.) Vahl
weed in disturbed ground
- 20 *Lida acuta*
weed in open places
- 21 *Acalypha indica* L.
uncommon in open places
- 22 *Synedrella nodiflora*
common in disturbed ground

July 4 - hill between
Merizo and Umataq
~~near~~ south end of Guam
eroded volcanic soil

- 23 *Cantharospermum scarabaeoides* (L.) Baill.
very common
- 24 *Hyptis suaveolens* (L.) Poit.
common
- 25 *Euphorbia*
common

- herb 1.5 m. tall; flowers
yellow "amo toмага
carabao"
- herb 1 m. tall, flowers
blue-violet "dadalaq cat"
"scobilla anako" (because
of long leaves). used
for brooms.
- "mumutong umai"
- flowers yellow
"saigon" fodder only

- twining vine with gray
leaves yellow flowers;
"kakaguater aniti"
(devil's peanuts)
leaves used medicinally.
strongly aromatic.
"mumutong" not used.
when it grows vigorously
it is thought to indicate fertility.
erect, lactiferous, flowers
white "golondrina".

25426 *Phyllanthus*
common

July 6 - Comarianas, hills
north of Mt. Tenjo and
Mt. Alutom, Guam
weedy disturbed places,
largely thickets of *Leucaena*

27 *Pomoea triloba* L.
climbing in thickets

28 *Bixa orellana*
thicket

29 *Waltheria indica* L.
edge of thicket

30 *Ageratum conyzoides* L.
edge of weedy thicket.

31 *Indigofera suffruticosa* L.
thickets

32 *Crotalaria quinquefolia* L.
weedy roadside

33 ~~Leucaena~~ *Blumea sinuata*
open weedy hilltop
on bare ground.

34 *Desmodium triflorum*
creeping on bare spots
and among weeds, common.

35 *Heliotropium ovatum*
common in disturbed places

many decumbent to
ascending stems from
a root crown.

vine, flowers dull
rose purple.
small tree 2 m. tall,
fruit dry.
herb 1 m. tall,
flowers yellow.
aromatic, flowers white.

suffrutescent herbs 1.5 m.
tall, flowers salmon pink.
flowers yellow, pods
inflated.
flowers yellow.

prostrate, flowers
purple.

plant grayish; flowers
white.

1946

~~Caroline~~ Marianas Is.

25434

Phyllanthus ^{amarus Schum. & Th.} ~~rusari~~ det. G. L. Webster, 1955
weed in disturbed places

37

Sida acuta L.
weed in edges of thickets

38

Cyperus
weedy places

Fundamentally Guam exhibits two main vegetation types correlated very well with the two types of substratum - raised coral limestone and volcanic tuff. The limestone in parts has weathered to produce a rather shallow red soil that is friable and apparently fertile. In most places where this is deep enough to be worked the forest has been cleared and the land planted to coconuts or other crops. In places where the soil is thinner or where the rough coral

Guam

erect

flowers orange-yellow.
leaves variable in shape and size.

small spreading tufts and isolated culms.

is exposed a thick wet forest with many epiphytes forms a complete cover. This is largely Pandanus, Ochrosia, ~~Clasocylon~~ Guettarda, Premna, Elaeocarpus, 25301, Pipturus, and several species of Ficus, with Cycas, Clasocylon, Laportea, etc. as smaller shrubs. This forest covers the northern portion of the island and occurs in the southern part wherever the volcanic material is covered by coral. This forest may be regarded as a modified strand forest, but more

mesophytic than that on Rota. It lacks the *Hernandia* and has more species of non-strand plants. This vegetation is probably what logically may be expected when typical strand vegetation is elevated over a period of many years. The conditions tend to become less and less halophytic as the ~~fresh~~ rain-water washes the salt and excess alkali out. The continual influx of propagules that always takes place produces more and more effect - more and more invaders find conditions to their liking and become established. A succession takes place, enormously slow, toward a mesophytic condition.

In such places as cliffs, cliff tops, forest is not so well supported and

other more pioneer species such as *Phyllanthus marianensis*, *Hedyotis foetidus*, *Bikbia*, etc. are found.

On the coastal plain, which is usually coral sand or slightly raised dissected coral, ~~true strand~~ or low muddy swamp land, true strand conditions prevail. The usual fringe of *Scaevola*, *Messerschmidia*, *Colubrina* ^{Casuarina,} *Ipomoea per-capuae*, ^{a sterile grass,} *Wedelia*, *Cassytha*, etc. lines the sandy portions. The rocky parts have *Pemphis acidula* very abundant with *Scaevola*, *Callicarpa*, *Hedyotis albido-punctata*, *Fimbristylis cymosa*, etc. Out on the reef flats in shallow salt water are two seagrasses, 25322, 25323 very abundantly.

The low muddy areas have *Bruguiera* ^{*clerodendron*} and *Rhizophora*, with *Thespesia*, and *Casuarina* around the edges. The land back of the beach supports a forest of *Hibiscus tiliaceus*, *Thespesia*, *Hernandia*, *Intsia bijuga*, *Guetlunda*, *Pithecellobium dulce*, *Clerodendron*, *Casuarina*, *Cocos nucifera*, *Morinda citrifolia*, *Pandanus tectorius*, *Clerodendron*, etc. This has in most places, especially where wet, been disturbed so much that it is hard to tell if any is really primary strand forest.

This whole coastal shelf seems to be a few feet ~~of~~ above sea level, and is being gradually cut down, as evidenced by the remnants of raised reef left here and there. The cutting may well have been

reduced now to that by solution and subaerial erosion because of the development of a fringing reef.

Much of the subsistence agriculture of Guam is on this coastal shelf. Coconuts are abundant, as are breadfruit, yams. Mangoes grow spontaneously. Hogs and cattle and chickens are ~~so~~ apparently common normally, though rare now.

In all disturbed areas, of course, weeds are enormously common. The most prominent is *Leucaena glauca* which forms thickets everywhere and tends to develop into a thick small forest. *Triphasia trifolia* runs it a close second, forming impenetrable tangles everywhere.

1946

Marianas Is.

Carica papaya has developed a small-fruited variety which has truly become a ubiquitous weed, especially on disturbed limestone areas.

Guam

One of the most distinctive vegetation types is that of the areas of volcanic exposure. It is essentially a grassland which seems to be an early successional stage. The dominant plant is *Miscanthus japonicus*, which forms dense brakes over much of the area. This is frequently burned off and erosion scars are a characteristic feature, in various stages of recovery. On these, and on ridges, rock outcrops, and other places where the sword grass is either absent or sparse, there is a flora similar to that of the volcanic regions of Rota and Iaijan, but much richer in species. Several species of *Fimbristylis*, *Heteropogon*, several other grasses, *Gleichenia linearis*, *Lycopodium cornutum*, *Pteris* sp., *Blechnum* sp., *Lygodium scandens*,

2 sp. of *Phyllanthus*

~~form~~ form the herbaceous
cover. ~~sp.~~ *Bidens* (*glossogyne*)
sp. is rare in rock crevices.

Prominent shrubs are a
Melastome, *Wikstroemia*,
a tiny-leaved myrtaceous
plant, *Glochidion* sp.,
Geniostoma, *Dodonaea* (rare),

164

165

with July 10 Fasserai Islet
 S.E. Wong around village in
 25439 coconut plantation
 Centella asiatica (L.) Urb.

40 ~~Vernonia~~ cinerea (L.) Less.
 common

41 Hibiscus tiliaceus L.
 thicket

42 Eugenia
 small grove

43 Premna ^{obtusifolia R. Br.} ~~corymbosa~~
 scattered

44 Ocimum basilicum L.
 around houses

45 Tacca leontopodioides (L.) O.K.
 common everywhere

soil sandy, even on
 outer beach

prostrate, forming
 patches "pengapem"
 flowers, purplish

spreading tree "hulifin"
 fiber of inner bark
 used for making
 "grass" skirts and woven
 wrap-arounds for women.

tree 15 m. tall, buds
 and fruits few; ~~but~~
 fruit fleshy rather
 tasteless, greenish white,
 seed free from pulp

"haravath" fruit eaten.
 small tree, flowers
 pale green, aromatic.

"yar"
 very aromatic, ~~the~~ bracts
 and calyxes purplish
 corolla white "warming"
 erect acaulescent herb,

"mogmog" some say
 tuber is eaten, others say not.

25446

Citrus

2

in village

4

47

Zoysia matrella (L.) Merr.
planted around houses
forming small patches of lawn

~~July 11 - same~~

2

48

Alocasia macrorhiza (L.) Schott
everywhere around village

July 11 - same, outside
of village.

7

49

Euphorbia chamissonis Buisson
common in open ground
under coconuts

5

50

Lepturus repens var. *cinerascens*
open ground under coconuts

5

51

Fimbristylis cymosa R.Br.
common

5

52

Suriana maritima L.
common on outer beach
on sand

4

53

Pemphis acidula Forst
common on outer beach on sand

small aromatic tree,
odor of lemon oil

"huru huru marets"

dense turf. "favit"
said to have been brought
by Japanese from Peleliu

stem 4 dm. tall, mature
spathe appendage
pendent. "bele" rhizome
said to be eaten.

prostrate, lactiferous,
leaves white beneath,
flowers green.

"marbuleng"

(Burch) Fosb. prostrate, not at all
tufted, forming a thin
mat. "fithel"
tufts: "bogar"

shrub up to 3 m. tall,
tree-like, flowers yellow
"wan"

small trees up to 6 m. tall
flowers white "hanggi"

- 25454 *Calophyllum inophyllum* L.
common generally
- 55 *Hernandia sonna* L.
rare on outer beach
- 56 *Wedelia biflora* (L.) DC.
common near ~~outer~~ ^{inner} beach
- 57 *Scaevola frutescens* (Mill.) Kr.
~~common~~ occasional on outer beach.
- 58 *Canavalia* ^{cathartica Thunberg} *microcarpa* (L.) Piper
common on outer beach
- 59 *Vigna marina* (Burm.) Merr.
common
- 60 *Cassytha filiformis* L.
occasional, parasitic
on various plants,
especially *Wedelia*
- 61 *Pandanus tectorius* Park.
common
- 62 *Terminalia litoralis* Lam.
(with H. Townes)
- 63 *Triumfetta procumbens* Forst.
sandy beach

- Tree 5 m. tall (others
up to 10 m.), sterile.
"fiteh"
- sterile shrub 3 m. tall
"hochoul"
- prostrate, branches
ascending, flowers yellow.
"yath yuth"
- shrub, 1 m. tall,
flowers white. "luthi"
- wine climbing in
trees, fruits on dead
vines. "holu"
- prostrate, peduncles
erect, flowers yellow. "holu"
- green leafless vine,
flowers white. "ululu"
- tree 6 m. tall; fruits
yellow, fragrant,
edible. "fats"
- tree 3 m. tall, flowers
white, fruit somewhat
immature, slightly keeled.
"kil"
- prostrate, sterile.
"harah"

25464

Canavalia microcarpa (X) Piper
 (with H. Townes)
 cathartica Thouras

65

Guetlunda speciosa L.
 outer beach, occasional

66

Barringtonia asiatica (L.) Kurz
 (with H. Macmillan)

67

Ficus tinctoria Forst f.
 occasional

vine, sterile "holu"

Used medicinally for stomach.
 tree 6 m. tall; flowers
 white, fragrant. "yuth"
 large tree, ~~flowers~~ flowers
~~and fruits~~ on ground
 beneath it, stamens
 pink distally petals
 white; "huel" trunk
 used ~~in~~ to make canoes,
 fruits not used to
 poison fish.

slender tree 4 m. tall,
 fruit orange yellow
 "haua" fruit eaten.

with
Hyl. Wong

July 11 - Mogmog Islet
gravelly substratum
with a line of ~~coral~~
broken coral at outer beach
flat, planted to coconuts
except large marsh
in center planted to
Cyrtosperma, this
filled with much.

25469

3

Ochrosia oppositifolia (Lam.) K. Schum.
rare

6

69 *Allophyllus*
rare

5

70 *Guettarda speciosa* L.
common

6

71 *Melochia*

occasional on outer beach
on flat that apparently
has been cleared.

5

72 *Vigna marina* (Burm.) Merr.
common ~~on~~ on open
flats near channel beach

5

73 *Pipturus argenteus*
~~abundant~~ on flats near
channel and outer beaches
seedling over whole
island.

slender tree 4 m. tall,
flowers white; fruits
green, old ones picked
up under tree.

— slender tree 4 m. tall,
flowers white.

— small tree, ripe
fruit white, fleshy.
— shrub, 1 m. tall,
flowers pink, much
darker in center.

prostrate, flowers
yellow.

— shrub 1.5 m. tall,
~~fruit~~ on, flowers greenish

- 25474 *Triumfetta procumbens* Forst f.
abundant on beaches
- 5 75 *Wedelia biflora* (L.) DC.
common on beaches
and in edges of forest
- 7 76 *Pipturus argenteus*
abundant on ^{open} flats
near channel and outer
beaches, seedlings
over whole island.
- 1 77 *Terminalia litoralis* Seem.
rare on open flats
- 9 78 *Canavalia* ^{cathartica Thouars} ~~microcarpa~~ (DC.) Piper
abundant in patches
of forest near outer beach
- 6 79 *Ficus*
common near outer beach
- 5 80 *Asplenium nidus*
occasional in patches of
forest
- 5 81 *Nephrolepis biserrata*
occasional in forest and
around bases of coconuts
- 5 82 *Clatostema*
common locally in
patches of forest on broken coral

- prostrate, extensive;
flowers yellow.
- prostrate with
ascending branches,
strong resinous odor
when broken; flowers
yellow.
- shrub 1.5 m. tall,
fruits fleshy, white,
achenes superficial.
- shrub 1.5 m. tall,
fruits immature
somewhat flattened.
- vine climbing in
trees; flowers rose purple,
fruits on dry vines.
- banyan type fig,
1.5 m. tall, figs green.
- rosette, leaves
ascending.
- leaves ascending
- stems very fleshy;
large leaved plants
in shade, small in open.

- 25483 *Morinda citrifolia* L.
occasional
- 4 84 *Ficus tinctoria* Forst f.
common
- 4 85 *Canna*
occasional in *Cyrtosperma* marsh
- 4 86 *Achyranthes aspera* L.
occasional in open
under coconuts
- 5 87 *Cyperus*
common around edges
of marsh just above
wet ground
- 5 88 *Ceratopteris*
in much of marsh in ^{water} channels
~~between~~ *Cyrtosperma* plants.
- 2 89 *Artocarpus altilis* (Park.) Forst.
common
- 2 90 *Artocarpus*
common
- 3 91 *Portulaca* ^{*samoensis* W. J. G. Hall} ~~*quadricifida*~~
common, especially
near dwellings
- 3 92 *Alocasia macrorrhiza* (L.) Schott
very common, especially
around village

- small tree 4 m. tall,
flowers white.
- shrub 2 m. tall,
ripe fruit orange-yellow.
- erect, 2 m. tall; leaves
purplish green,
flowers ~~red~~ scarlet.
- erect herb, up to
1 m. tall, flowers
pink within anthesis.
- small tufts
- stipes very weak,
fronds strongly dimorphic.
- tree 20 m. tall.
fruit eaten
- tree 15 m. tall
fruit eaten, also by bats.
- plant fleshy,
flowers yellow.
- plant 1.5 m. tall, stem
0.5 m. tall; spathe
appendage bronze-purple,
pendent.

- 25493 *Ipomoea pes-caprae*
open flat back of ^{channel} beach
- 94 *Suaeda maritima*
open flat back of
channel beach.
- 95 *Carica papaya*
common everywhere
- 96 *Euphorbia Chamissonis* Bais.
common on gravel ridge
back of outer beach and
on gravel flat.
- 97 *Euphorbia thymifolia*
common, especially around
dwellings
- 98 *Echinochloa*
one plant seen
- 99 *Phyllanthus*
rare in edges of patches
of forest
- 25500 *Echinochloa*
common locally
- 01 *Paspalum conjugatum* Berg.
rare in ~~edges of patches~~
~~forest~~ openings
- 02 *Fimbristylis cymosa* R.Br.
common
- 03 *Acalypha*
occasional in open under
coconuts

- ~~open fls~~ prostrate,
4-5 m. long, lactiferous;
flower purple.
shrub 3 m. tall,
flowers yellow.
- tree 4 m. tall, lactiferous
flowers cream white.
- prostrate, leaves
white beneath; flowers
greenish.
- plant prostrate, ~~fls~~
forming a mat,
purplish.

erect

culms ascending

rooting at nodes

dense tufts

flowers green

- 25504 7 *Guarea involuta* (Forst f.) R. & S.
occasional
- 5 05 *Eleusine indica* (L.) Gaertn.
common
- 2 06 *Colocasia esculenta* (L.) Schott
~~occ~~ cultivated in marsh
- 2 07 *Cyrtosperma chamissonis* (Schott) Merr.
cultivated in marsh
Cyrtosperma merkusii (Hassk.) Schott
det D.H.N. 6/1998
- 2 08 ~~*Xanthosoma*~~
~~*Typhonium*~~
cultivated on dry ground
- 5 09 *Euphorbia hirta* L.
weed around bases of
coconuts
- 5 10 *Phyllanthus niruri* L.
common
- 5 11 *Vernonia cinerea* (L.) Less.
common
- 4 12 *Crataeva speciosa* Volk.
common, planted
- 3 13 *Cucurbita*
common, planted
- 6 15 *Blechnum* ~~*pyramidalum*~~ ^{*brownii*}
occasional, local
- 3 16 *Eclipta alba* (L.) Hassk.
occasional near marsh
- 5 14 *Oplismenus compositus* (L.) Beauv.

prostrate, forming a
loose mat.

leaf dull above,
petiole green. corm eaten
plants more or less
acaulescent, leaves
up to 2 m. tall,
petioles more or less
prickly. rhizome eaten

prostrate

erect

flowers purplish

small tree, fruit
eaten.

prostrate, flowers
deep yellow; fruit
a crook-neck.

prostrate to ascending

25517 *Flemingia strobilacea* Gaud.
common

5 18 *Paspalum*
common locally near marsh

3 *19 *Cyperus brevifolius*
occasional

6 20 *Polypodium scolopendrium*
common, especially
on bases of trees

3 21 *Portulaca oleracea* L.
common ~~in open~~ disturbed
places

2 22 *Ipomoea batatas* L.
cultivated extensively

5 23 *Eragrostis amabilis* (L.) W. & A.
common ~~is~~

2 24 *Pilea microphylla* (L.) Liebm.
common locally

5 25 *Hedyotis biflora*
abundant in open
places and under coconuts

4 26 *Ocimum sanctum* L.
doveyard

5 *19a *Jussiaea suffruticosa* Mig.

stem fleshy, reddish;
does not sting.
culms spreading - ascending

heads green

fronds erect,
rhizome extensively
creeping.

plant fleshy,
purplish green.

prostrate, root eaten
"camote"

spreading tufts

prostrate, fleshy

prostrate; flowers
white, corolla tube
swollen

very aromatic
flowers white

flowers yellow

186

187

- 2 1 *Ixora ceciliensis*
"acheu"
- 4 2 *Polyscias grandifolia* Rolfs.
"achenecha" Wöna (Moen)
- 2 3 *Crotalaria mucronata* Desv.
"afalafal"
- 2 4 *Glochidion*
"ator"
- 2 5 *Curcuma*
"äfän"
- 3 6 *Parinarium glaberrimum*
"ais"
- 2 7 *Parinarium glaberrimum*
"eis" (ais) Tol
- 2 8 *Hernandia ovigera*
"akurang"
- 7 9 *Cordia subcordata*
"alau" Toloas (Dublon)
- 1 10 *Cordia subcordata*
"ainö" Tol "alau" Moen
- 1 11 *Messerschmidia argentea*
"amalaset" Wöna (Moen)
- 2 12 *Nephrolepis*
"omare" Wöna (Moen)
- 2 13 *Messerschmidia argentea*
"amalaset"
- 1 14 *Cyperus javanicus*
"amälä" "emele"
- 3 15 *Nephrolepis*
"amäre"

- 2 16 *Glochidion*
"amoses" Wöna (Moen)
- 2 17 *Glechoma linearis*
"önecha"
- 2 18
"ano" Wöna (Moen)
- 1 19 *Acrostichum aureum*
"opössen" (Ton)
- 4 20 *Acrostichum aureum*
"apasou"
- 2 21 *Eugenia*
"äpel" Tol
- 4 22
"äpö" Wöna (Moen), "satein ana", "sateian sät"
- 1 23
"apuap"
- 5 24
"apuap"
- 1 25 *Clerodendron inerme*
"apuech", "ulo"
- 1 26 *Ficus tinctoria* var. *neo-eludarium* (Summ.) Forst.
"ouol", "apuilis" fruits are eaten
- 3 27 *Cassia alata*
"arakak" Tou (Tol)
- 1 28 *Terminalia catappa*
"asas"
- 1 29 *Miscanthus floridulus*
"asat"
- 2 30 *Randia carolinensis* (Val.)
"Asepot" Tol, asepar Moen

- 31 *Wedelia biflora*
"atuaat"
- 32 *Wedelia biflora*
"atuaat"
- 33 *Jussiaea suffruticosa* L.
"aunenipuin" Wöna (Moen)
- 34 *Eroecaria agallocha*
"ansus" Mangrove
- 35 *Ficus tinctoria* var. *neo-eludorum* (Summ.) Forb.
"mauk" Moen, "awöl" Tou (Tol)
- 36 *Psychotria carolinensis*
chemel
- 37 *Psychotria carolinensis* (Vahl) Forb.
"chemel" Wöna (Moen)
- 38 *Solanum*
"chi" yellow fruit apples
- 39 *Polypodium scolopendria*
"chichi"
- 40 *Colocasia esculenta*
"chimök" Tou (Tol)
- 41 *Colocasia esculenta*
"chimok" Moen
- 42 *Randia carolinensis*
"chömis" - Toloas (Dublon)
- 43 *Pittasporum*
"eirenges" Tol, "oneput" Moen; small white flowers
- 44 *Ipomoea digitata*
"emechimech" Tol; nechi mech Moen
- 45 *Glochidion*
"emoses"

- 46 *Pemphis acidula*
engi Wöna (Moen)
- 47 *Piper*
"Ennes"
- 48 *Piper*
"Ennes" Wöna (Moen)
- 49 *Dioscorea*
"ep" Wöna (Moen)
- 50 *Clerodendron inerme*

Check on these native
names

53

60

77

112

Duplicating number
62 -

one is registered in
the # book the other
is *Cyperus*

- 51 *E*
"fa"
- 52 *z*
"
- 53 *z*
- 54 *z*
- 55 *z*
- 56 *z*
- 57 *z*
- 58 *z*
- 59 *Jussiaea suffruticosa*
"likainenpal" Tou (Tol)
- 60 *Caesalpinia bonduc* (L.) Roxb.
"liko ioio" Tou (Tol)

en)

(Moen)

Check on these notice
names

53

60

77

112

Duplicating number

62-

one is registered in
the # book the other
is Cyperus

- 1 31 *Wedelia biflora*
"atua f"
- 1 32 *Wedelia biflora*
"atua f"
- 3 33 *Jussiaea suffruticosa* L.
"aunenipuin" Wöna (Moen)
- 1 34 *Excoecaria agallocha*
"ansas" Mangrove
- 1 35 *Ficus tinctoria* var. *neo-eludorum* (Summ.) Forb.
"mauk" Moen, "awöl" Tou (Tol)
- 3 36 *Psychotria carolinensis*
Chemei
- 3 37 *Psychotria carolinensis* (Vahl) Forb.
"Chemei" Wöna (Moen)
- 1 38 *Solanum*
"chi" yellow fruit apples
- 2 39 *Polypodium scolopendria*
"chichi"
- 2 40 *Colocasia esculenta*
"chimök" Tou (Tol)
- 2 41 *Colocasia esculenta*
"chimok" Moen
- 6 42 *Randia carolinensis*
"chömis" - Toloas (Dublon)
- 2 43 *Pittosporum*
"pirenges" Tol, "oneput" Moen; small white flowers
- 1 44 *Ipomoea digitata*
"emechimech" Tol; mechimech Moen
- 2 45 *Glochidion*
"emoses"

- 4 46 *Pemphis acidula*
engi Wöna (Moen)
- 1 47 *Piper*
"Ennes"
- 3 48 *Piper*
"Ennes" Wöna (Moen)
- 1 49 *Dioscorea*
"ep" Wöna (Moen)
- 1 50 *Clerodendron inerme*
pucherik (west), etin (ost)
- 1 51 *Eugenia*
"fan"
- 1 52 *Zingiber*
"tanun" Tou (Tol) "futun" Moen
- 1 53 *Pteris*
immerin "enffaiton"
- 2 54 *Procris pendunculata*
"kimait" Tou (Tol)
- 2 55 *Gossypium*
"Koton en Japan Wöna (Moen)
- 2 56 *Gossypium*
"Koton en Japan" Wöna (Moen)
- 1 57 *Curcuma*
"kuchun(g)" (flowers in Dez.?)
- 3 58 *Barringtonia asiatica*
"kun"
- 3 59 *Jussiaea suffruticosa*
"likainenpal" Tou (Tol)
- 1 60 *Caesalpinia bonduc* (L.) Roxb.
"liko ioio" Tou (Tol)

- 1 61 *Hibiscus moschatus*
"likonokan" - Tou (Tol)
- 1 62 ~~Solanum~~ *Solanum amara*
"Maras" - Moen "pwānu" - Tol
- 3 63 *Ficus tinctoria* var. *neo-chudana* (Summ.) Forb.
Mauk - "Wöna" (Moen)
- 2 64 *Davallia solida*
"mechenkatu"
- 1 65 *Ipomoea digitata*
mechimoch (Ost) emechimech (West)
- 1 66 *Vitex negundo*
"Meugit"
- 2 67 *Pisonia grandis*
"mök" Wöna (Moen)
- 2 68 *Amorphophallus*
"Moku fen"
- 2 69 *Euphorbia hirta*
"kichich" - Tol, Moreniap - Moen
- 2 70 *Kleinovia hospita*
monou Wöna (Moen)
- 1 71 *Luffa cylindrica*
"mororot" - Tol, Moen
- 2 72 *Guetardella speciosa*
"mosor" Wöna (Moen)
- 1 73 *Allophylus*
"Ngo" - Wöna (Moen)
- 1 74 *Allophylus*
"Ngo" - Tou (Tol)
- 3 75
"Nika chopu chop" Wöna (Moen); Grouse on Mai, Kuz, Väkich

- 1 76 *Cassia*
"Nikamaur"
- 1 77 *Scleria*
"Mikaunaun" - Wöna (Moen) "Nika safasap" - Tou (Tol)
- 2 78 *Morinda citrifolia*
"Nopur"
- 2 79 *Morinda citrifolia*
"Nupur" - Moen, "Atin" - Tou (Tol)
- 15 80 *Cynometra*
"ömö"
- 2 81 *Cynometra*
"ömö" Toloas (Dublon)
- 2 82 *Bruguiera conjugata*
"ong"
- 2 83 *Curcuma*
"öngin"
- 1 84 *Ageratum conyzoides*
"opönu pön" - Tou (Tol)
- 3 85 *Piper*
"ötik" Wöna (Moen)
- 2 86 *Fagraea*
"ö-ur", sö-ur Moen
- 1 87 *Fagraea*
"öur", ä-ur Tol, sö-ur Moen
- 1 88 *Erythrina*
"par" Tou (Tol)
- 2 89 *Erythrina*
"par"
- 1 90
"pulu pul", Peninap - Moen

- 1 91 *Thespesia populnea*
"pöllö"
- 1 92 *Thespesia populnea*
"pöllö"
- 2 93 *Cyrtosperma*
"pula" Tou (Tol)
- 1 94 *Xylocarpus*
"punopun" (Ton)
- 6 95 *Colophyllum inophyllum*
"täkich" Wöna (Moen)
- 3 96 *Sonneratia caseolaris* alba
"saras" Tou (Tol)
- 1 97 *Sonneratia caseolaris* alba
"saras"
- 1 98 *Hedychium coronarium*
"sinzer" "sinser"
- 1 99 *Sida acuta*
"siomen" Tou (Tol)
- 4 100 *Barringtonia racemosa*
"son" Tou (Tol)
- 2 101 *Hibiscus moschatos*
"sötumo" Wöna (Moen)
- 2 102 *Fagraea*
"sour" Uman
- 1 103 *Cordyline terminalis* (L.)
"tinechol" Tou (Tol)
- 2 104 *Cordyline terminalis*
"tinepor" Tou (Tol)
- 2 105 *Celosia argentea*
"tolen chako"; Uman Is

- 2 106 *Hedychium coronarium*
"tunun en won"; introduced
- 5 107 *Commersonia bartramia*
"tupuchol" Tol
- 2 108 *Macaranga*
"tupunuwol" Tou (Tol)
- 1 109 *Premna integrifolia* ~~*corymbosa*~~ ^{*obtusifolia* R.Br. (obtusifolia leaves)}
"umukau" Tou (Tol)
- 1 110 *Premna integrifolia* ~~*corymbosa*~~ ^{*obtusifolia* (obtusifolia leaves)}
"umukau" Wöna (Moen)
- 3 111 *Premna integrifolia* " " "
"umukau" Wöna (Moen) Tonaachau
- 3 112 *Eugenia*
"iöllungit"
- 1 113 *Schefflera*
"ütüsa" Tou (Tol)
- 3 114 ~~*Citrus*~~ *Ocimum*
"warung"
- 2 115 *Lumnitzera littorea*
"wei" Wöna (Moen)
- 1 116 *Ochracarpus*
"wengü" Tou (Tol)
- 3 117 *Hibiscus schizopetalus*
no native name, introduced Wöna (Moen)
- 1 118 *Lycopodium-cernuum*
Sova did not know the name; Grows only on mts. in clearing
- 3 119
"ochrap kiniani" ~~Ton~~ Ton (Tol)

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