

Brazil 79

Bama

TU2/539#

DART

P357359

\$.33 H

memo book

30 sheets
6 in. x 4 in.
no. 490

0



71723 40550

2

Stuart Hall co., inc. KANSAS CITY, MISSOURI 64108

S.W. of Belmonte on 89th
rest on white sand slope
30 m. (*Alimnia*) -
grows

Muri. Belunete - 31 Km S.W. of Belunete and 89 km
east of Tapedi, Fort Forest on white sand slopes
above creek, ~~the~~ elev. 30 m. (Altimeter) -
granite

above Tapedi - 9568 -

Ceploc. 9617.6 } 61.5

9629.5 } 22.5

in Belunete 9679.1 } 652.84

Mer. Tapedi. 9705. 710

Altimeter. 9710.4 } 81.8

BR 101. 9792.2 }

White BR 101 = 1.13 Km -

2489
Ansonville 419.
427.8

419
(08.8 km) per
52.101.

K - W 796
2015 to Oliveira

Alma 815

833.2
Lips to a

base to Rio Marcin
by day the river -

Boat up to 3.5m
diam -
± up to 20m high -

Mendocino -
± up to 15 mm.
dia. up to 2.2-3

870,9

Min 890,1

Choice (870,9)

Solito - 841,3 -
Spoke

Deposito Nuevo & Cirque
H. A. Solito -
9208 km.

9210.3 *km*
213.

9231.7. Solito &

9235.2 Fajardo -
A. angustata

9243.6

note

9245.9. note due.

263.3

17.4 + todere

9290.8

~~minutes~~
- photo & note
Arg. choice
reverts to blue

Wang

2476 ¹⁰ mine e. obliq. Rhinoc. tenuis new leafy?

2477 Rhinoc. radiata

" " H. 18-20

2478 A. tenuis seedling

2479 A. gracilis

2476 ¹⁰⁰² Rhinoc. radiata in fls

2477 Rhinoc. radiata in fls

2478 Rhinoc. radiata new leaf

2479 ¹⁰⁰ Rhinoc. radiata same Coral?

2480 A. tenuis seedling

2481 A. tenuis radiata

2482 A. gracilis

2483 Atractantha ovulata

2484 A. radiata

2485 A. asymetrica

2486 Mesobla Parianella ²⁴⁸⁷

2487 Mesobla radiata in fls. (Rosa la CERAC. tenera, H. 18-20)

2488 Anomochloa in fls.

2489 Mesobla radiata in fls.

2490 Mesobla radiata in fls.

Wings on

2491

Brasil 1979

Bahia 79

2476

Feb. 22/79

Blumwood sp.
 (same as new one from Aug. 9 1976)
 Bo, Hun. Ilheus, estrada Oli-
 reira - Vila Brasil, 30 Km
 SW of Olinda. (Parado
 10 km from Ilheus & Santa Fel
 in Maron, few more to el.)

Growing near the edge of
~~the~~ forest in medium
 dumps. Culms steep, up
 to 3.5m in diam and
 about 20m high, to
 leaning on trees. Nodes
 from the base to 2m
 with strong, looks
 same as old & old
 long, ca. 6.7m.
 Mid culm nodes with

dry steep wooded look
of pines - looking more
like oak without photo
ed with long blade about
a. long a. heart.

All in flowers, very pretty
fat pseudopithecelid
common in the upland
area is called "ganchi"
growing next to it
Strobilanthes cardinalis
also seen in several
places mostly past and
dry but in the wetting
not abundant but some
Few pictures with roll
#1 Kodak - not good
light, rain
In one area also
growing and collected

a Mertensia in flower
FAA: Dry large a small
spikelet a leaf. (2-3?)
(garramides ~~2-3~~ spikelets)
Stems -
Boragin? (re)

2477

Newbury -
Se, M. Ilben - here last
on 2476

Short plants flowering,
were already by at
post.

Scrubby pl. M. with
thick cartilaginous, waxy
double or culms about
2, 3 - maximo a up to
 ± 15 cm Lys. hanging from
trees - growing in the grass
(for Mue) & Rhact.
Cardinalis - Not too
far from river Maron

This is a + disturbed
part of sandy soil
in ondulose region
very humid, dry rainy.

2 trials: More a boxes
for analysis - culms fine
Few photographs? not
Kodakware fine.

Feb-23

2478

Abies tenuis

Be. M. Jelen - 19 wad

Olivenza - Vill Brion,
18.3 km, SW of Olivenza
(new locality, beyond type loc.)

-FAA 4-^K_{int} - ^{wjz} - ^{but}
2 series from 1970 &
1 3:1 nature

 $1:3:1$

1 - Borg. (6) -

no bulky material

photo; color roll #2 extra 200
roll #3 B&W.

The partially cut down part
of white band soil.

Very abundant but mostly
dry aspect, still some

patches, green and honey
rare ones still producing
new swat.

Very rose hip, mature
fruit, found only 3 or 4 -
but very abundant & small
to little ^{juicy} ~~clay~~ & - shape
of seeds ^{most} ~~black~~ ~~black~~ -

Seedlings growing well
but (most) many, rather
few, probably because
plant very disturbed and
cut. 70 seems about
any large ones, probably
counting on in the part
with the type locality

In scrub in flower seen
2 fruits developing in the
P. one 2° fruit and
all other 25 3 ~~fruit~~ ^{fruits}

about. This area is hilly
undulate and somewhat
seems to have the higher
points. We saw the bog
to stop on the lower
parts of slopes.

RHB₄

2489

Atractantha radiata

~~2489~~ ~~some local~~ 2489
growing in partially cut
part of white sand soil
in small patch with
a bunch *Lycopodium* popula-
tion of *A. tenuis* in
the slope of edge yield.
Atract. still green more
in fl. dry and part
but many still going
and many with
long petioles and
erect in one or two
places. Beautiful heads
as with long expan-
sion as a star.

collected for basium
only -

Totals same photograph

2480

2,500 km from last
Alimie - (°)

~~10.4 none 969.0~~
~~& Olvire 18.3~~

Alimie type locality for
moss, 971.500 m above
a river: 15.9 - 16 km
from Olvire

200 m up from

Alimie undergrowth (15.700 m)
971.700

Reposolire: 987.4

71.7

15.7

2480 - ^{tenuis} ~~Alm. fruticosa~~ seedlings

2481 - " ~~flor.~~ -

2482 - ~~A. macrophylla~~
seedlings -
~~2483~~ -

Solida & Oliveira - to Porto

38977, 500 } 17.3 km
138994, 800 } ~~to the~~

39003, 7 ^{10 km + 8 km} ~~to the~~ ^{to the} ~~Al. fruticosa~~
39019, 8005 ^{to the} ~~Al. tenuis~~

(Perdida) + 3 km to, over
to the ~~to the~~ Buacoe

gro. of also (but finish)
A. nodulata

9020, 3 - A. tenuis & A. nodulata
to - very intense & rich

total. full of seedling of
Alm. fruticosa, few of others
both dry but still
few little green of Alm.
fruticosa -

9022 - Al. tenuis, the
very best found with
traces of new growth
in place, as a
canopy, beautiful tall
trees -

9026 - km. (48.5 km from Oliveira)
Linda para
Sapucaia A. bururupi -
A. ovalanata -
~~not~~

entirely to entire to para
bururupi - Ilheus - Oliveira
9032. 8 km.

9043, 7 - Lote, Lote pinal
do Pinal -
sido de Pinal e Oliveira
— longo

sido de Pinal - Olive
9132, 4

sido de Oliveira - Nova
9149, 7 -

233

24,3

new - Alm. g. tenuis
new collection from park
locality -

- A. tenuis new for
type local.

- A. maculata for
type local.

collected

A. g. tenuis new
locality 2483

Atractodes overlapped
2484

2485 *Astr. radiata*
type locality and from
300? m. south

F.A.A.: 2 very w. mat. vials
with very young infl. &
other with young tips infl.
1 wide tall infl. with young
infl. with proliferation
and other young infl. or part
of it.

1 black-white with tips of
proliferations

1 young - young infl.

1 3:1 " "

- total 6 vials - and
not far removed -

Notes: from 1920 coll. E.H. 200
roll #2, 1/2 + roll #4

Black W. from 1920. roll 3 & 5

2480

Febr 23

Do H. Th. Inf. Oliveira -
white trail, 16 km ^{15,900} SW
of Oliveira. (type locality)
Abnormia tenuis
seedlings

Young plant of about
one year or more
a few months more?
Beautiful seedlings
looking like *Thesia*
lythophylla. They
are in 4 stages of
growth, some about
50 cm or +, already
with the first branches
for a middle node
Many still with

fruit attached, the 1st
root very thick.
They are very abundant
in places forming a
carpet - looking
healthy and getting
well.

Notes taken: Bx W with #
Bptan - 200 all #
herbarium made.
some with photo?

Feb. 23

2481

H. macrophylla Kunze
(Powers)

Bx, M. Flh. - strada Olinda
ca - Vila Brasil, 15th Km
SW of Olinda. 15,900

In many places still
plant green and with
inflorescences. This implies
not so long as we
saw many in the
pick of flowering ^{last year}.
Again, in this patch
several small, young
fruits seen.
Herbarium & few photo
notes?

Feb 23

2482

Bo. Mun. Ilheus, ~~the~~ Estrada
Olivença - Vila Brasil, 15.7 km
SW of Olivença

Alvimia ~~racemosa~~ ^{*crassifolia*}
(seedlings)

type locality

Plants mostly dry
and finish but some
patches on one side
of the road. ^{intermediate} I saw one

flower with very young
developing fruit

seedlings are abundant

all over the forest and

plants look very large

Hard to believe at first

glance that they are

seedlings, they look like

an *Alnus*.

Some plant still with
out set of fruit attached
and some already with
the fruit made in the
branches.

Herbarium collected

Photo: B. W. and
color (photo ca. 200) with
flesh - (flesh with camera
not working!)

200 m higher up on road
before *Alvimia tenuis*

These seedlings are about
1 year old or a few months
more.

Saturday, Feb. 24

2483

Alimnia gracilis
(red lips)

50, Mem. Fikens. 27. 12. 18

Olivenza - Vile Mont and
then rural saproecine
- Curculionidae from Olis-
to the intersection point
17, 3 km SW and then
8 (and the new site 10 km)
right and rural -

Red plants dry or almost,
few spots with green
leaves but lots of
seedling. They look heart-
ful, in ~~bluish~~ several
stages, but not too
small, plant probably
finished long time.

app, same time as
the type locality.
Beautiful bright green
leaves, about same
shape as the mother
plant, many with
first node with
branches, many few
already trying to climb
good vegetation.

Note in S & W & C & S

We saw 2 coroties
with A. pairs, and
in the ore 2 km above
was going with A. trau-
tanthe trodiate -
both coroties. Very of
new growth that

Ba.

Ba. - Mun. de Ilheus, Rd
Oliveira - Vile Brasil, 17.3 Km
SW of Oliveira and then
31.2 Km to the right, on the
road Sapucaia - Cururupe
Sábado Feb. 24 2484

Atractantha oreolamata

Growing at the edge of
secondary, ~~forest~~ partially cut
forest along the road.
Climbing and sending
out new shoots and
covering densely the refuta-
tion.

New shoots arching and
leaving an refutation for a
while, then climbing -
Plant with no flowers -
Beautiful spot of *oreolamata* -

bulky - mol.?

FAA:

herbario: Hb -

Feb. 25

2485

(Hornings & Camaral)

Atractantha radiata Willd.

Bahia, Mun. & dist. de
Mun. - Olivença, 28 Km N of
Mun., passing the Maroim.

Collected from a Atlantic forest
on white sand soil, near
a sand dune. This is the
same site I collected and
discovered in 1976. The origi-
nal population is now prac-
tically dead, dry, still with
dry inflorescences but not fruit-
ing. After careful exploring the
area we found a few
seedlings, presumably from
seeds of *A. radiata*, growing

under the plants. They look pretty sunburnt but very small ~~to~~ to be 100% sure. I took photographs but to not collected.

About 300 m or so beyond this site, going south towards passing the ^{top of the} sand dune there is another spot of *A. radiata* very green and flowering. I think than in 1976 this part was not blooming and probably started a little later than the rest of population.

Almost every inflorescence was ~~proliferated~~ proliferated, producing vegetative axes like rays coming out

of the basal ball inflorescence. Each ray ends in one or two or more? spikelets. There are very heavy and they hang down from tips of branches. They look very pretty.

FAA: 2 very wide mouth vials with very young inflorescences and other with very young big inflorescences and in other vial young inflorescences with proliferations of part of this proliferations.

1 vial with tips of proliferated axis.

1 Boquet = young spike

13:1

(total 6 vials - not bulky collection)

Photos: from 19- or 20 others

Expt. 200 roll #2 and half
or more of roll #4
Blavit from 19, 20 of roll #3
and ~~20~~ roll #5.

Feb 26 2486
Crissiluma asyntheticum, new form
Crissiluma !!!

Bahia, Mun. de Una - ~~Chilodactylus~~
Road Una - Olivença, ca. 2 km
N. of Una city, fazenda of Mr
Cloris de Matos Pires.
Alt. 75 m. s.m.

Very abundant, dominant
plant in coastal forest of
white sand soil. This *Samanea*
was collected very completely
in 1976, ~~exactly~~ ^{very} climbing *Samanea*
with very hard, solid culms, ^{very} ^{strong}
curved, and growing on
succulent and leaning
on vegetation and then
climbing to the top of
trees, and hanging from

top. About 15-20 cm high.
Part of the original original
point has been cut down,
all along the entrance
and on both sides of
the road til way ahead
inside park.

In one place near the
other intersection with the
stream one plant was
in flower.

The inflorescences (pseudospike-
lets? or so) extremely long
some 20 cm long or more.

The spikelets dry and looking
like infested by disease.
That we found a few other
plants flowering farther down
but all ~~the~~ dry.

They look like the type
of pseudospikelets of
Bombusa but enormous.

The best looking of the pseudo-
spikelets were fixed in FAA
then. The long pseudospikelets
break easy in pieces.

Bol. Mun. de Una, Road
Una - Olivença, CEPLAC
Reserva "Lemos Maia".

Coniella.

Growing in coastal forest
of white sand soil.

Common in forest mixed
with bamboo, *Meritachys*
in bloom and also
Crissiuma (no flowers here).

Feb. 27, 1979. Col. # 2487

Feb. 27.

2488

Merostachys (en flor)

Rd. Mun. de Una. Road
Una - Oliveira, CENLAC's
reserva forestal "Lençóis Maria".
(ca. 7 km from Una?)

This "erva" is new in part
of the area I collected in 1972.
I think is about 5 km or so
from Una, where I collected
in 1972. This *Merostachys*,
Asymetrica, for the first
time and one or 2 *Merostachys*
clays - one of which is now
blooming and *Stachys carduoides*.
Medium size *Merostachys*,
with rather thin, asperous
culms and short leaves.
Collected a lot of

branches with flowers
and also sterile parts:
the buds and nodes
with branches -

Feb. 28

2489

Anomochloa

Same loc. as 1976 -

+ 8.8 km from BR 101 - on
Road São José de Macuco -
Mina - São José de Macuco

Few plants found flowering,
There were as before very
high up the hill side on
dark, humid forest.

Were photographed and
later fixed in FAA, few
specimens collected for
Herbarium -

March 3, 1979

2490

Merwinia sp. (in bloom)

Mun. de Belmonte, ²⁶ Km

SW of Belmonte and 87 Km
E of Tapachi.

~~Now forest on white sand-
dunes along creek.~~

Elevat. 30 m.

Low ^{tree} forest on white sand
soil.

Most of the population
already dying, dry and
only the tips of branches
still green with inflores-
cences, the new shoot can.

Alvimia ~~fruticosa~~ ^{fruticosa} x *Stratocaulis*
radiata var. in:

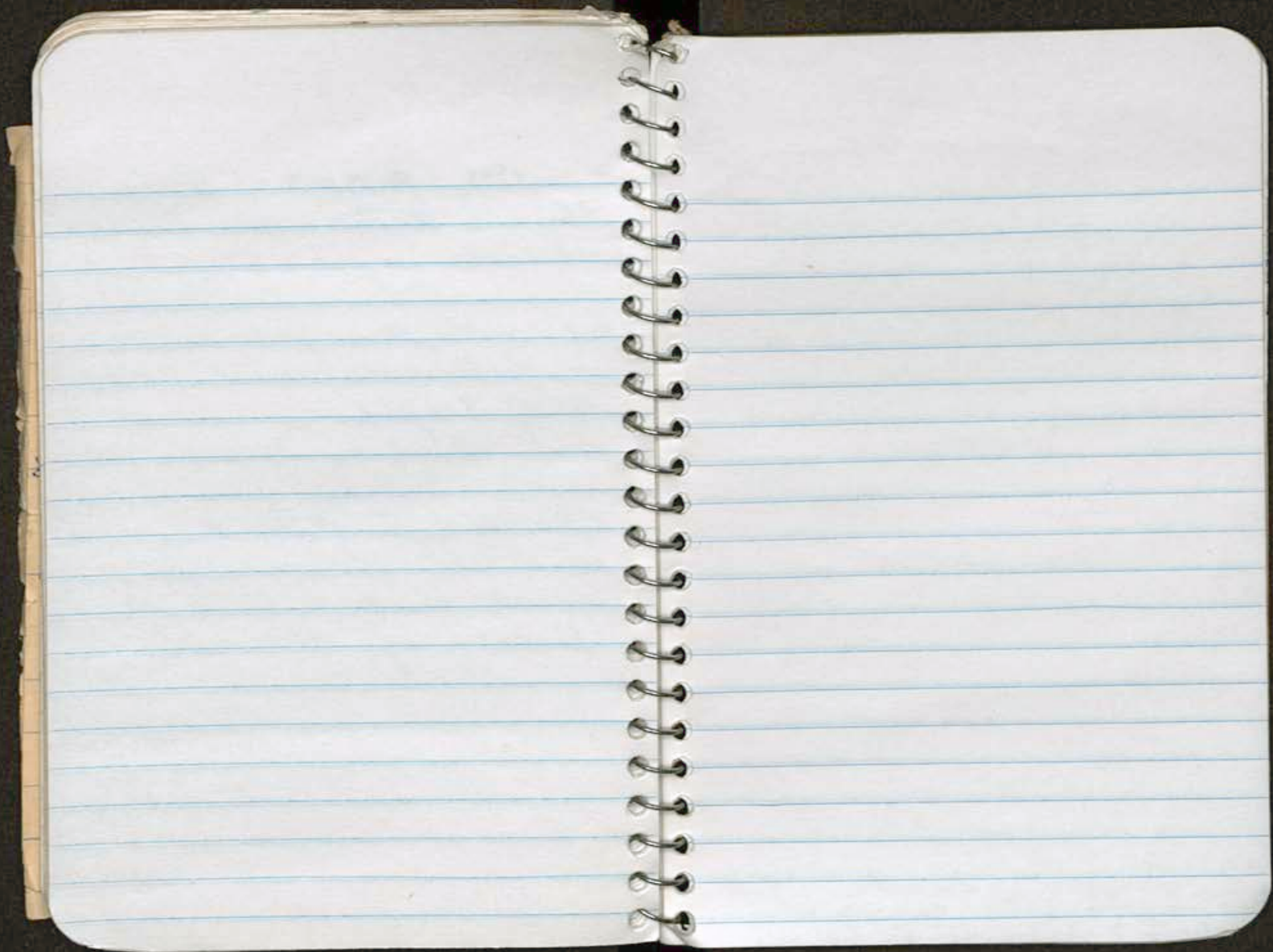
Belmonte, Mex., 31 Km SW
of Belmonte and 84 Km
E of Tlapachi.

Alt. 2000 m. 30 m

Low tree type of forest on white
sand soil, covering slopes
above creek. Full of
seedlings of *Alvimia*.

K, MO, NY, WIS

2494



agm

Gafanhoto

GAFANHOTO = langosta
roladora -

Hotel Fontaine en
Oliveira - de
Dona (Frodo) Bito

wide Mo-lanensis - frag.

9302.9 -

