(62)

Reference E/52.II.

Forest Department,
Entomology Section,
P.O. Box 1752,
Kampala.

17th July, 1967.

Insect Collector
Mafuga Kibale + Lendu
u.f.s. DFO/.....

u.f.s. FO/.....

Instructions for Insect Collectors.

You should familiarise yourself with the trees as soon as possible. This can be done with the help of Forest Guards or Rangers with whom you should always work closely.

2. We are very much interested in the life histories of Lepidoptera defoliators under field conditions. We are trying to get out-door cages and insectaries made. But until this is available you should make use of the cages you have got as much as possible. You should collect larvae and rear them and record their progress on the following lines:-

Date:	No.larvae	No.pupated	No.of dead larvae or pupae removed	No.adults emerged	No.of parasites emerged.

3. Cages should be checked every morning and the above data recorded.

4. The greater part of any working day must be spent in the field. We are trying to get a simple method of studying population trend. But until a proper method is worked you should collect all insects of silvicultural importance and record your data as under. This will will give us a rough guide on the abundance of certain species of insects:

Date	Name or family of Insect.	Host and date of planting.	Nature of damage.	Extent of Damage
10/7/67	Geometrid	P. patula P.1960	defoliating	2 trees slightly defoliated.

Records of this nature should be entered daily immediately on return from the field so that data is not confused.

5. Note carefully that we shall judge the amount of work you are doing according to the number of insects you send us and also how well records of this is made.

6. In case of any sign of abnormal increase in number of insects or outbreak you should report immediately to the Forester i/c who would then inform me through the D.F.O.

7. All your correspondence concerning your work should pass through the F.O. and D.F.O. to me.

8. You should go on safaris when convenient, e.g. when departmental transport is available. This should average about 6 nights a month.

9. I am going to visit you shortly so that I can discuss with you any problems and to see how you are foring on.

(M. Oloya)
ENTOMOLOGIST

c.c. Conservator (Research),

(102)

Lendu Forest Station
P.O. Box 21
Arua
20th Jan. 1968

Forest Entomologist
Nakawa.



Laboratory Experience

You asked me to do so for coming
had asked in a letter, as
to the office for more experience.
& wanted if possible to come there
late February 1968 if I would
get your letter or reply. The
(spec) Collection box will come with me.

S. Adabo,
Ord. Entomological.

P.S. Can you send me ruled
papers for collection lists
and Reports?
20/1 Adabo.

Lendu Forest Station,
P.O. Box 21,
Arua
5th March, 1968

The Forest Entomologist
Nakawa,
U.F.S. DFO Arua, Samuel Y.B. Kaumi 8/3
" FO Lendu. AM 6/3/68

-8 MAR 1968
P.O. Box 21 ARUA

Monthly Report of Insect Collection Lendu Forest for Feb. 1968.

1. Insect Collection.

Few Collection was done on Lepidoptera Catterpillars defoliating the Nursery seedlings, Some of these were the Buzura loopers and some were unknown spp.

Very many trees of Pin. patula and Cu. benthamii beyond the Fire-Tower dying were investigated in (?CPT.5). Only few were affected ~~with~~ with Armillaria but the actual Cause of the death was unknown. And Pin. radiata which have mostly dead tops in CPTs. 7, 8, 9 and 10 die in Scattered places in the CPTs.

2. Plantation Fungus disease.

In (?CPT.5), a lot of Pin. patula and Cu. benthamii trees beyond Fire-Tower were found drying away. The Cause of these death was how ever Unknown.

3. Armillaria.

This has been found affecting the following trees in Usi Forest. Few benthamii (Cypress), Pines patula and radiata.

4. Pin. radiata Dead Tops.

This was found to be rather Common in Usi; Occuring in CPTs. 7, 8, 9 and 10 mostly. And has given number of P. radiata trees dying in CPTs. in Scattared places.

5. Plantation Defoliators.

The defoliation was not at all found Common in the CPTs. in Usi Forest. Except that,

there were very many unknown old cocoons hanging on the branches of Cu. benthamii and few on Pinus patula and radiata which didn't show much signs of defoliating.

6. Nursery Leader.

Catterpillars of Lepidoptera were found defoliating the seedlings of Cu. lusitanica of about a foot in hight in the Nursery. Some of these were the Buzura loopers and some unknown spp.

7. Gonometa.

The sp. is also found to be common occuring in scattered places in C/Ts. doing slight defoliation. But the catterpillars have never been found in large numbers which might have been so due to the Techinidae Parasitization This was found out when some larvae of the sp. were caged and and were mostly parasitized.

8- Buzura.

The larvae were found defoliating Cu. lusitanica in the Nursery with other unknown spp.

9- Insect Attack in living Trees.

Nothing to Report.

10. Borers in Felled Trees and Timber.

There is nothing to Report.

11. Miscellaneous.

(i) A 6 days Safari was made in Usi Forest during the month.

(ii) The C(R) Who paid a visit here in the middle of Feb. 1968 to Lyudu Forest (N/Nile) found the Writer on Safari to Usi Forest.

S. O. Adabo,
Orderly Entomological.

(122)

Lendu Forest Station,
P.O. Box 21
Arua,
1st April, 1968.

The Forest Entomologist
Nakawa,
U.F.S. DEO, Arua, Samuel Y.S. Laumi 5/4
U.F.S. Forest officer, Lendu, [signature] 2/4/68

Monthly Report of Insect Collector Lendu
CFR. for March 1968.

1. Insect Collection:

Lasiocampid larvae (unknown sp) defoliating Pin. radiata in CPT. 12 (Pl. 1960) were collected and sent to Nakawa. Lepidoptera larvae (unknown sp and family) defoliating were collected on the seedlings of Cupressus lusitanica in the Nursery and they have been caged, and specimens collected in Lendu were taken to Nakawa by the Forest Entomologist, Mr. Ologa.

2. Plantation Fungus Disease.

Pin. radiata in Ollo is becoming worse as formerly reported. It has many trees dying out.

3. Armillaria:

This has been recorded on the following spp. at Lendu, Pin. patula, Cu. lusitanica Pin. Caribaea and Widd. whyctei.

4. Plantation Defoliators.

Lasiocampid (unknown sp.) larvae were found seriously defoliating Pin. radiata in CPT. 12 (Pl. 1960). This was found out after they had defoliated three quarters of the area. Most of the cocoons or the ones pupated were eaten or destroyed away by crows (birds). This area was shown to the Entomologist. Few larvae were collected and sent to Nakawa.

5. Nursery Defoliators:

Lepidoptera (unknown sp. and family) ~~larvae~~ larvae were collected defoliating the seedlings of Cu. lusitanica in the Nursery. The defoliation was considered to be serious one as they were found everywhere on the Cu. lusitanica beds.

5. Bluzura:

The adults are very common in the QFS at present. But the signs of the larvae have not yet been found out.

7. Insect Attack in Living Trees.

Nothing to report.

9. Borers in Felled Trees and Timber.

Also nil.

9. Miscellaneous.

No visit (Safari) was made to another station during the month.

The Forest Entomologist, Mr. Oboya during his home leave paid a visit to Londu Forest during the month where he was shown the defoliated area and also went upto Ol- to see the Pin. radiata in QFS. 15 Pl. 1962.

S. O. Adabo
Dvd. Entomological.



Zendu Rainfall figures and Maximum and M
Temperatures

1968
Dec/Nov.

~~Adult Emergence~~ ~~Trap No.~~.....

~~Insect Species~~..... ~~Host~~..... ~~Compartment No.~~.....

~~Month of~~.....

Date	~~No. of adults emerged~~	~~Female~~	~~Male~~	~~Parasi~~ ~~Diptera~~	~~Hy~~
1	17.8	25.1	14.5		
2	3.0	24.5	14.0		
3	21.3	23.4	14.2		
4	19.2	23.5	12.0		
5	6.5	24.0	12.8		
6	19.2	20.7	13.5		
7	.3	21.8	12.1		
8	Nil	23.4	12.7		
9	Nil	24.0	12.2		
10	3.0	25.0	13.5		
11	Nil	22.6	12.8		
12	.8	25.0	13.7		
13	Nil	24.2	12.6		
14	Nil	25.1	12.8		
15	Nil	25.3	13.3		
16	Nil	25.5	12.6		
17	Nil	26.0	13.6		
18	Nil	26.3	12.5		
19	Nil	25.7	11.0		
20	Nil	26.4	12.3		
21	Nil	26.2	11.5		
22	Nil	26.0	10.5		
23	Nil	26.1	11.8		
24	Nil	26.6	12.6		
25	Nil	26.1	10.7		
26	Nil	26.1	11.8		
27	Nil	26.3	Temp of		
28	Nil	27.5	Minimum		
29	Nil	25.4	broken not		
30	Nil	26.2	Reading from		
31	Nil	26.2	97 up to Now.		
Total	altogether 73.3	720.2.			

S. Sobo
EO.

File F/Entomologist (145) (186) P.O. Box 21, Arua, 1/2/69.

Meteorological figures for January 1969.

Rainfall, Maximum and Minimum Temperatures for Jan. 1969.

Date	Rainfall	Maximum	Minimum
1	Nil	26.0	
2	Nil	26.1	
3	1.5	27.7	
4	Nil	25.1	
5	22.5	25.5	
6	15.2	23.2	
7	Nil	23.1	
8	Nil	25.0	
9	Nil	25.2	
10	Nil	25.7	
11	Nil	25.3	
12	Nil	25.3	
13	Nil	25.3	
14	Nil	26.1	
15	Nil	26.5	13.8
16	Nil	26.7	14.6
17	Nil	26.6	15.7
18	Nil	26.3	16.5
19	Nil	27.0	12.8
20	Nil	27.6	15.2
21	33.6	25.0	14.2
22	7.2	22.6	14.3
23	16.0	19.0	12.8
24	42.6	20.7	13.0
25	Nil	23.4	13.8
26	1.2	24.4	14.3
27	1.2	25.3	14.0
28	Nil	23.2	13.2
29	Nil	23.5	14.0
30	Nil	24.3	11.5
31	Nil	24.5	10.6
Total Altogether	141.0	771.2	234.3

[signature]
Entomological Ordery

The Forest Entomologist
Nakawa.

JUNE 1969

(242) (~~45~~)

ARUA FOREST STATION
P.O. Box 21,
ARUA.
1/7/69.

RAINFALL FIG., MAXIMUM AND MINIMUM TEMPERATURES.

FOREST ENTOMOLOGY
RECEIVED
10 JUL 1969
KAMPALA, U

DATE	RAINFALL	MAXIMUM	MINIMUM
1	Nil	24.2	14.5
2	Nil	25.4	14.9
3	6.2	25.3	14.5
4	Nil	25.0	13.2
5	0.7	24.2	15.1
6	Nil	24.7	14.8
7	Nil	24.8	14.7
8	Nil	25.0	14.8
9	TRACE	23.0	14.0
10	1.5	22.5	13.5
11	2.5	25.0	14.0
12	Nil	24.8	14.4
13	Nil	25.4	14.0
14	21.3	25.0	13.0
15	Nil	23.0	14.2
16	29.4	22.6	15.5
17	Nil	23.2	15.2
18	Nil	22.6	14.8
19	Nil	24.5	15.0
20	13.5	23.0	13.0
21	Nil	23.2	14.7
22	Nil	23.2	14.9
23	Nil	24.2	13.0
24	Nil	24.5	13.0
25	Nil	24.9	14.2
26	Nil	25.8	15.0
27	Nil	24.2	14.2
28	Nil	25.0	13.0
29	Nil	24.4	12.5
30	Nil	25.0	14.0
Total Altogether	75.1	727.6	425.6

S O Doba

File E.S.



(3 99)

P.O. Box 21,
Arua
4/5/70

Max, Min and Rainfall of April 1970.

Date	Maximum	Minimum	Rainfall
1	22.7	14.5	Nil
2	20.3	14.5	17.2
3	24.6	14.0	Nil
4	25.5	14.0	Nil
5	24.8	14.0	5.2
7	25.8	15.2	Nil
8	25.2	15.5	Nil
9	25.4	15.8	Nil
10	24.8	16.1	Nil
11	23.8	15.0	4.2
12	22.5	15.2	32.1
13	21.0	14.8	Nil
14	25.0	15.0	Nil
15	25.0	15.5	Nil
16	25.5	15.7	7.2
17	23.6	14.8	50.4
18	23.5	15.8	3.0
19	25.0	15.5	Nil
20	22.5	15.0	4.3
21	22.2	15.2	3.6
22	19.4	15.8	Nil
23	22.0	10.1	57.4
24	23.0	16.7	Nil
25	21.8	10.0	3.5
26	23.4	13.0	
27	21.1	14.3	Nil
28	24.0	15.0	Nil
29	25.0	15.3	Nil
30	26.0	15.2	Nil
Total	25.0	15.7	Nil
	709.4	438.2	100.5

Max, Min. and Rainfall Temperature for March 1970

	Maximum	Minimum	Rainfall
	27.5	16.2	22.0
	18.6	14.7	Nil
	24.3	14.6	23.4
	21.0	14.0	Trace
	20.0	12.7	Nil
	26.5	14.5	Nil
7	24.7	16.8	Nil
8	23.8	16.5	29.0
9	20.0	13.3	3.0
10	18.0	13.2	Nil
11	22.8	15.2	16.0
12	23.5	14.5	Nil
13	22.6	14.5	Nil
14	22.8	14.5	Nil
15	23.0	14.0	10.0
16	24.0	16.3	1.5
17	24.7	15.7	Nil
18	22.2	15.7	Nil
19	22.4	14.5	8.6
20	24.0	15.2	Nil
21	27.0	14.5	9.5
22	25.7	14.8	Nil
23	24.6	15.2	Nil
24	20.0	13.8	Nil
25	24.3	14.5	1.4
26	24.0	15.7	6.9
27	23.7	16.2	Nil
28	25.3	16.0	Nil
29	26.8	15.0	2.1
30	20.7	13.7	38.3
31	24.5	16.0	Nil
Total	724.2	362.0	171.7

17 APR 1970 KAMPALA

(? 2666 Spila 1999)

DEC 1971

P.O. Box 21,
Arua.
9th December 1971.

Forest Entomologist
Thru: D.F.O. W.N./Madi
" F.O. Lendu.

Report on dead trees of Cupressus Lusitanica in Cpt. 3.

Fungus

This was just forgotten out when last month monthly Report was sent.

There are more than 20 trees of Cu. Lusitanica in Cpt 3 as here above with dead tops. The cause is not discovered and several trees, approx. 30 in the same area or Cpt. were dead and some dying. May be it is due to drought or rocky-side.

No specimens were collected from any of the trees. Number of the fallen trees were only three.

S. O. Adabo

F/ Guard Entomology.

SOA/VO.

II Forest Entomologist.

I noted a number of dead Cypress in Cpt 2 + 3 Usi which appeared to be dead because of supression. The thinnings here have been a bit delayed. The death/db reported above may be due to the same cause.

DFO/WN/M. 23/12

FOREST ENTOMOLOGY
RECEIVED
29 MAR 1972
KAMPALA

U R G E N T.

252

Forest Office,
P.O.Box 21,
Arua.

23 - 3 - 72.

The Forest Entomologist,
Forest Department,
Nakawa.

thru: The District Forest Officer,
Forest Department,
West Nile/Madi,
Arua.

" The Forest Officer,
Lendu.

MAR 1972
24/3
P. Box 21.

Please let me know what [illegible] - should be taken
DC

Pachymetana - Okavu-reru.

These have shown already a threatening outbreak in Cpt.1. planted 1963. Several trees have been off stripped their middles. The next generation will be a serious one according to the observation. They are already in pupal, egg and young larval stages. Just very few in the last larval stages.

You can find these stages in the assessment form attached here, going to the Forest Entomologist.

P R E D A T O R S:-

Crows are playing their part in destroying some of the pupae

As you dicided to work on them in pupal stages, this would be the right time now. But when after two weeks, due to some interruptions they will all be in egg and larval stages.

FOREST ENTOMOLOGY
RECEIVED
29 MAR 1972
KAMPALA, UGANDA

S.O. Adabo,

FOREST GUARD ENTOMOLOGY/LENDU.

SOA/EMO.

3.52 III

254

Entomology Section,
P. O. Box 1752,
KAMPALA.

4th April, 1972.

DFO/Arua.

Pachymetana-Okavu-renu
Ref. F.G's letter of 23.3.72 through you

I am coming over to West Nile to check on the reported out-break of these defoliators. If I find the situation warrants it we shall resort to dusting or spraying with insecticides during the late instars.

I shall be in West Nile on 3/4/72.

CC/EAR.

(M. OLOYA)
FOREST ENTOMOLOGIST

L/13.

281

Lendu Forest Station,
P.O.Box 21,
Arua.

9th May, 1972.

11 MAY 1972
P.O. Box 21

The Forest Entomologist,
Forest Department,
P.O. Box 1752,
Kampala,

thru: The District Forest Officer,
West Nile/Madi,
P.O.Box 21,
Arua,

" The Forest Officer,
Lendu.

11/5

Insects Damage.

There has been insects attack already in Cpts, L/8, L/9, L/10 and L/11 in Lendu. This damage is suspected being of Buzura. Plenty of needles have dropped down. This may probably be of 1968 - 69 though they have not yet shown signs of outbreak in the above Cpts. They have just appeared on P.patula yet.

S.O. Adabo,

FOREST GUARD ENTOMOLOGY/LENDU.

SOA/EMO.