A QUANTITATIVE-ECOLOGICAL ANALYSIS OF THE SOIL MESOFAUNA ASSOCIATED WITH *ERAGROSTIS CURVULA* (SCHRAD.) NEES

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CONTENTS

6. THE CLIMATE/........

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1. INTRODUCTION

This paper gives an account of a systematic investigation of the fauna in soil covered by Eragrostis curvula (Schrad.) Nees from Potchefstroom, Republic of South Africa, extending over a period of one year from November 1st, 1962, to October 17th, 1963.

The investigation is mainly concerned with a quantitative seasonal examination of the soil mesofauna together with some environmental factors which could exert an influence on the soil fauna.

Van der Drift (1951) defined the soil fauna as those animals that occur in the soil either during their whole life or in one or more of their developmental stages. If a species spends only a part of its life in the soil then only this stage is considered to belong to the soil fauna.

Fenton (1947) divided the fauna of the soil into three groups according to size: microfauna (0.001 - 0.040 mm), mesofauna (0.040 mm to several cm) and macrofauna (above several cm). Van der Drift (1951) followed the same basis of classification; he distinguished between microfauna (0.02-0.2 mm), mesofauna (0.2 - 2 mm), macrofauna (2 - 20 mm) and megafauna (2 - 20 cm). Van der Drift divided the mesofauna further into:

A. Micro-arthropods: mites and collemboles, 0.1 - 2.0 mm in length, obtained by desiccating soil samples.

B. Remaining mesofauna: nematodes, rotifers and tardigrades, obtained by plunging the samples in water.

This/.....

This investigation deals only with the mesofauna in group A: Acarina, Collembola and other arthropods of similar size.

Based on vertical distribution, the soil fauna is divided by Gisin (see Haarlov, 1960) into the real soil inhabitants (eu-edaphon), litter inhabitants (hemi-edaphon) and inhabitants of the soil surface (ep-edaphon). This study is concerned with the soil mesofauna in the upper 5 cm of soil only, since the sampling tool used had a height of 5 cm.

Samples of soil were removed from plots on which grass (E. curvula) had been growing for one, two and three years respectively. One of the original ideas was also to study the effect of the age of the stand of grass on the soil fauna, but unfortunately the plot covered by three year grass was ploughed four months after the investigation was commenced. An investigation on the effect of ploughing on the soil fauna was not one of the objects of the present study but it has been possible to obtain some information on this. Because there were apparently no major differences in the composition of the fauna of the remaining two plots, the data obtained from these two plots were combined and treated as such in the analysis of the soil fauna.

For the purpose of this investigation, a maximum of only 15 sampling units could be taken on each sampling occasion i.e. five sampling units on each plot. At the beginning of the study it was decided to take a set of sampling units twice every month, about a week apart, to obtain a set of 10 sampling units per plot per month, a number more suitable for statistical analysis, but as a result of often great variation in numbers of soil populations within the short period of a week, it was decided to keep the data obtained on each sampling occasion separate.

The period of study was characterised by abnormal rainfall, which diverged widely from the previous means (see figure 1). Good rains fell during the first and second ten-day periods in November, 1962, after a period of drought. With the exception of the second half of January, 1963, rainfall during 10-daily periods from December until the middle of March, a period which is usually characterised by good rains, was below the long-term average. Good rains fell during the first 10 days of April, 1963, as well as in May, 1963, and in June, 1963, - months usually with a low rainfall.

Much work has been done on the soil mesofauna in various parts of the world but little is known about the soil mesofauna in African soils. Salt (1953, 1955) investigated the quantitative and qualitative aspects of soil micro-arthropods in pasture and arable soil in East Africa and Belfield (1956) investigated the vertical distribution of the various groups of arthropods in pasture soil throughout the dry and wet season in West Africa. Lawrence (1953) published an excellent work on the biology of the cryptic fauna of the indigenous forests of South Africa.

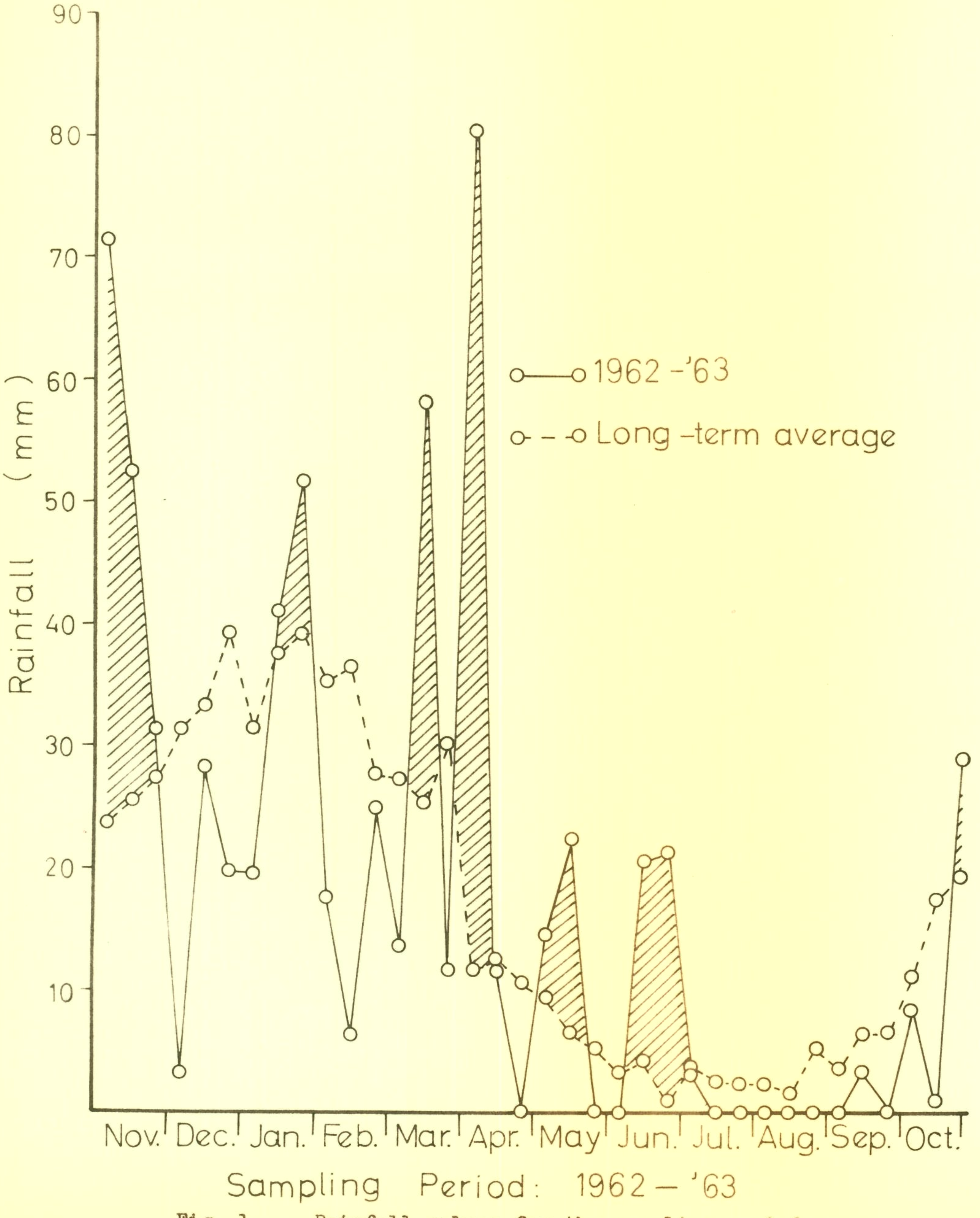


Fig. 1. Rainfall values for the sampling period as compared with the long-term averages.

2. AREA OF INVESTIGATION

The investigation was made on three experimental plots situated at the Agricultural College and Research Institute, Potchefstroom. Potchefstroom (Lat. 26^{o} 44'S, Long. 27^{o} 05'E; mean height above sea level 1352 metres) is situated on the banks of the Mooi River in the Western Transvaal.

The three plots (A, B and C) were covered with grass (E. curvula), which had been growing for one, two and three years on A (block G plot 38), B (blok G plot 44) and C (blok G plot 38) respectively. No other plants had grown on the plots during the period of investigation. The ground had previously been under a standard crop rotation and must be considered as land under cultivation rather than permanent grassland. The habitats were very homogeneous so that random sampling could easily be applied. Each plot was approximately 30-35 yards long and about four yards wide and was surrounded by other experimental plots (see plates I, II, III). The plots had a fairly uniform surface, evenly covered by the grass (see plates IV, V). No grazing of the experimental plots took place, but the grass allowed to grow for hay was cut at regular intervals during the summer months.

3. ANALYSIS OF THE SOIL

3.1 MECHANICAL ANALYSIS OF THE SOIL

No mechanical analysis of the soil studied was made during the period of investigation but Baier (1963) gives a mechanical analysis of soil from the same area

as that/.......

Plate I. Plot A.

Plate II. Plot B.

Plate III. Plot C (Ploughed).

Plate IV. A close-up of the vegetation of plot A.

Plate V. A close-up of the vegetation of plot B.

as that on which this study was based and describes the soil as follows:-

"The mechanical analysis in table 1 indicates a remarkably uniform texture throughout the profile of the sandy clay soil. The sand fractions vary from 7.6 to 5.2 per cent, the latter figure referring to the subsoil. The silt figures are generally lower than those of the sand fractions. The colloid clay content (i.e. $<$ 0.002 mm) increases from about 34 per cent in the surface layers to 39 per cent at a depth of 24 - 30 in."

3.2 CHEMICAL ANALYSIS OF THE SOIL

During the period of investigation the plots received the following manurial treatments:

1. Limestone ammonium nitrate (20.5% N)

Period	Date of manuring	Amount of manure
1961 - 1962	6 Dec. 1961	100 lb/morgen
	14 Jan. 1962	"
1962 - 1963	27 Dec. 1962	"
	28 Jan. 1963	"

2. Superphosphate (19.1% $P_2 O_5$)

1961	1 May 1961	900 lb/morgen
1962	14 Jun. 1962	"
1963	27 May 1963	"

A composite soil sample was taken from each plot for chemical analysis. The analysis was made by the Fisons laboratories, with the following remarks:- The carbon was determined and converted to percentage organic material using a formula. For this estimation a conversion factor was used. The phosphate

determined/......

TABLE 1

Mechanical analysis of the soil from experimental plots, block D, plot 67 at the Agricultural College and Research Institute, Potchefstroom. (after Baier, 1963)

Depth	Fractions		
	Clay	Silt	Fine Sand
in.	0.002 mm %	0.002-0.02 mm %	0.02-0.2 mm %
0 - 3	34.5	4.4	7.6
3 - 6	34.1	4.0	6.8
6 - 12	36.0	4.2	5.9
12 - 18	37.7	3.4	6.0
18 - 24	37.6	3.2	5.7
24 - 30	39.6	3.6	5.2
30 - 36	35.4	4.4	5.9

TABLE 2

The chemical analysis of soil covered by <u>E. curvula</u> from plots A, B and C, made on 21 Aug. 1963.

	Colour and Texture	K con-duct.	pH (H_2O)	pH (KCl)	% org. mat.	P_2O_5 p.p.m.	K_2O p.p.m.	CaO p.p.m.	Na p.p.m
Plot A	B s, l	27	5.8	4.5	2.1	28	205	810	18
Plot B	"	26	5.5	4.3	2.0	44	130	515	20
Plot C	"	97	5.8	4.6	1.5	38	200	1160	30

determined was the accessible or readily soluble phosphate. The result of the chemical analysis is tabulated in table 2.

A factor which is particularly noticeable is the low percentage organic material in the soil in all three plots, notwithstanding the fact that grass had grown for more than two years on plot C and more than a year on plot B. The surface of the soil of plots B and C was covered with a thin layer of undecomposed grass. The lack of organic material in the soil was probably due to the fact that the greater part of the production was removed from the field during cultivation, leaving practically no litter.

4. CLIMATE OF THE AREA INVESTIGATED

The figures for the climatic factors which could not be measured in the habitats studied, were obtained from the meteorological station of the Agricultural College and Research Institute, Potchefstroom, situated near the area studied.

4.1 AIR TEMPERATURE

Air temperatures were recorded in a Stevenson screen, four feet above the ground and are given in Table 3.

4.2 SUNSHINE AND EVAPORATION

The sunshine hours and evaporation for the period of investigation are tabulated in table 4.

4.3 RAINFALL/......

TABLE 3

Maximum and minimum air temperatures for the period of investigation (October 1962 - October 1963).

Month	Mean Daily Maximum	Mean Daily Minimum	$\frac{\text{Max. + Min.}}{2}$
October 1962	29.7°C	11.8	20.7
November	26.5	14.2	20.3
December	30.0	15.0	22.5
January 1963	27.2	15.5	21.3
February	29.0	14.8	21.9
March	26.7	12.7	19.7
April	23.0	8.4	15.7
May	19.7	2.8	11.2
June	17.2	1.2	9.2
July	17.2	0.3	8.7
August	21.5	1.4	11.5
September	27.9	9.1	18.5
October	28.1	11.4	19.7

TABLE 4

Sunshine hours and evaporation October 1962 - October 1963

Month	Sunshine hours	Evaporation mm
October 1962	9.7	213.5
November	7.0	144.8
December	10.2	217.5
January 1963	7.3	163.1
February	10.6	185.8
March	8.3	149.5
April	8.2	103.4
May	8.5	80.1
June	6.8	51.8
July	7.9	66.9
August	9.6	106.9
September	10.0	154.2
October	8.8	171.8

4.3 RAINFALL

The rainfall was measured a few yards away from the sampling site. In table 5 the total daily rainfall in mm for the period of study is given.

4.4 SOIL TEMPERATURE

The soil temperatures were measured in the field with a soil thermometer at a depth of 5 cm (i.e. the height of the sample container) on each sampling occasion throughout the investigation. Two readings (often three) were made on each plot to obtain a mean value. In table 6 the average soil temperature for each plot on each sampling date is given.

Curves of the soil temperatures were drawn together with curves of the soil population (figures 5, 6, 7).

4.5 MOISTURE CONTENT OF THE SOIL

Estimation of the moisture content of the soil was carried out throughout the investigation. An average of two soil samples were taken at random on each plot on every sampling occasion to determine the soil moisture content. The size of each soil sample was approximately 100 cc taken to a depth of 5 cm i.e. the height of the sampling tool. Immediately after sampling in the field, the soil samples, in aluminium containers with tight-fitting caps to prevent evaporation, were brought to the laboratory where they were weighed and then oven-dried at 110°C until their weights remained constant. In table 7 the moisture contents of the soil samples are expressed as

percentages/......

TABLE 5

Daily rainfall (mm) for the period October 1962 - October 1963

Day	Oct. 62	Nov. 62	Dec. 62	Jan. 63	Feb. 63	Mar. 63	Apr. 63	May 63	Jun. 63	Jul. 63	Aug. 63	Sept. 63	Oct. 63
1	1.0	3.7	-	-	13.4	-	-	-	-	1.2	-	-	-
2	0.9	2.9	-	-	-			-	-	-	-	-	-
3	-	0.8	-	-	-	2.3	29.9	-	-	-	-	-	-
4	3.0	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	2.6	12.0	-	-	22.5	-	-	-	-	-	-
6	-	8.0	-		-	-	-	-	-	-	-	-	-
7	-	16.5	-	-	-	0.9	-	-	-	-	-	-	-
8	-	17.1	-	2.5	-	-	18.8	-	-	-	-	-	-
9	-	21.4	-	0.9	-	-	-		-	1.7	-	-	
10		-	-	-	-	-	-	13.4	-	-	-	-	7.3
11	-	1.3		9.1	-	4.1	-	3.6	8.4	-	-	-	-
12	-	6.6	-	1.1	-	31.2	9.4	-	11.8	-	-	-	-
13	-	7.3	-	-	-	-	0.9	-	-	-	-	-	-
14	-	7.7	7.9	-	-	-	-	-	-	-	-	-	-
15	-	7.5	-	6.2	4.5	-	-	-	-	-	-	-	-
16	-	12.9	20.5	-	-	-	-	-	-	-	-	-	-
17	-	-		-	-	7.7	-	-	-	-	-	-	-
18	-	1.1	-	-	-	2.5	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	2.8	-	30.0	0.9	-	-	-	-	-	-	2.5	-
21	20.0	-	1.9	26.3	-	-	-	-	-	-	-	-	-
22	-	-		0.3	23.7	-	-	-	-	-	-	-	8.5
23	-	21.6	19.5	0.1	-	-	-	-	-	-	-	-	5.6
24	-	1.0	-	2.3	-	-	-	-	-	-	-	-	-
25	-	-	-	10.5	-	0.9	-	-	-	-	-	-	-
26	-	-	-		-	-	-	-	-	-	-	-	-
27	-	-	-	9.6	-	-	-	21.7	12.9	-	-	-	7.8
28	-	4.6	-	-	-	10.5	-		8.8	-	-	-	-
29	0.1	-	-	-	-	0.6	-	-	-	-	-	-	-
30	0.3	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	0.6	-	-	-	-	-	-	-	-	-
Total	25.3	144.8	52.4	111.5	42.5	60.7	81.5	38.7	41.9	2.9	-	2.5	29.2

TABLE 6

Average soil temperature in ^{o}C.

Date	Plot A	Plot B	Plot C
1 November 1962	33.3	25.6	30.0
7 November	30.0	30.0	30.0
4 December	34.4	31.1	31.1
11 December	41.1	36.9	37.2
3 January 1963	43.3	43.3	35.6
11 January	27.0	32.0	27.0
5 February	23.3	22.0	21.7
12 February	27.4	29.1	27.2
5 March	26.6	26.6	23.9
12 March	17.8	16.7	17.4
9 April	15.6	16.4	16.4
17 April	14.9	14.7	14.6
1 May	22.8	22.2	23.0
8 May	19.4	19.0	18.7
5 June	7.9	9.7	8.3
13 June	11.9	13.1	15.0
1 July	14.1	13.8	16.0
26 July	8.5	10.2	14.1
6 August	10.7	14.2	11.9
14 August	12.9	14.3	19.1
4 September	-	16.5	-
11 September	21.4	18.4	25.4
2 October	21.6	20.8	24.4
17 October	24.1	23.1	22.9

TABLE 7

Moisture content of the soil expressed as a percentage of the dry weight.

Sampling date	Plot A	Plot B	Plot C
1 November 1962	4.83	5.05	5.04
7 November	12.82	11.94	16.90
4 December	5.08	4.72	5.77
11 December	4.05	3.09	4.26
3 January 1963	3.09	1.31	3.38
11 January	7.04	7.02	8.57
5 February	9.78	8.55	12.50
12 February	6.10	4.93	6.48
5 March	6.10	5.44	3.86
12 March	12.00	9.67	9.37
9 April	17.19	19.67	19.40
17 April	14.64	17.29	15.05
1 May	6.37	7.21	6.45
8 May	5.32	6.08	6.66
5 June	7.14	7.01	7.45
13 June	17.74	16.49	18.33
1 July	17.87	18.74	14.31
26 July	9.63	8.40	6.26
6 August	7.00	6.79	6.22
14 August	6.04	6.19	3.48
4 September	5.12	5.69	3.65
11 September	4.81	4.72	2.57
2 October	3.56	2.90	2.61
17 October	4.57	5.16	3.17

percentages of the dry weight of the soil; the figures are means for all the sampling units for each plot collected on the dates indicated. These data are shown graphically in figures 5 and 16 together with curves for the fluctuations in numbers of the soil populations.

5. EXTRACTION PROCEDURE

5.1 COLLECTING OF SAMPLING UNITS IN THE FIELD

For the survey of the soil mesofauna two series of soil samples were taken each month from the beginning of November, 1962, until the end of October, 1963, to cover one full year. A series of samples consisted of 15 sampling units, the size of each unit being 105.37 cc, and was divided between the three sampling plots. Therefore, on each plot five sampling units were taken on every sampling occasion. The two series for each month were as far as possible taken one week apart. This amounted to a total of 360 sampling units, spread over twelve months (30 units each month) and three plots (120 units on each plot).

The five sampling units were taken in a diagonal line over the plot, about six yards apart.

For the removal of the soil sample from the soil a sampling tool was used which also served as the sample container. The sampling tool consists of a brass cylinder 5 cm high, with an outside diameter of 5.62 cm, an inside diameter of 5.18 cm and a volume of 105.37 cc. One end of the cylinder is

beveled/......

beveled to form a cutting edge so that the cylinder can penetrate the soil more easily. In practice the sample container was pressed or, when the soil was very dry, hammered into the soil to a depth of 5 cm i.e. the height of the sampling tool. The soil at the lower end of the sampling tool was then separated by means of a small spade, and the tool with contents lifted out of the soil. In order to keep the soil sample undisturbed, small metal plates, which were kept in place by a rubber band, were placed on the top and the bottom of the sample container. An attempt was made to keep disturbance of the sampling unit to a minimum, but because this investigation was carried out on soil with a sandy nature which became very loose when dry, it was often difficult to obtain undisturbed soil samples.

After the removal of a series of sampling units in the field, they were immediately transported to the laboratory for extraction.

5.2 EXTRACTION OF THE FAUNA FROM THE SOIL

5.2 1 EXTRACTION APPARATUS

The extraction device used for the quantitative extraction of the mesofauna from the soil was that of Auerbach and Crossley (1960), a dry - funnel apparatus which is a modification of the extraction apparatus originally devised by Berlese (see plate VI). It was modelled closely after that of Macfadyen (1953) and consists briefly of the following parts: a perspex box of 16 x 10½ x 10½ in. which contains removable trays to hold 15 sample containers and 15 small funnels. The sample holders are arranged

in three/......

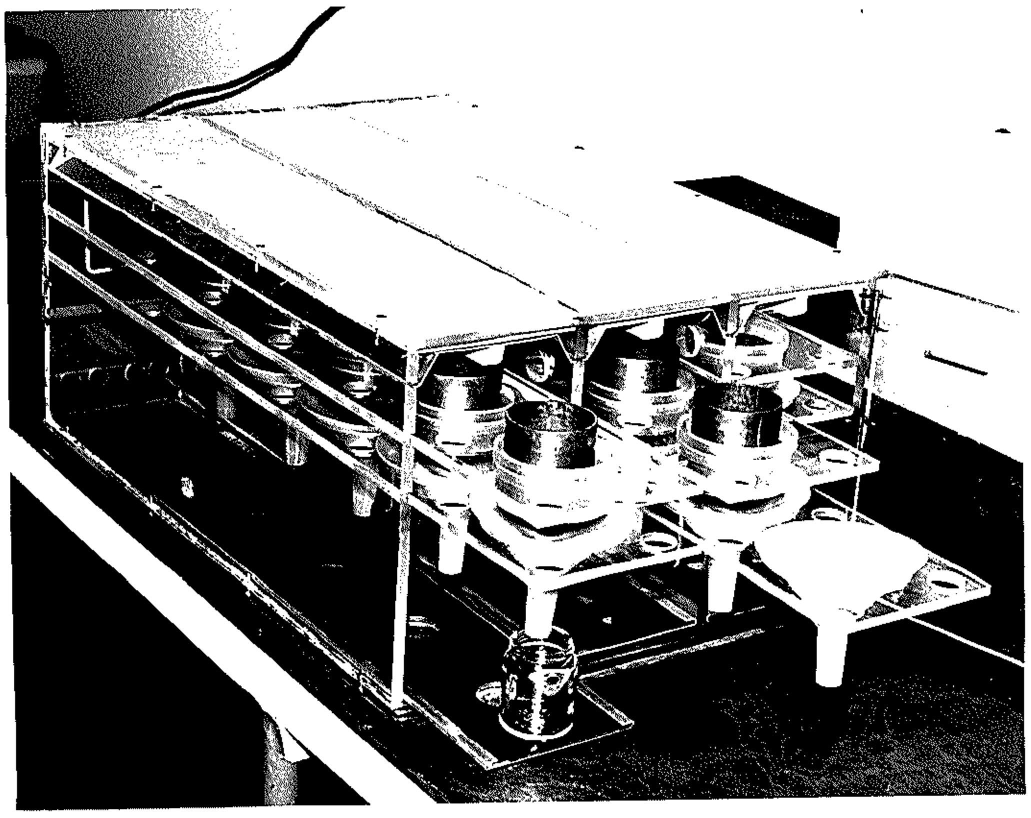


Plate VI. Extraction apparatus.

in three banks of five each with perspex partitions separating the banks. Each sample holder is a hollow perspex cylinder with a flange and fits into a opening in the tray. A removable circular piece of screen, upon which each sample container rests during extraction, fits in the bottom of the sample holder. Electric wires in reflectors are used as heat sources which can be controlled, with separate heaters for each bank. Removable trays hold the sample containers in position about an inch below the reflectors. A second set of trays holds the small plastic funnels immediately below the sample container. The trays slide into grooves out in the walls and partitions so that they can be loaded outside and then inserted into the box. Collecting vials for each funnel are placed on a third set of trays at the bottom of the box.

5.2 2 SAMPLE TREATMENT

In the laboratory the soil samples were immediately put into the extraction apparatus for it is usually considered that the interval between sample collection and extraction should be as short as possible (Murphy 1962a). The samples were put in a inverted position in the extraction apparatus. Jacot (1936) states that the soil sample should be placed surface downwards in the funnel and that the core should be subdivided so that the thickness of sample material is about 2.5 cm. In this case the soil was not subdivided since the first 5 cm of soil were not naturally divided into layers except for a thin top layer of undecomposed organic material. Hammer (1944)

is also/.....

is also of the opinion that the soil samples should be placed inverted in the funnel, without being disturbed and teased apart as had always previously been done, on the grounds that handling kills the more delicate animals and obstructs the passages through which they could otherwise move to the lower surface of the soil.

The organisms were extracted at a temperature of 30°C at the top of the sample for the first day, thereafter the temperature was increased by two degrees every day for a period of five days. The temperature above the sample was then increased to 44°C for the sixth day of extraction to make sure that no heat resistant organisms remained in the soil sample; after this last day no more organisms were extracted from the soil. Glass vials filled with 70% alcohol were used for collecting the extracted mesofauna.

Various authors (Forsslund 1948, Macfadyen 1953, Murphy 1962a) found large numbers of organisms remaining on the sides of the funnel. This was also the case in the present investigation and the animals remaining in the funnels were carefully washed down with 70% alcohol into the glass vials after each extraction. No attempt was made in this study to check the extraction efficiency. Hartenstein (1960) is of the opinion that where comparative quantitative studies are being pursued, the percentage recovery is not as important as an accurate constant proportion of recovery from each funnel for each collection date.

5.2 3 HANDLING/.......

5.2 3 HANDLING OF THE CATCH

The separation of the animals from the soil and organic matter that fell through the funnel was done under a dissecting microscope by hand sorting. The contents of each collecting tube were carefully washed out with 70% alcohol into a counting dish, which was a flat bottom Petri dish with ruled lines on the bottom. To reduce this volume the excess alcohol was often removed by using a small dropper. This was done under the stereomicroscope to prevent the removal of any organisms. Counts were made simultaneously with the separation of the organisms from the other material under the stereomicroscope, usually at a magnification of 24x, by shifting the counting dish to and fro under the stereomicroscope. The organisms were removed with a needle as they were encountered and for further identification they were placed in a hollow-ground slide with a few drops of lactic acid; otherwise they were put directly in small glass vials filled with alcohol. Large mites and Collembola etc. were taken out with a small spatula or a fine camel's-hair brush.

5.3 IDENTIFICATION AND STORAGE

For the examination and identification of the mites, the following method was used: The mites were transferred from alcohol to a few drops of lactic acid on a hollow-ground slide; the delicate mites were sufficiently cleared within a relatively short period, while the more sclerotized mites were warmed in the lactic acid until they were clear. After identification the specimens were transferred to small

specimen/......

specimen tubes (1" x $\frac{1}{4}$") filled with alcohol. For permanent mounting, the mites were placed in a drop of Hoyer's solution on a slide and covered by a coverglass.

6. THE CLIMATE DURING THE PERIOD OF INVESTIGATION IN RELATION TO THE SAMPLING DATES

October, 1962, the month preceding the date on which the first samples were taken, was characterised by dry weather with mean daily maximum temperatures above normal. Although the first good rains (20.0 mm) fell on the 22nd of October, 10 days before the first samples were taken, the soil was dry on the sampling date. On November 7th, 1962, the soil was moist due to good rains on four days preceding the date of sampling.

During December, 1962, severe dry weather prevailed. The total rainfall for the month was the lowest recorded for December since 1906, consequently the samples for the month had a low moisture content and also very high soil temperatures were recorded during that period. The soil temperature was above normal and rose gradually to the end of the month. These apparently unfavourable conditions (high soil temperatures and simultaneously low soil moisture) continued until after the first samples for January, 1963, were taken, when good rains fell and the soil and air temperatures decreased.

In the period between the taking of the first and second samples in January, a total of 15.4 mm of rain fell and the soil was well moistened. Still more rain fell during/.....

fell during the rest of January and the early part of February and the soil moisture in the first samples of February was relatively high. This was the only good rain for the summer period so far. Unfavourable conditions set in after this sample was taken and prevailed until a few days after the 5th of March, the date of the first sample for March. The soil of the second sample for March had a high moisture content due to rain (4.1 mm) on the previous day and in contrast to February, the soil became cooler during March by 4.9°C at a depth of one inch as registered at the weather station.

Heavy rains fell during April and the rainfall for this month was above normal. On the day of sampling, April 9th, the soil was saturated with water due to heavy rains during the previous week, 23.2 mm of rain being recorded the night before. Soil temperatures had gradually decreased. On the 17th of April the soil was still moist.

During the periods preceding the sampling dates for May (a 17-day period in the case of the May 1st sample) no rains fell and the soil temperatures increased.

June was a typical winter month with severe frost. Although the soil was fairly dry on the day of sampling, June 5th, since no rain had fallen for a period of seven days before the sampling date, the soil benefited by a good fall (21.7 mm) eight days before the sampling date. The soil was again saturated with water on the 13th, the second sampling date for June, due to rainfall of 20.2 mm the

previous/......

previous day and night. Except for the first few days, which were dry, June was exceptionally cool and humid and these conditions seem favourable to the soil mesofauna. The mean daily sunshine and evaporation for this month were the lowest recorded during the sampling period.

No appreciable amount of rain was recorded from July until the first week in November. The sky was often cloudy during July and this resulted in below normal temperatures at night. Rainfall for July was slight, as can be seen from table 5, but due to the high relative humidity and cloudy conditions the evaporation was below normal, as were the soil temperatures.

August is the last month of winter and no rains fell, but sunshine, relative humidity, evaporation and soil temperatures were all below long-term averages.

After the last sampling date for August, there was a steady rise in temperatures and it became so hot in September that it was sometimes as hot as it is in summer. Only 2.5 mm of rain fell on September 20th. The soil temperatures had risen a lot compared to the previous month and were above the long-term average; above-normal sunshine was recorded in September. These drought conditions prevailed till October 9th, when the soil was well moistened by 7.3 mm of rain.

7. RESULTS/.......

7. RESULTS

Tables 11 and 12 give a complete list of the species of the fauna and the numbers collected during the main census from November, 1962, to October, 1963.

7.1 NATURE OF THE SOIL MESOFAUNA

The soil mesofauna extracted comprised the following groups: Class Arachnida, represented by the orders Acari and Araneae, though only one spider was encountered during the investigation; the class Myriapoda was represented by seven specimens only; the class Insecta, of which the Collembola formed the major part, constituted one of the major groups of the soil mesofauna.

The Collembola and the rest of the Insecta were treated as two separate groups and were not classified further. The Acari, the most numerous group present in this soil, were classified into the suborders Mesostigmata, Trombidiformes and Sarcoptiformes. The Sarcoptiformes were further classified into Cribatei and Acaridiae.

7.1 1 MESOSTIGMATA

The Mesostigmata and the numbers per sampling unit, collected during the sampling period, are given in table 11. Ten genera belonging to five families constituted the mesostigmatid population in the soil of plots A, B and C. The family Aceosejidae were represented by the following species: Gamasellodes seminudus (Ryke), Protogamasellus sp. a, P. sp. b

(closely/.......

(closely related to P. primitivus Karg), P. sp. c, Lasioseius sp., and Antennoseius sp.

The family Laelaptidae included the genera Androlaelaps, Cosmolaelaps and Gaeolaelaps (sp. near praesternalis Willmann).

The family Phytoseiidae included the genus Amblyseius. Only one specimen of Rhodacarus sublapidlus Ryke (Rhodacaridae) and one specimen of the genus Kleemannia (Ameroseiidae) were encountered.

7.1 2 TROMBIDIFORMES

The Trombidiformes were represented by a greater variety of organisms. Twenty one families and 41 genera were recorded, some of which were present in large numbers while others were less numerous.

The following families and genera were encountered:

Family	Genus
Eriophyidae	
Scutacaridae	Imparipes with three subgenera, I. (Telodispus), I. (Imparipes) and I. (Archidispus), the latter represented by three species.
	Scutacaris subgenus Variatipes
Pyemotidae	Pyemotes
	Pygmephorus
	Siteroptes

Tarsonemidae/......

Family	Genus
Tarsonemidae	Tarsonemus
Eupodidae	Eupodes, represented by three species.
	Protereunetes
Bdellidae	Spinibdella
	Bdellodes
	Biscirus
Rhagidiidae	Rhagidia
Tydeidae	Tydeus, represented by five species viz. T. sp. a, T. sp. b, T. sp. c, T. grabouwi Meyer & Ryke and T. munsteri Meyer & Ryke
	Microtydeus
	Coccotydeus
	Pronematus
Cunaxidae	Cunaxa, represented by two species.
	Cunaxoides, represented by three species.
Nanorchestidae	Nanorchestes
	Speleorchestes
Pachygnathidae	Pachygnathus (?)
Caligonellidae	Molothrognathus, represented by two species.
	Stigmagnathus
Stigmaeidae	Ledermülleria, represented by two species.
Raphignathidae	Raphignathus
	Acheles

Tetranychidae/.......

Family	Genus
Tetranychidae	Aplonobia, represented by two species.
	Eotetranychus
	Monoceronychus
	Oligonychus
	Schizotetranychus
Linotetranidae	Linotetranus
Pseudocheylidae	Pseudocheylus
Anystidae	Chaussieria
Cheyletidae	Cheyletia, represented by two species.
	Cheletomimus
Erythraeidae	Hauptmannia, represented by two species.
	Abrolophus, represented by three species viz. A. sp. a, A. sp. b and A. vignae Meyer & Ryke
Trombidiidae	Microtrombidium (?)
	Ettmülleria

7.1 3 SARCOPTIFORMES

The Oribatei and Acaridiae were not further classified but two species of the Oribatei and one of the Acaridiae could be differentiated.

7.2 COMPOSITION OF THE SOIL FAUNA

During the period of investigation five sampling units were taken on each sampling occasion on each of the three plots. On the beginning of March, plot C,

covered/.....

covered by three year E. curvula grass, was unfortunately ploughed and this had a destructive effect on the soil mesofauna of that plot as can be seen in figure 9. As a result of this and of the fact that no major differences in total numbers of soil organisms were found to exist between plot A and plot B (total number of organisms for period of investigation:-
Plot A-5,058, Plot B-4,931 as against plot C-2,454) and since climatological factors were similar for all three plots, it was decided to combine the numbers of soil animals for plots A and B. The numbers plotted in the population curves are the averages for plots A and B for each sampling date. In order to facilitate the comparison of the data of this investigation with other investigations, the numbers of organisms per sampling unit were multiplied by the factor 474.5 to obtain the number of organisms per square metre.

The greatest number of organisms collected during the period of investigation consisted of the Acari which comprised 84.6 per cent of the total fauna of 12,443. The Collembola and other insects were the second most important group as far as numbers were concerned, with but a few Myriapoda present.

The Collembola comprised 13.1 per cent and the rest of the Insecta 2.2 per cent of the total mesofauna. Collembola were found in 43.3 per cent of the total sampling units, the highest number per sampling unit recorded being 183 (86,833.5 per sq. metre). A high percentage (80.2) of the mesofauna belonged to the Trombidiformes. In figure 2 the

population/.......

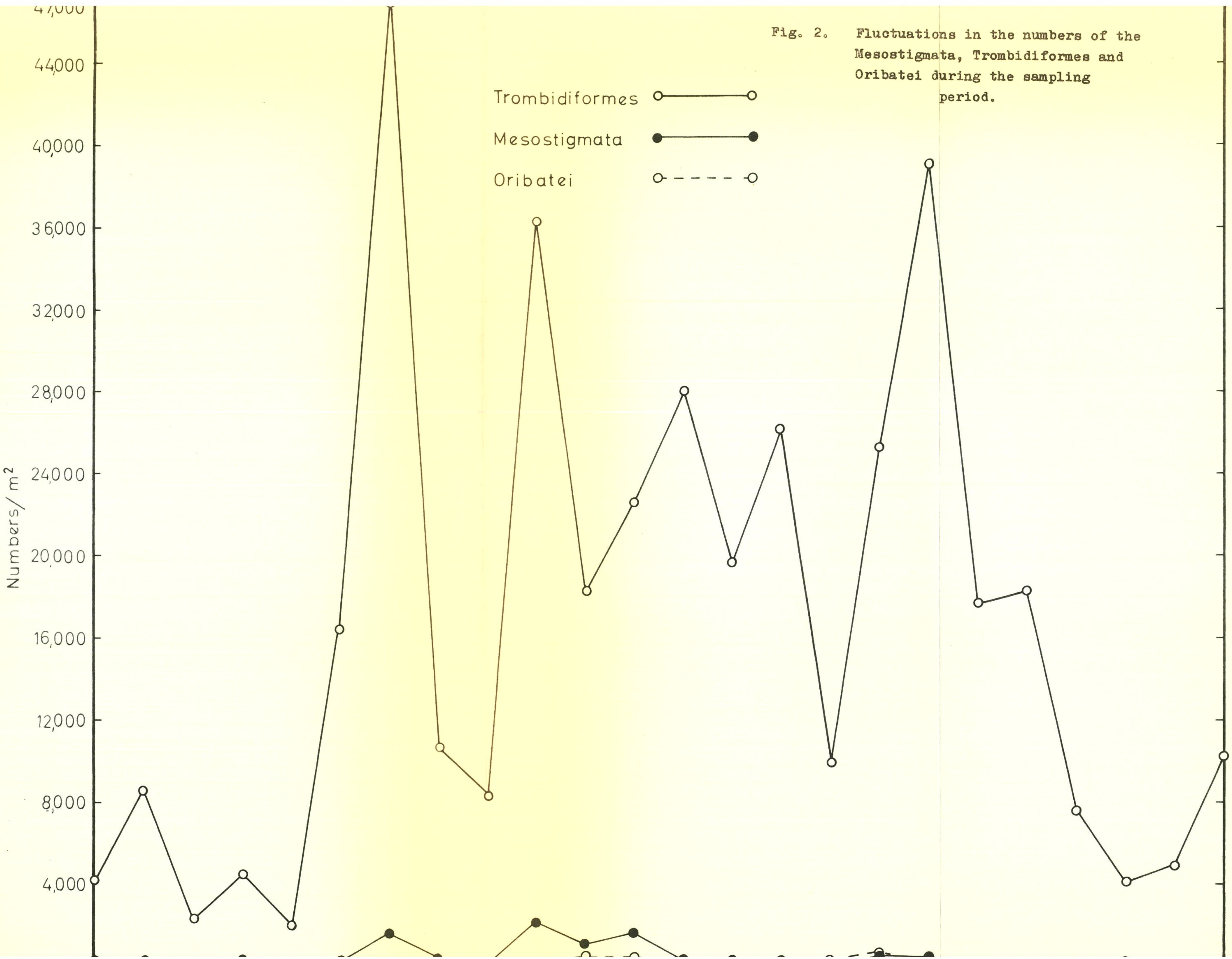


Fig. 2. Fluctuations in the numbers of the Mesostigmata, Trombidiformes and Oribatei during the sampling period.

population density for each sampling date for Mesostigmata, Trombidiformes and Oribatei are plotted. From this figure it can clearly be seen that the Trombidiformes were the most numerous in this soil, comprising 94.8 per cent of the total number of Acari collected while the Mesostigmata constituted 3.7 per cent, and the Sarcoptiformes only 1.3 per cent. The highest number of Oribatei recorded during the sampling period was six individuals per sampling unit (2,847 per sq. metre). Oribatei were encountered in only 63 or 17.5 per cent of the sampling units.

7.2 1 MESOSTIGMATA

The highest recorded number of Mesostigmata per sampling unit was 38 (18,031 per sq. metre). Mesostigmatic mites were recorded in 113 or 31.4 per cent of the total number of sampling units, a considerably higher frequency than the Oribatei.

The most numerous species was Protogamasellus sp. a (Aceosejidae), a relatively small, weakly sclerotized eu-edaphic species, which occurred in 74 or 20.5 per cent of the total sampling units and constituted 61.5 per cent of the total Mesostigmata fauna. The larger mites of the family Phytoseiidae were the second most numerous, of which Amblyseius occurred in 24 or seven per cent of the total sampling units and constituted nine per cent of the total Mesostigmata fauna.

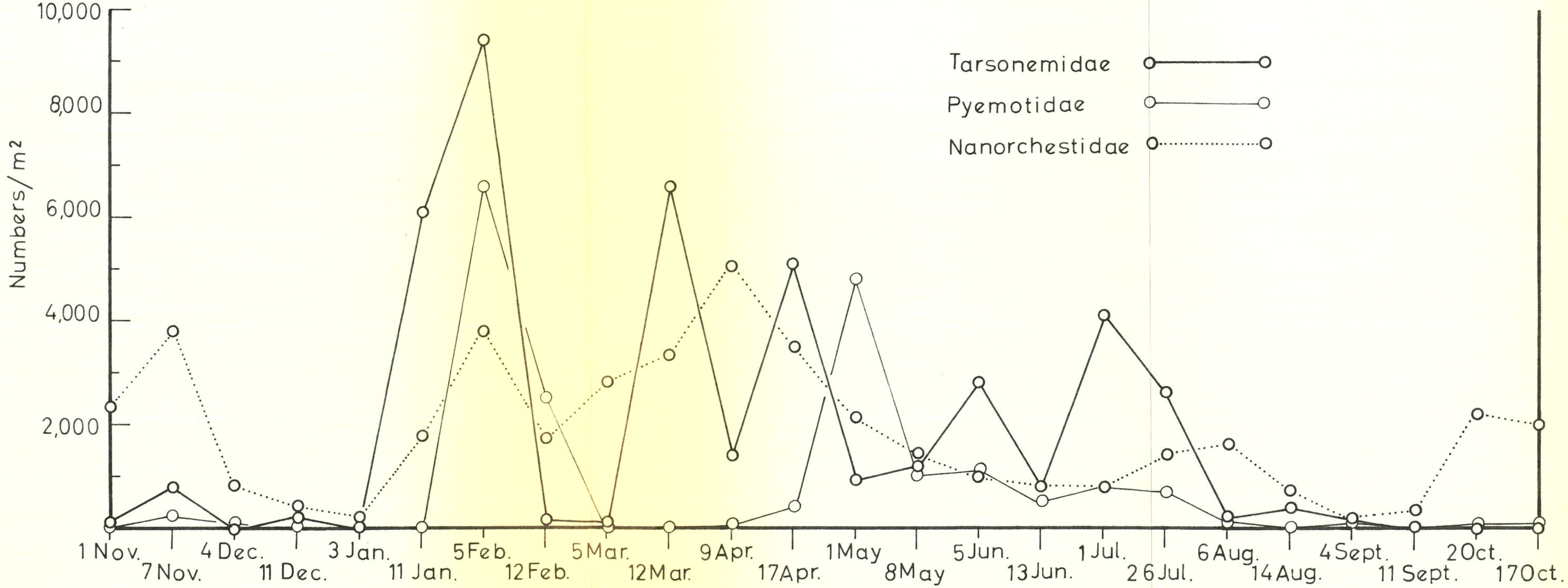
7.2 2 TROMBIDIFORMES/.......

7.2 2 TROMBIDIFORMES

The Trombidiformes were represented by 21 families of which only few were quantitatively important. The numbers per sq. metre of these quantitatively important families are plotted for each sampling date in figures 3 and 4. The family Tydeidae was by far the most numerous, representing 58.8 per cent of the Trombidiformes. The members of this family responsible for the high Trombidiformes and Acari values were Microtydeus and Coccotydeus, which constituted 53.7 per cent of the total trombidiform fauna. These two genera were not separated during sorting, due to their very small size and high numbers which made sorting very difficult. However, it can be mentioned that few Microtydeus were present and that Coccotydeus was mainly responsible for the high numbers. These two genera were present in 301 or 83.3 per cent of the sampling units. A further member of the Tydeidae was Pronematus, of which only five specimens were recorded.

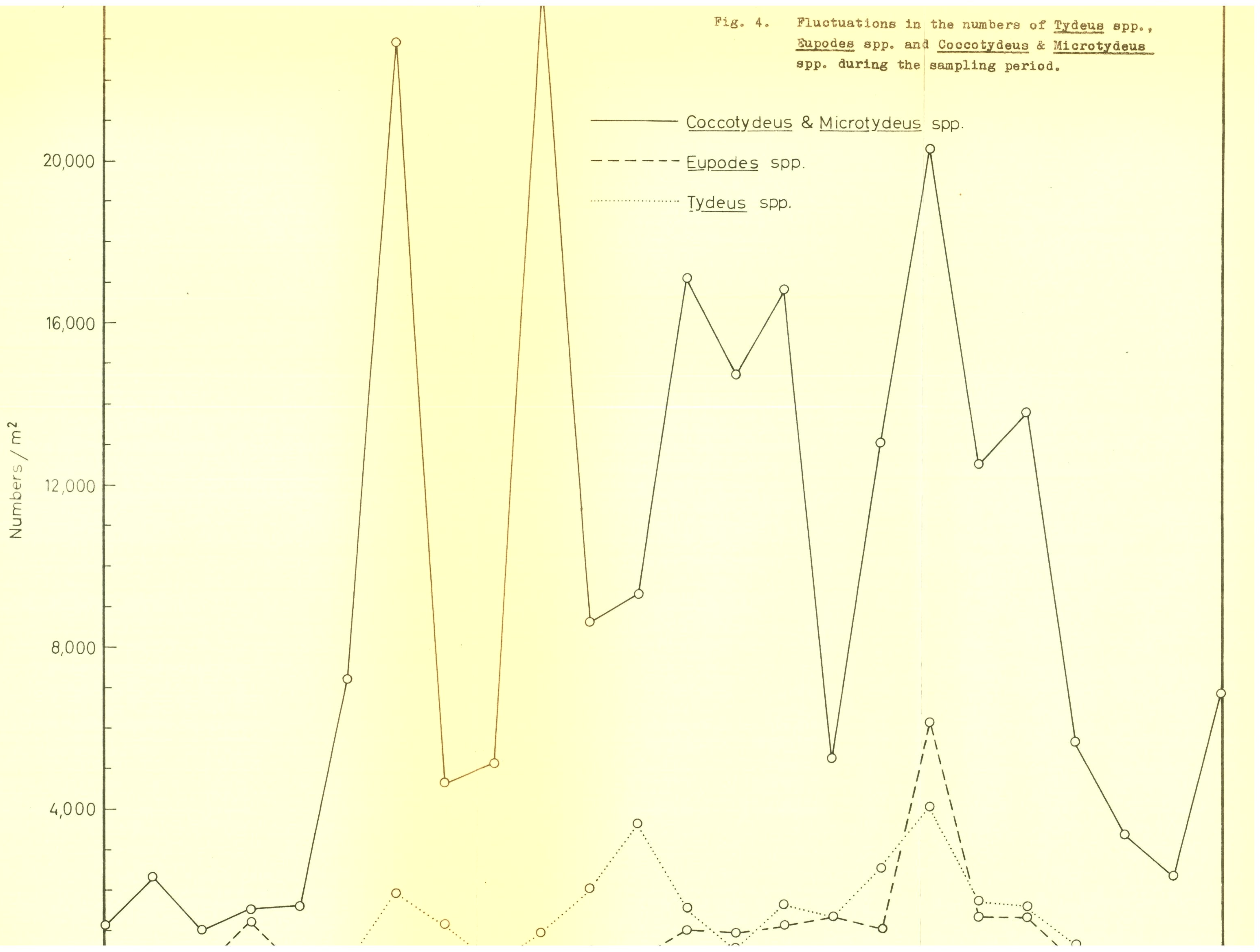
Quantitatively, the Nanorchestidae were the second most important family, represented by two genera, Nanorchestes and Speleorchestes. The Nanorchestidae occurred in 73.3 per cent of the total sampling units and represented 11.9 per cent of the total Trombidiformes collected.

Other important families, arranged numerically according to total numbers collected during the period of investigation, were Tarsonemidae, Eupodidae and Pyemotidae. Although the numbers of Eupodidae were much lower at 6.9 per cent of total Trombidiformes than the Tarsonemidae at 11.5 per cent, Eupodidae appeared in 41.5 per cent of the total sampling units as against the 40.3 per/.......



10,000
8,000
6,000
4,000
2,000
Numbers/ m²
Tarsonemidae
Pyemotidae
Nanorchestidae
1 Nov.
7 Nov.
4 Dec.
11 Dec.
3 Jan.
11 Jan.
5 Feb.
12 Feb.
5 Mar.
12 Mar.
9 Apr.
17 Apr.
1 May
8 May
5 Jun.
13 Jun.
1 Jul.
26 Jul.
6 Aug.
14 Aug.
4 Sept.
11 Sept.
2 Oct.
17 Oct.

Fig. 4. Fluctuations in the numbers of <u>Tydeus</u> spp., <u>Eupodes</u> spp. and <u>Coccotydeus</u> & <u>Microtydeus</u> spp. during the sampling period.



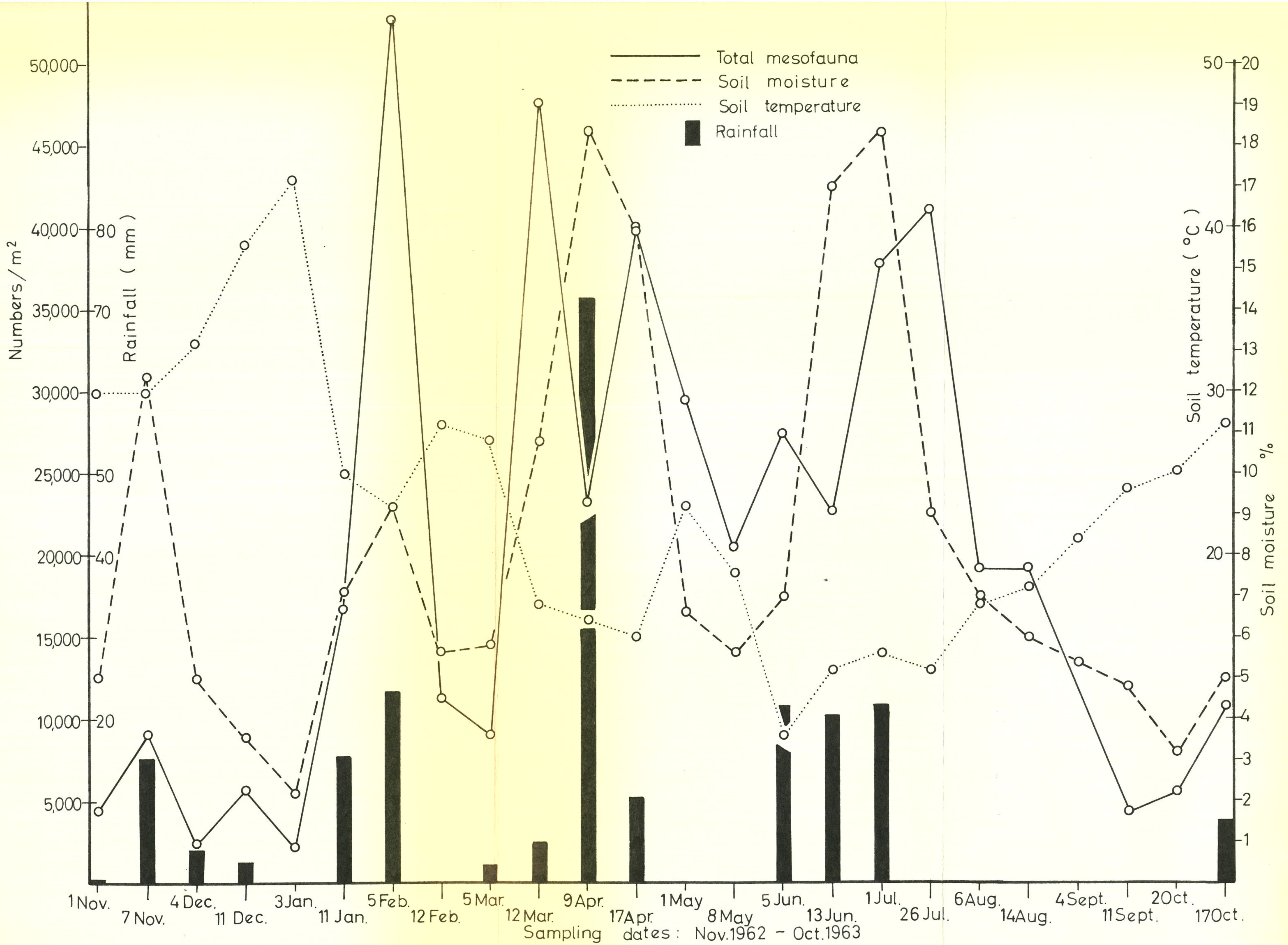
the 40.3 per cent in which the Tarsonemidae were found. The family Pyemotidae, mainly represented by the genus Pygmephorus, occurred in 27.7 per cent of the sampling units and constituted 5.4 per cent of the total Trombidiformes.

The representatives of the Tetranychidae, mostly larvae, were found rather regularly in the soil samples, but they do not belong to the true soil fauna. Of the Raphignathoidea group, species of the genus Ledermülleria may be considered as true soil inhabitants, prefering pasture soils (Kühnelt 1961). According to this author the predatory Eupodidae are also to be found in pasture soils. Cheyletids, which were frequently encountered, are not sensitive to light and they are in no way bound to the soil although regularly found there. The Erythraeidae, which were also frequently collected, are usually found in the surface layer of soil and, as far as is known, they are all predatory and prefer warmth. The Bdellids belong to the regular inhabitants of the litter and top soil layer and feed on other small soil animals (Kühnelt 1961). Rhagidia are generally believed to be carnivorous (Macfadyen, 1954).

7.3 FLUCTUATIONS IN THE SOIL MESOFAUNA

In fig. 5 the number of soil mesofauna per square metre for each sampling date is plotted in a graph against the soil temperature, percentage soil moisture, and the rainfall. Commencing at a very low level on November 1st, 1962, a slight increase in the mesofauna was registered on November 7th. A dry period followed, and high temperatures prevailed until January 11th. This period was characterised by

low numbers/.....



Total mesofauna
Soil moisture
Soil temperature
Rainfall
Numbers / m²
Rainfall (mm)
Soil temperature (°C)
Soil moisture %
50,000
45,000
40,000
35,000
30,000
25,000
20000
15,000
10,000
5,000
80
70
50
40
20
50
40
30
20
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
1 Nov.
7 Nov.
4 Dec.
11 Dec.
3 Jan.
11 Jan.
5 Feb.
12 Feb.
5 Mar.
12 Mar.
9 Apr.
17 Apr.
1 May
8 May
5 Jun.
13 Jun.
1 Jul.
26 Jul.
6 Aug.
14 Aug.
4 Sept.
11 Sept.
20 Oct.
17 Oct.
Sampling dates : Nov. 1962 – Oct. 1963

low numbers of organisms. The lowest number (2,087.8 per sq. metre) during the period of investigation was recorded on January 3rd, coinciding with the highest soil temperature and lowest percentage soil moisture. This minimum in the population curve was followed by a steep rise (January 11th), reaching a summer maximum on February 5th, the number of organisms recorded on this date being 52,716.9 per sq. metre and the highest for the sampling period. Good rains fell prior to these dates and the soil temperatures remained relatively high. An increase in the populations of Tydeidae, Nanorchestidae and Tarsonemidae in plot A were responsible for the rise in the total population curve. The spring and summer months were characterised by low numbers of organisms except for the February peak which was accompanied by high soil moisture content and lower soil temperatures.

At the beginning of March the organism numbers were still low but a steep rise in the curve was registered on March 12th, which was maintained until the end of August, the last month of winter. During this autumn and winter period minor fluctuations in the soil population curve occurred which might have been caused by changes in the soil moisture as can be seen in figure 5. The relatively dry period from May 1st to June 5th, was accompanied by a slight fall in the population curve. The autumn and winter period was characterised by a fall in the soil temperatures, the lowest being recorded during June, with frequent rain.

Although no rain fell during August, the soil temperatures were still relatively low and coupled with this decrease in soil moisture was the decline in the population curve. A drastic decrease in organism

numbers/......

numbers occurred with the rise of the soil temperatures and the small amount of rain during September and the first few days of October. A small rise in the population density was registered on October 17th, due to a total of 7.3 mm of rain which fell seven days before the date of sampling.

In figure 6 the population curve for Acari is drawn against the soil temperature and total amount of rainfall for the 10 days preceding the dates of sampling. The population curve for Acari in general shows the same trends as the curve for the total mesofauna, except for a steep fall in the curve on June 13th, under apparently favourable conditions. Both the population curve for the mesofauna, and the curve for Acari have a summer maximum on February 5th (48,588.8 Acari per sq. metre) and maxima on March 12th (38,576.9 per sq. metre) and July 26th (39,858 Acari per sq. metre) with minor fluctuations in between. A steep fall in the curve occurs in the dry summer periods with a minimum of Acari numbers on January 3rd (2,040.4 per sq. metre). In figures 5 and 6 the amount of rainfall for 10 days preceding the date of collection is given; no apparent relation could be found between the mesofauna and Acari numbers and the daily amount of rainfall during the period of investigation. The decrease in the population curve on April 9th, and June 13th, under apparently favourable conditions was probably caused by either flooding or poor extraction; 18.8 mm of rain fell during the night before April 9th, and 20.2 mm the day and night before June 13th. On both these occasions the soil was saturated with rainwater. On sampling occasions directly afterwards there was a

rise in/........

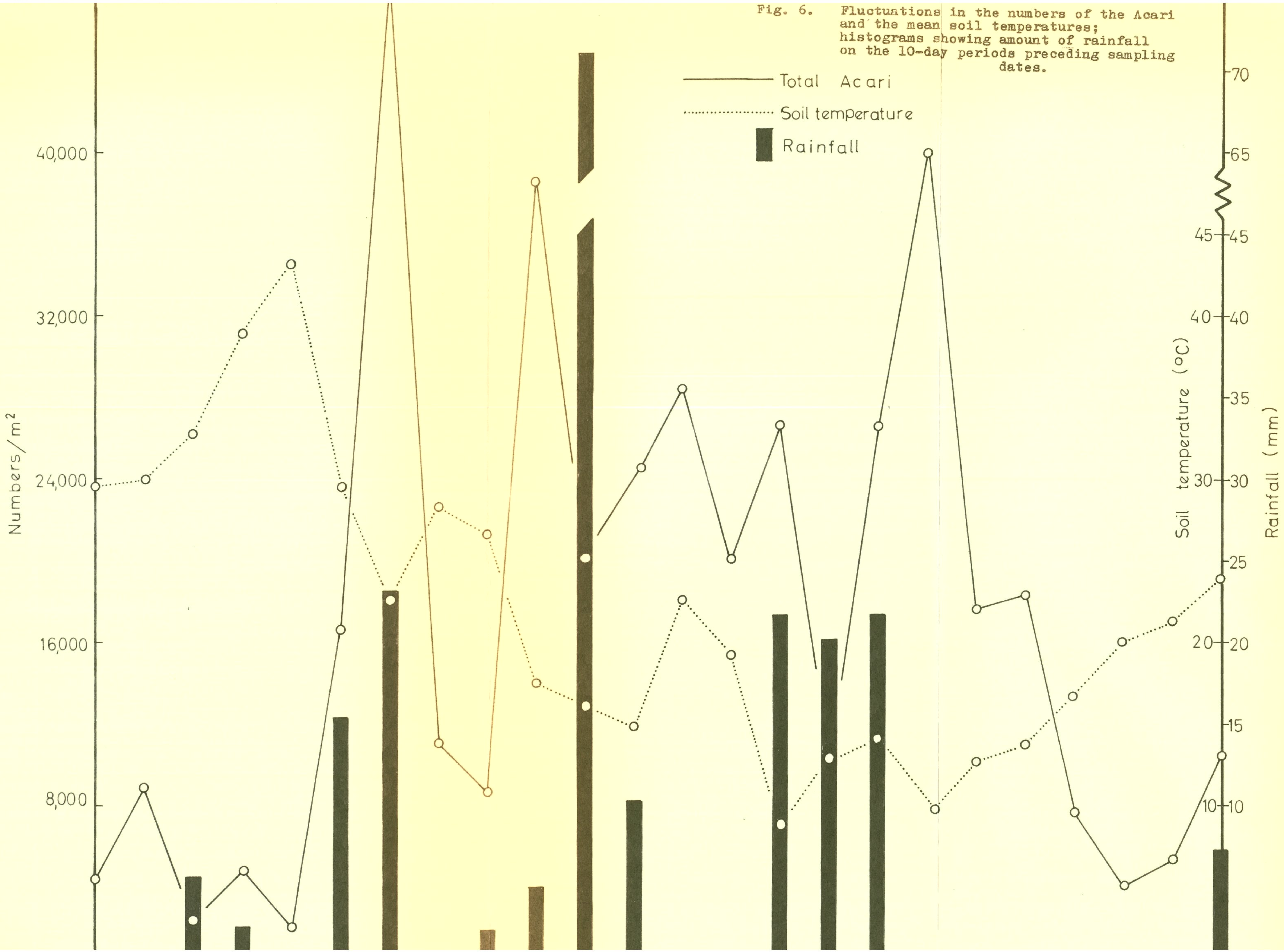


Fig. 6. Fluctuations in the numbers of the Acari and the mean soil temperatures; histograms showing amount of rainfall on the 10-day periods preceding sampling dates.

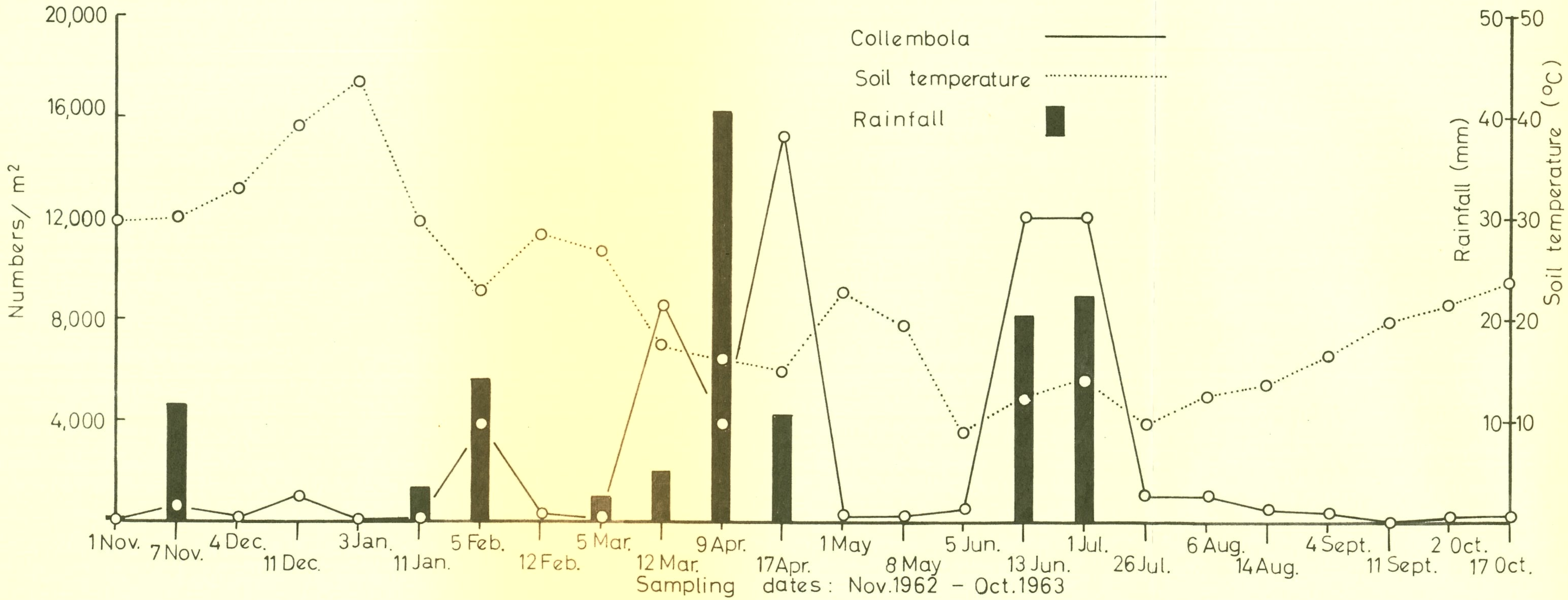
rise in the population numbers. On the day prior to the first sampling date of July (1st) and the morning before sampling time 1.2 mm of rain fell. This amount of rain probably had no adverse effect on the numbers of the soil fauna as was the case on April 9th, and June 13th.

In figure 7 the numbers of Collembola per sq. metre obtained on each sampling date are plotted against soil temperature and rainfall. The histograms for rainfall represent the total amount of rainfall for the five days preceding the date of sampling. No correlation could be found between the Collembola numbers and the total amount of rainfall for the 10 days preceding the date of sampling in contrast to that found in the population curves for Acari and the total mesofauna.

The Collembola were present in very small numbers except for peaks on February 5th (3,701.1 per sq. metre), March 12th (8,588 per sq. metre) and a maximum on April 17th (15,184 per sq. metre). After this maximum, the curve drops to the minimum with a steep rise again on June 13th (11,957.4 Collembola per sq. metre) and on July 1st (11,910 per sq. metre).

Population curves were drawn for the quantitatively most important families and genera. These are the families Pyemotidae, Tarsonemidae and Nanorchestidae (figure 3), and the genera Coccotydeus & Microtydeus, Tydeus (Tydeidae) and Eupodes (Eupodidae) (fig. 4). Coccotydeus and Microtydeus, the most abundant species, showed wide fluctuations with maxima on February 5th (22,918.4 per sq. metre), March 5th (24,721.5 per sq. metre) and July 26th (20,261.2 per sq. metre). The

low numbers/......



Numbers/ m²
20,000
16,000
12,000
8,000
4,000
Collembola
Soil temperature
Rainfall
Rainfall (mm)
Soil temperature (°C)
50
40
30
20
10
1 Nov.
7 Nov.
4 Dec.
11 Dec.
3 Jan.
11 Jan.
5 Feb.
12 Feb.
5 Mar.
12 Mar.
9 Apr.
17 Apr.
1 May
8 May
5 Jun.
13 Jun.
1 Jul.
26 Jul.
6 Aug.
14 Aug.
4 Sept.
11 Sept.
2 Oct.
17 Oct.
Sampling dates : Nov. 1962 – Oct. 1963

low numbers on June 13th, were probably caused by either flooding or poor extraction.

It seems as if the Nanorchestidae, and in particular Speleorchestes sp., as well as the Tydeidae have the greatest tolerance for extreme environmental conditions such as low moisture content of the soil and high soil temperatures. The population curve for Nanorchestidae does not show wide fluctuations. After relatively high numbers of Nanorchestidae were encountered at the beginning of the investigation, there was a decrease in the population to a minimum on January 3rd, followed by an increase to an autumn maximum on April 9th (5,124.6 per sq. metre). After this date there was a gradual decrease to a spring minimum on September 4th, followed again by an increase towards October, 1963.

The Tydeidae (Coccotydeus and Microtydeus excluded) also did not show wide fluctuations in the population density curve. Low numbers were recorded during the spring and summer months but there was a gradual increase during autumn, reaching a winter maximum (6,073.6 per sq. metre) on July 26th after which there was again a gradual decrease towards spring.

The Eupodidae (Eupodes spp.) were generally present in higher numbers during autumn and winter but three peaks could clearly be observed i.e. on February 5th (1,898 per sq. metre), April 17th (3,558.8 per sq. metre) and July 26th (4,033.3 per sq. metre). The samples collected on these dates contained many juvenile forms.

The population/.......

The population curves for Tarsonemidae and Pyemotidae (Tarsonemini) show wide fluctuations, both reaching maxima in summer on February 5th (Pyemotidae, 6,595.6 per sq. metre and Tarsonemidae, 9,442.6 per sq. metre). Except for a second peak in the population curve during May (4,745 per sq. metre) the Pyemotidae were present in relatively low numbers as compared with the Tarsonemidae.

7.4 VERTICAL DISTRIBUTION OF THE SOIL MESOFAUNA

Although only the soil animals present in the upper 5 cm of soil had been collected for the purpose of this study, attention was also given to the vertical distribution of the mesofauna in the soil.

A series of soil cores was taken in the autumn on March 8th, 1964, following the main census. This single series was collected on plot A and consisted of 7 samples (A, B, C, D, E, F and G.) Each sample consisted of two sampling units, the first being the 0-5 cm layer and the second the 5-10 cm layer. The second sampling unit was taken underneath the first. The soil temperatures and soil samples for the determination of the soil moisture were taken simultaneously with the sampling units. The numbers of soil animals recovered in the series of samples and the soil temperatures and percentage soil moisture content are tabulated in table 8. In figure 8 the total number of organisms per sampling unit for both soil layers is illustrated by means of histograms. It is clearly shown that the highest concentration of the soil mesofauna was in the 5-10 cm layer and in

both samples/......

TABLE 8

Vertical distribution of the soil mesofauna in a single series of soil samples.

(The number of organisms per sampling unit of 105.37 cc).

Sample	Depth (cm)	Trombidi-formes	Mesostig-mata	Sarcopti-formes	Collem-bola	Other Insects	Total per sampling unit	Number per m^2	Soil temp. (^oC) at 5 cm depth	% Soil moisture content
A	0-5	38	-	-	-	1	39	18,505.5	24.2	7.4
	5-10	72	1	-	-	1	74	35,113.0		8.6
B	0-5	87	1	-	-	15	103	48,873.5	30.0	6.8
	5-10	130	-	1	-	6	137	65,006.5		8.6
C	0-5	57	-	-	-	-	57	27,046.5	31.0	7.0
	5-10	101	2	-	-	-	103	48,873.5		
D	0-5	26	1	-	-	1	28	13.286.0	30.0	5.5
	5-10	78	-	-	1	1	80	37,960.0		
E	0-5	28	-	1	2	-	31	14,709.5	29.2	6.7
	5-10	65	-	-	-	-	65	30,842.5		
F	0-5	15	1	-	1	-	17	8,066.5	29.0	
	5-10	36	2	2	-	-	40	18,980.0		
G	0-5	38	-	-	-	-	38	18.031.0	34.6	4.7
	5-10	126	5	2	-	-	133	63.108.5		

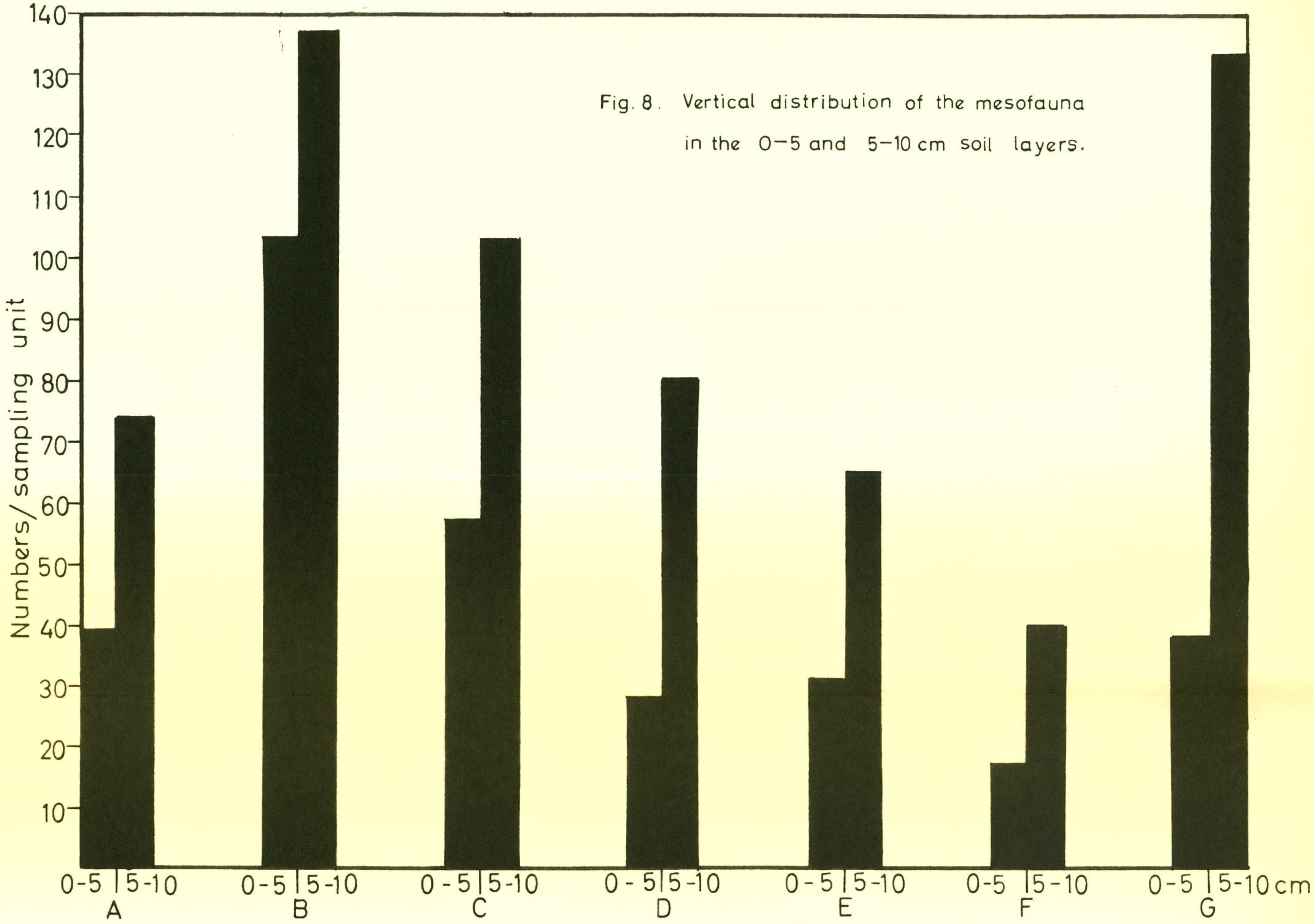


Fig. 8. Vertical distribution of the mesofauna in the 0–5 and 5–10 cm soil layers.

both samples A and B the percentage soil moisture content was also higher in this layer.

The high concentration of the soil animals in the lower soil layer could reflect the permanent distribution pattern of the fauna of this soil, or it could be the result of a temporary migration of the animals to escape unfavourable conditions in the uppermost layer where the moisture content of the soil was lower and the soil temperature relatively high. To draw any conclusions on this point, however, samples from both layers should be taken both throughout the day when different conditions prevail, and throughout the year. Belfield (1956), for example, in studying the vertical distribution of Arthropoda (including mites and Collembola) in the top 18 in. of a West African grassland soil, found an increase in the density of arthropods as the season became wetter; the increase was the result of a very steep, rise in the number of animals present in the top 2 in. (5 cm). He found that the majority of the animals were below 6 in. during the dry season and in the top 6 in. during the wet season.

7.5 EFFECT OF PLOUGHING

As a result of the ploughing of plot C at the beginning of March, 1963, it was possible to study the effect of ploughing on the density of the soil fauna present in the first 5 cm of soil.

Before ploughing, the total number of organisms collected on plot C and the total mean number collected on plots A and B were approximately the same (1,062.0 and/.....

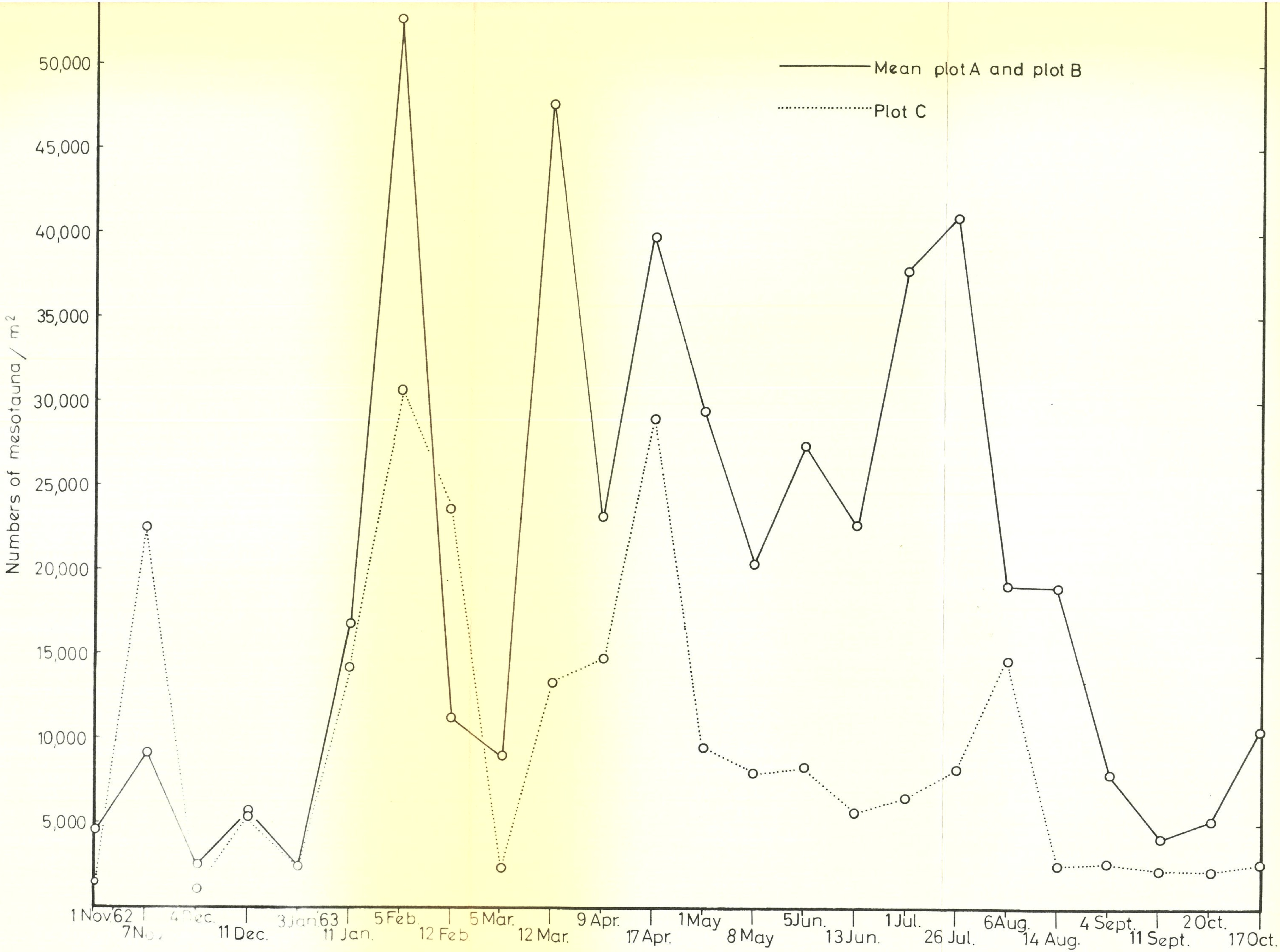
(1,062.0 and 1,132.5 respectively) but the total numbers collected after the ploughing showed a great difference, with the numbers from plot C greatly reduced (3,862 mean for plots A and B, and 1,392 for plot C).

In figure 9 the mean numbers of the soil fauna per sq. metre for plots A and B for each sampling date are compared to those for plot C. The reduction of the numbers from plot C after ploughing is clearly illustrated. The population curve for plot C shows a marked drop on March 5th (2,372.5 per sq. metre), directly after ploughing, compared to that of the mean for plots A and B (9,015.5 per sq. metre). However, the number of organisms in plot C increased gradually on the three successive sampling dates until a second maximum for the sampling period was reached on April 17th, 1963 (29,134.3 per sq. metre), a period characterised by good rains and consequently high soil moisture with apparently favourable temperatures; notwithstanding this rise in the population curve, the numbers of plot C never exceeded those of the other two plots in the period after ploughing.

A sharp fall in the number of organisms in plot C followed the high peak on April 17th, i.e. from 29,134 organisms per sq. metre to 9,490 organisms per sq. metre; these low numbers prevailed until the termination of the sampling period, except for a small rise in the population curve on August 6th. The percentage water content for plot C showed no marked differences from the other two plots though during dry periods it was often lower.

The ploughing of plot C resulted in the complete

disappearance/......


Mean plot A and plot B
Plot C
Numbers of mesofauna / m²
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
1 Nov.62
7 Nov.
4 Dec.
11 Dec.
3 Jan.63
11 Jan.
5 Feb.
12 Feb.
5 Mar.
12 Mar.
9 Apr.
17 Apr.
1 May
8 May
5 Jun.
13 Jun.
1 Jul.
26 Jul.
6 Aug.
14 Aug.
4 Sept.
11 Sept.
2 Oct.
17 Oct.

disappearance from the soil samples of juvenile forms and adults of the phytophagous mites previously regularily encountered. These were the members of the Tetranychidae and Eriophyidae which are included under the edaphon. The disappearance of these mites alone could not cause the reduction of the soil population for they were present in only relatively low numbers. As a result of the ploughing of plot C, the Collembola were also reduced to very low numbers compared to those of plots A and B.

The destructive effect of ploughing on the soil fauna has been observed by various authors e.g. Thompson (1924), Hammer (1949), Kühnelt (1961) and Kevan (1962). Hammer, in studying the effects of agricultural practice on a Danish farm, found a serious reduction in soil animals, especially mites and collemboles, due to ploughing but after a period of undisturbed development the soil fauna recovered and reached a maximum. The factors in ploughing which cause the reduction of the numbers of soil animals, are according to Thompson (1924), apart from direct injuries to larvae and the larger forms, the disturbance of the soil, resulting in increased evaporation of moisture from the surface, and consequently a temporary drought with a particularly detrimental effect on Collembola. Kühnelt (1961) states that the factor most decisively affecting the life of soil animals is the mechanical working of the soil, causing the destruction of the original pore space system and injuring the larger members of the soil mesofauna (Oribatei and Collembola); in some instances it was found that the population declined to one-tenth as a result of ploughing.

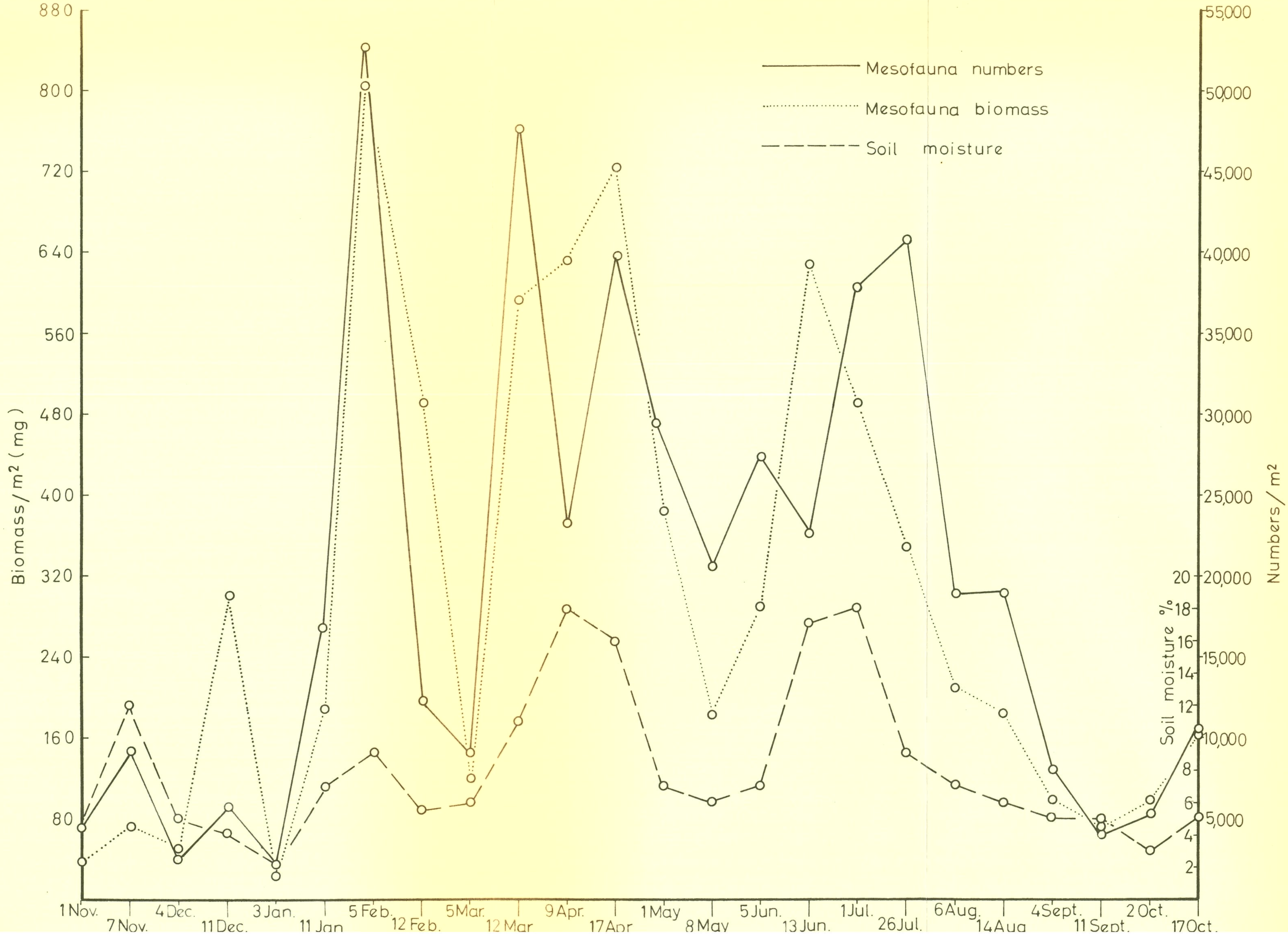
7.6 BIOMASS OF THE SOIL MESOFAUNA

Biomass can, for purposes of this study, be defined as the total weight of the population per unit area. The biomass, whereby both size and numbers are integrated, was determined for each of the various groups of animals in the soil to get an idea of the energy status or energy flow in the soil (see table 13).

The biomass of the following groups were determined: total soil mesofauna, Acari, Mesostigmata, Trombidiformes, Sarcoptiformes, Collembola, other insects and also the quantitatively important families and species of the Trombidiformes and Mesostigmata. The numbers in the figures are the averages for plots A and B and are expressed as the biomass per sq. metre. The biomass values which were used for individual species to calculate the biomass of the populations, were those obtained by Olivier & Ryke (in press) and Loots & Ryke (in press) by weighing the live specimens on a micro-balance. These values are tabulated in table 9.

The biomass of the total soil mesofauna present in the upper 5 cm of soil is plotted in figure 10, together with the population numbers of the total soil mesofauna and the percentage moisture content of the soil obtained for each sampling date. When the curves for population density and biomass are compared, it will be seen that there are no major differences between these curves; both have their maxima and minima during the same periods of the year. However, the curve for biomass fluctuates less than that for population density. According to figure 10 there seems to exist a close correlation between biomass numbers and percentage soil

moisture./.......



Mesofauna numbers
Mesofauna biomass
Soil moisture
Biomass/m² (mg)
880
800
720
640
560
480
400
320
240
160
80
Numbers/m²
55,000
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
Soil moisture %
20
18
16
14
12
8
6
4
2
1 Nov.
7 Nov.
4 Dec.
11 Dec.
3 Jan.
11 Jan
5 Feb.
12 Feb.
5 Mar.
12 Mar
9 Apr.
17 Apr
1 May
8 May
5 Jun.
13 Jun.
1 Jul.
26 Jul.
6 Aug.
14 Aug
4 Sept.
11 Sept.
2 Oct.
17 Oct.

TABLE 9

Organism	Mean biomass per individual (mg)
Trombidiformes	0.0130
Eriophyidae	0.0010
Scutacaridae	0.0060
Pygmephorus	0.0040
Tarsonemus	0.0040
Eupodes	0.0140
Spinibdella	0.0140
Rhagidia	0.0140
Tydeus	0.0135
Coccotydeus	0.0015
Cunaxa	0.0140
Nanorchestes	0.0020
Speleorchestes	0.0020
Molothrognathus	0.0180
Stigmagnathus	0.0060
Ledermülleria	0.0160
Raphignathus	0.0020
Aplonobia	0.0460
Monoceronychus	0.0400
Oligonychus	0.0260
Schizotetranychus	0.0140
Linotetranus	0.0120
Cheyletia	0.0020
Abrolophus	0.0400
Trombidiidae	0.0400
Anystidae	0.0130
Pseudocheylidae	0.0020
Mesostigmata	0.0200
Protogamasellus	0.0040
Gamasellodes	0.0180
Antennoseius	0.0240
Cosmolaelaps	0.0080
Gaeolaelaps	0.0200
Androlaelaps	0.0200
Amblyseius	0.0080
Lasioseius	0.0240
Acaridiae	0.0140
Oribatei	0.0133
Collembola	0.0252
Other insects	0.4046
Araneae	0.7500
Myriapoda	1.9500

moisture. Both the highest biomass value (804 mg per sq. metre) and the highest population density of soil mesofauna occur during the summer on February 5th, with peaks in the biomass curve during autumn in April and during winter in June and July. There was a greater fall in the biomass curve than in the population curve during the period from the 1st of May until the 5th of June which was characterised by relatively high soil temperature and low soil moisture content. Very low biomass figures were recorded during the dry summer and spring months, lower than for the dry autumn and winter periods.

In figure 11 the biomass is plotted for the Collembola, other insects and Acari for each sampling date. The Insecta, other than Collembola, were present in very small numbers as compared with the total fauna (only 2.2 per cent), but as can be observed in the figure this group has the greatest total biomass (53,371.2 mg per sq. metre) of all the groups of animals. The biomass curve shows wide fluctuations throughout the period of study, with peaks in late summer on February 5th and February 12th (480 and 422.4 mg per sq. metre respectively), which are the highest biomass values for all the soil animal groups recorded during the period of investigation; peaks were also registered during autumn and early winter.

Although the total numbers of Collembola (13.1 per cent of the total soil mesofauna) were lower than those of the Acari (84.6 per cent of the total mesofauna) the total biomass for Collembola nearly equalled that of the Acari (19,478.6 and 21,477.8 mg per sq. metre respectively). However, the Acari probably showed greater activity throughout the year than the Collembola

because the/......

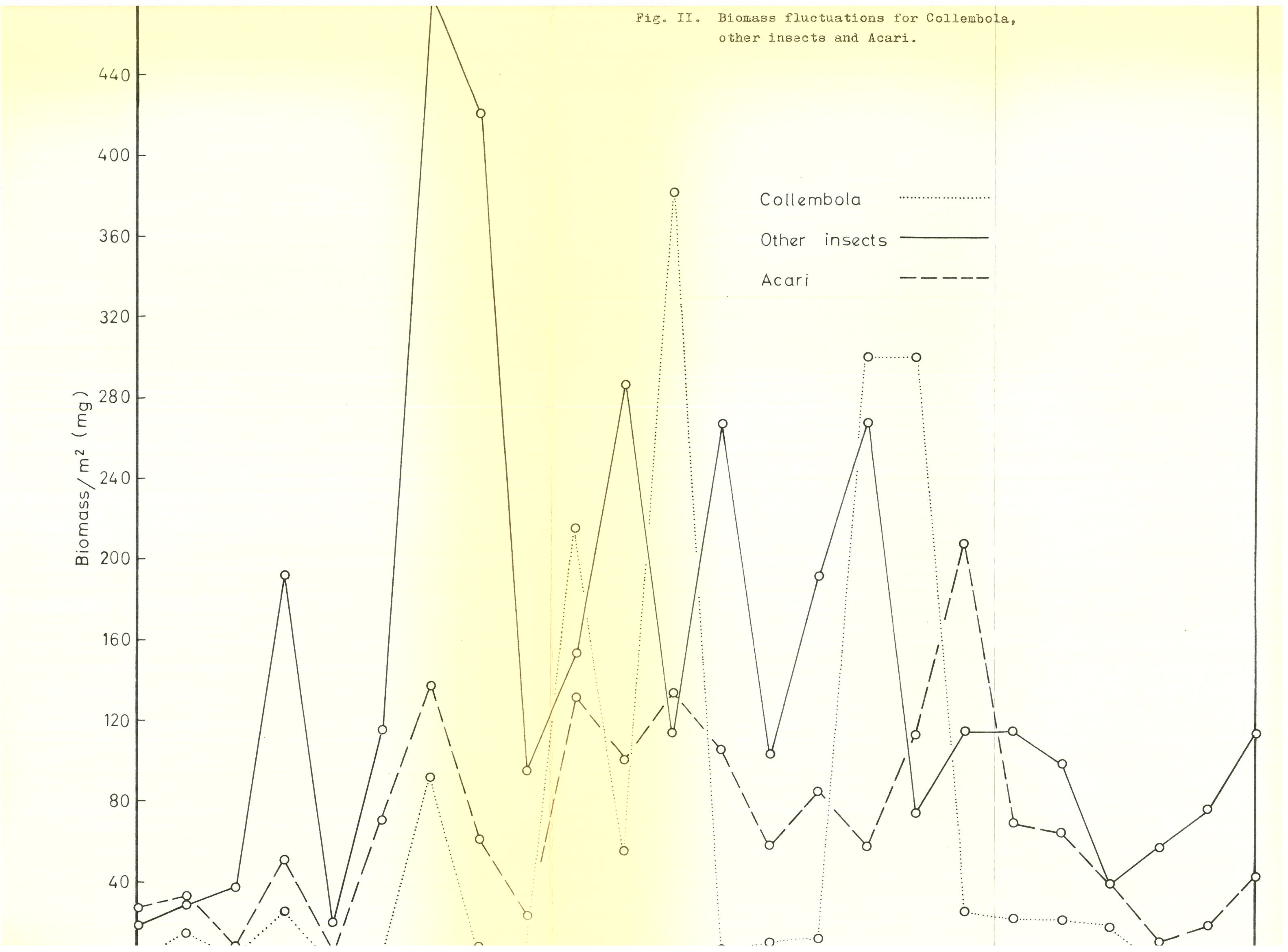


Fig. II. Biomass fluctuations for Collembola, other insects and Acari.

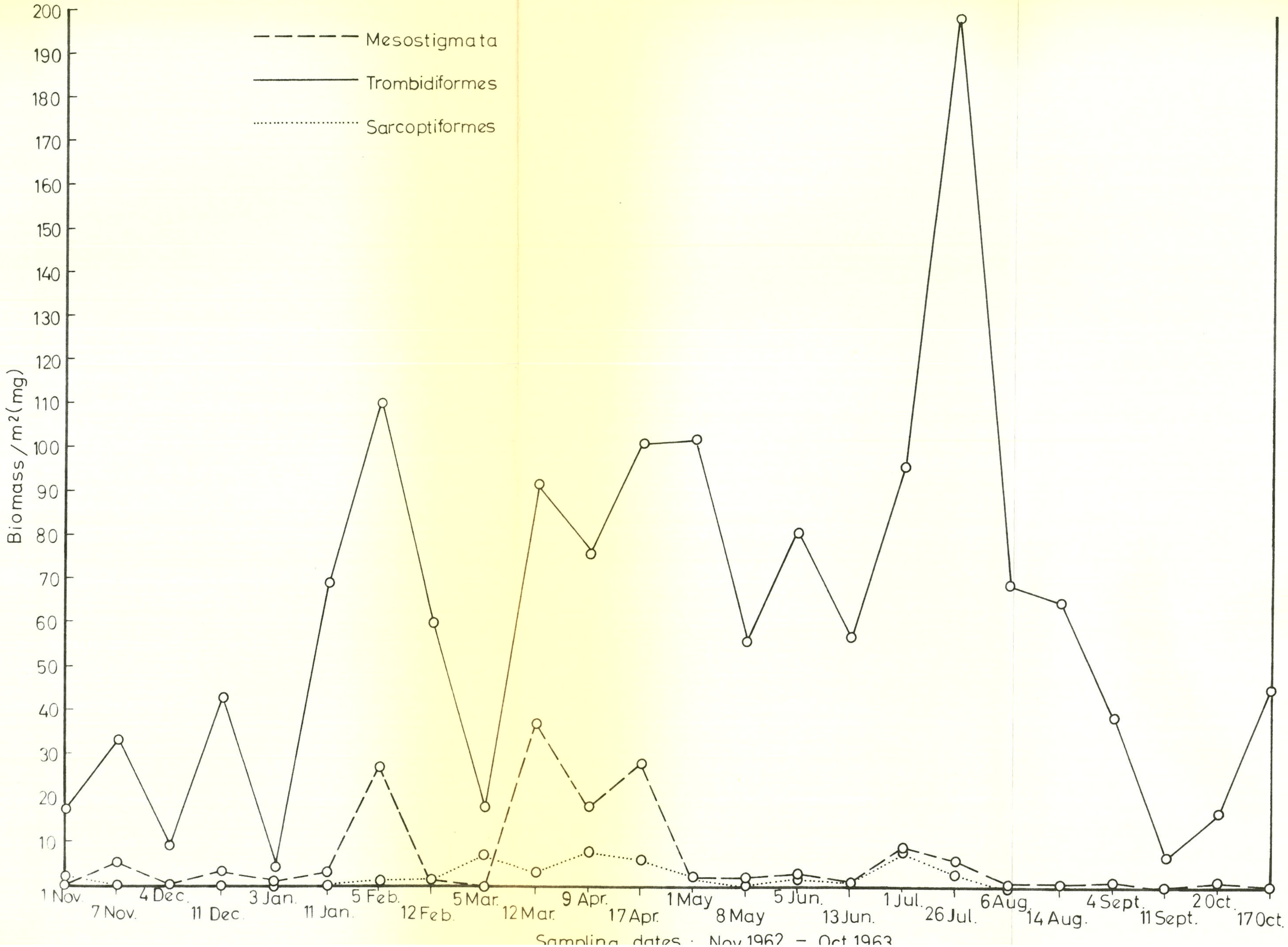
because the biomass curve for Acari is maintained more or less at a high level while the curve of the Collembola biomass has maxima under apparently favourable conditions and falls to a very low level after a short rainless period (see figure 11).

Contrary to the biomass curve for the total mesofauna population, where the highest biomass was recorded during summer, the Acari has its highest biomass value in winter on July 26th, notwithstanding the fact that this period was not characterised by the highest number of Acari, which was actually recorded in summer on February 5th (figure 11). The Acari which mainly contributed to this high biomass figure (52 mg per sq. metre) were the relatively larger species i.e. Tydeus spp. of the family Tydeidae and Eupodes spp. of the family Eupodidae, the populations of which reached their maxima on the 26th of July. The high numbers of Acari recorded on February 5th, consisted mainly of species of smaller biomass i.e. Coccotydeus, Microtydeus, Tarsonemus and Pygmephorus spp.

The biomass values for the Acari suborders Mesostigmata, Trombidiformes and Sarcoptiformes for each sampling date are plotted in figure 12. Not only were the population numbers of Mesostigmata and Oribatei low in this soil but also their total biomass (626.7 and 631.1 mg per sq. metre) was far less than that of the Trombidiformes (19,961 mg per sq. metre).

The biomass of the Mesostigmata species most frequently encountered i.e. Protogamasellus spp. (Aceosejidae) and Phytoseiidae spp., as well as the biomass of the total Mesostigmata, are plotted in

figure 13/......


Mesostigmata
Trombidiformes
Sarcoptiformes
Biomass / m2 (mg)
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
1 Nov.
7 Nov.
4 Dec.
11 Dec.
3 Jan.
11 Jan.
5 Feb.
12 Feb.
5 Mar.
12 Mar.
9 Apr.
17 Apr.
1 May
8 May
5 Jun.
13 Jun.
1 Jul.
26 Jul.
6 Aug.
14 Aug.
4 Sept.
11 Sept.
2 Oct.
17 Oct.
Sampling dates : Nov 1962 – Oct 1963

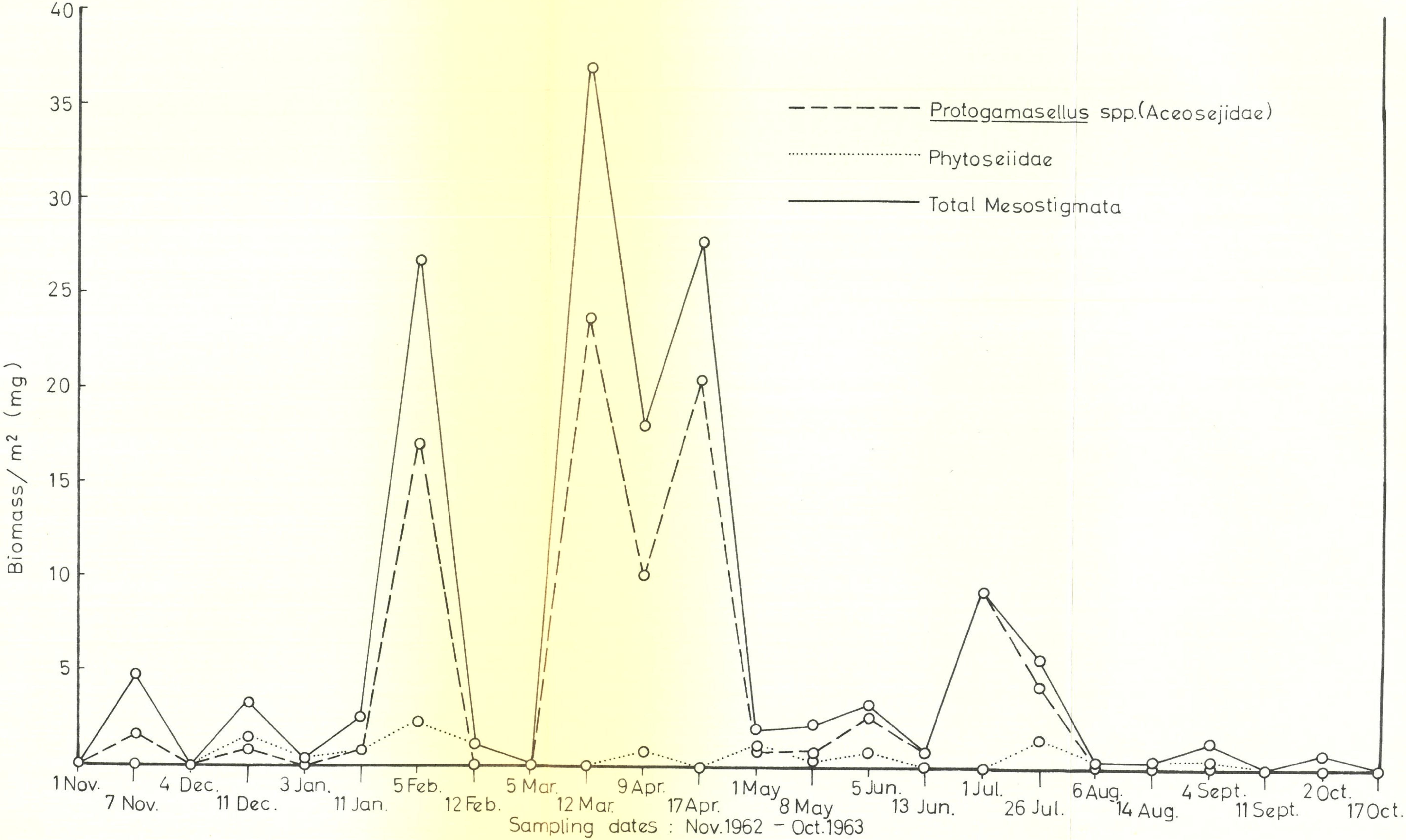

Biomass/ m² (mg)
40
35
30
25
20
15
10
5
Protogamasellus spp.(Aceosejidae)
Phytoseiidae
Total Mesostigmata
1 Nov.
7 Nov.
4 Dec.
11 Dec.
3 Jan.
11 Jan.
5 Feb.
12 Feb.
5 Mar.
12 Mar.
9 Apr.
17 Apr.
1 May
8 May
5 Jun.
13 Jun.
1 Jul.
26 Jul.
6 Aug.
14 Aug.
4 Sept.
11 Sept.
2 Oct.
17 Oct.
Sampling dates : Nov.1962 – Oct.1963

figure 13. It can clearly be seen that the biomass in the course of the year was low except for relatively high values during the months of February, March and April. Protogamasellus sp. a, the relatively small eu-edaphic species, contributed mainly to the biomass of the mesostigmatid population, due to their relatively high numbers in the samples.

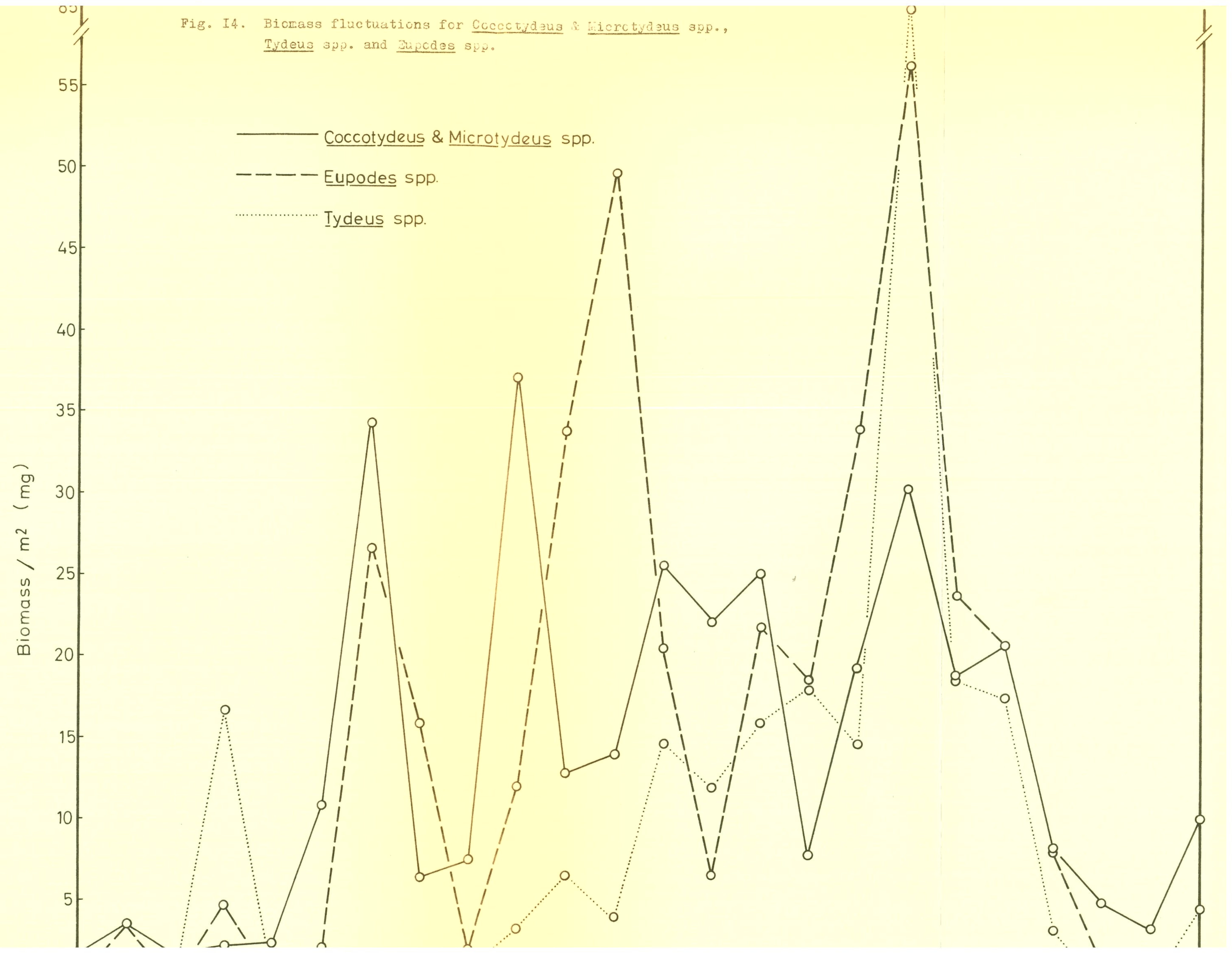
In figures 14 and 15 the biomasses of the quantitatively most important families of Trombidiformes are plotted for each sampling date. These families, in descending order of total biomass figures expressed as mg per sq. metre, were the following:- Tydeidae: Tydeus spp. (3,354.7), Microtydeus and Coccotydeus spp. (3,701.4); Eupodidae: Eupodes spp. (4,543.8); Tarsonemidae: Tarsonemus sp. (2,192.2); Tetranychidae (1,708.2); Nanorchestidae (1,116.0); Erythraeidae (1,112.2) and Pyemotidae (1,023). It will be noted that the Tetranychidae and Erythraeidae, which were present in relatively low numbers throughout the period of study (total population numbers 64 and 92 respectively), had a relatively high total biomass compared to those families which were present in high numbers.

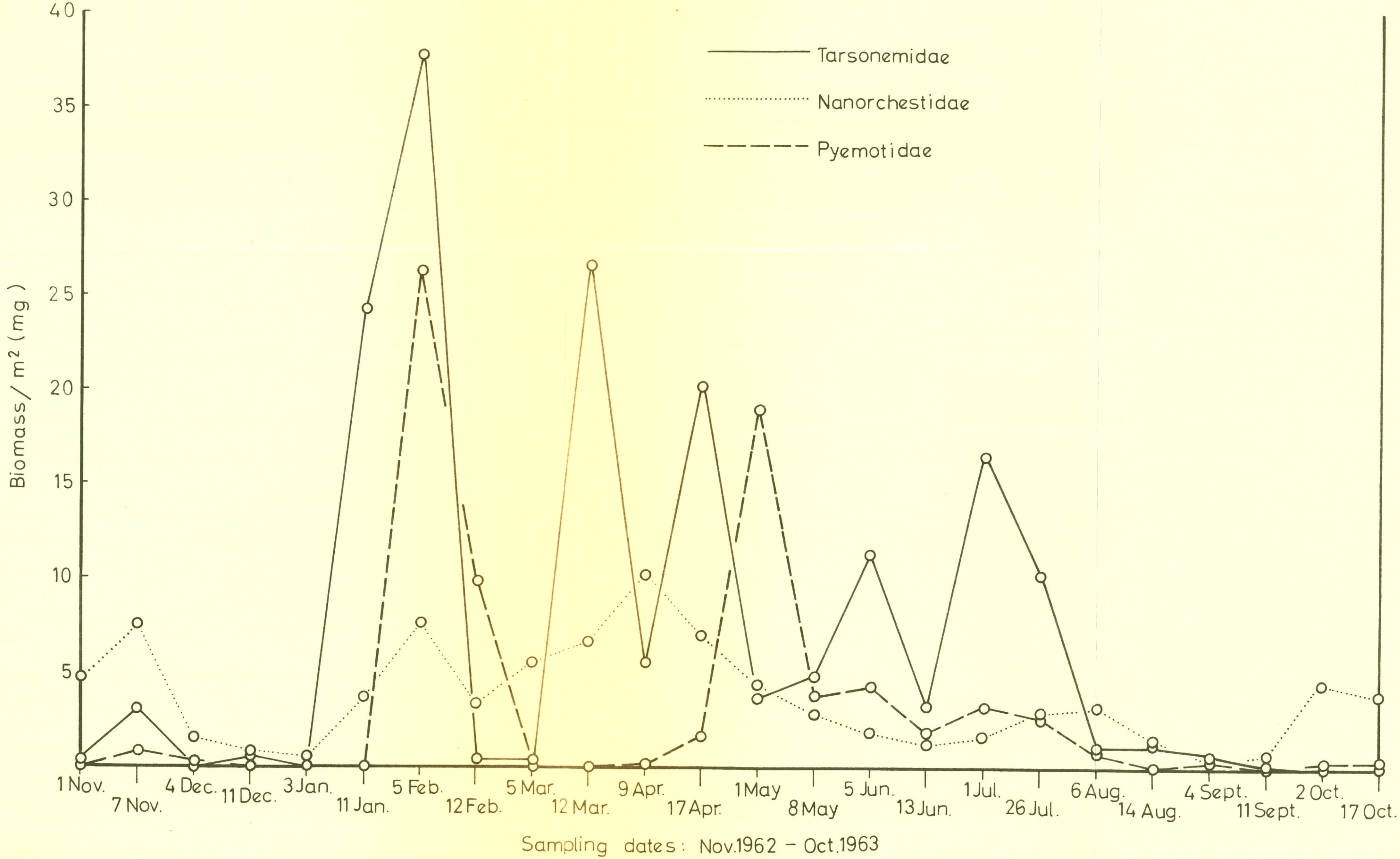
7.7 EFFECT OF THE SOIL TEMPERATURE AND SOIL MOISTURE ON THE SOIL FAUNA

Figure 16 shows the quantitative seasonal changes in the populations of the Acari and Collembola, as well as the water content of the soil at the time of sampling. Judging from this figure and the preceding figures giving the soil temperatures, it is clear that there exists a greater or lesser degree of correlation

between soil/.......

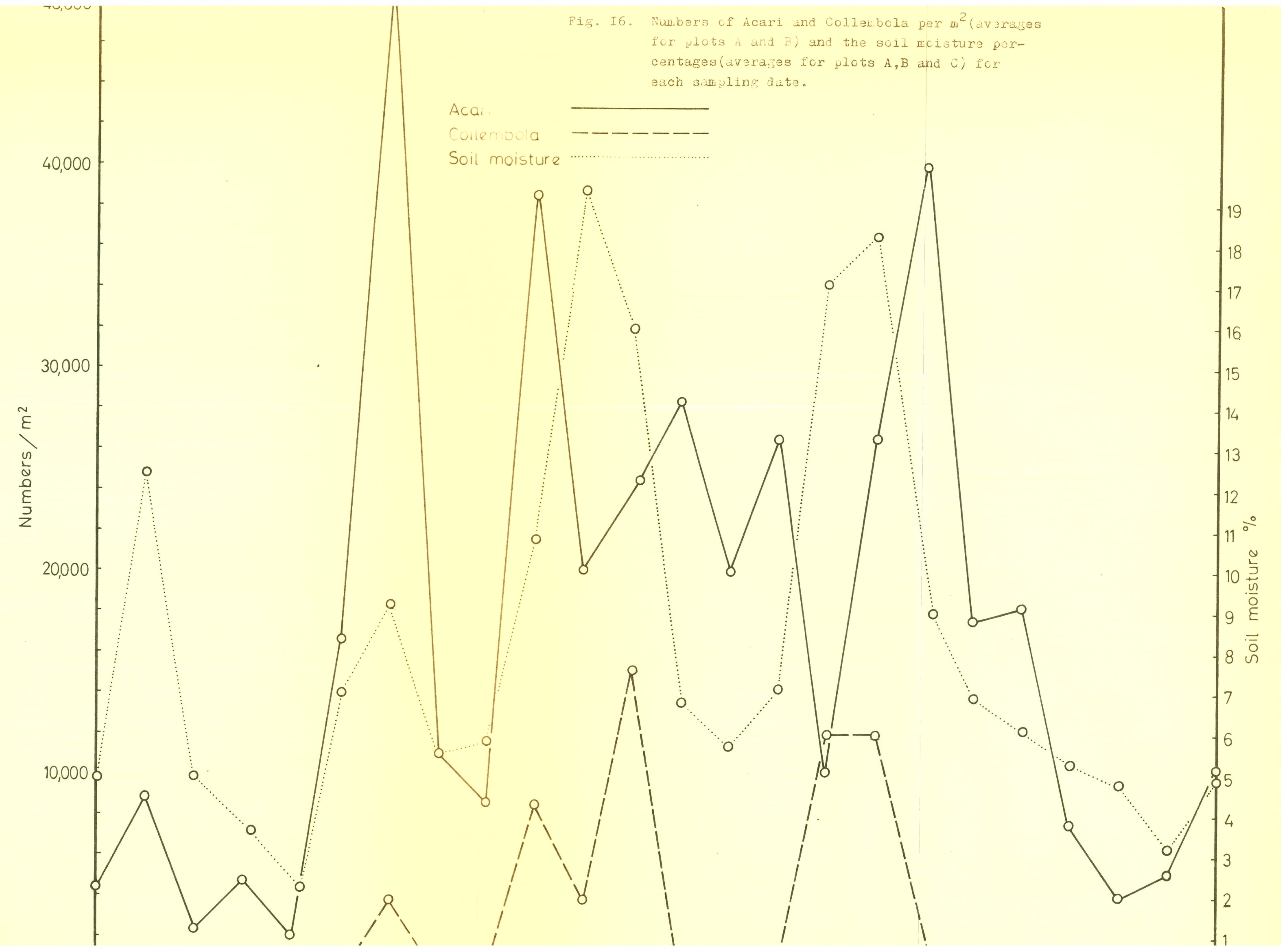
Fig. 14. Biomass fluctuations for Coccotydeus & Microtydeus spp., Tydeus spp. and Eupodes spp.





Tarsonemidae
Nanorchestidae
Pyemotidae
Biomass/ m² (mg)
40
35
30
25
20
15
10
5
1 Nov.
7 Nov.
4 Dec.
11 Dec.
3 Jan.
11 Jan.
5 Feb.
12 Feb.
5 Mar.
12 Mar.
9 Apr.
17 Apr.
1 May
8 May
5 Jun.
13 Jun.
1 Jul.
26 Jul.
6 Aug.
14 Aug.
4 Sept.
11 Sept.
2 Oct.
17 Oct.
Sampling dates: Nov.1962 – Oct.1963

Fig. I6. Numbers of Acari and Collembola per m^2(averages for plots A and B) and the soil moisture percentages(averages for plots A,B and C) for each sampling date.



between soil temperature and soil moisture and the numbers of the soil animals present. The numbers of the soil fauna, water content percentages (table 7) and soil temperatures (table 6) are graphically represented in figures 17 and 18. In figure 17 the soil moisture percentages (the average values for plots A, B and the first four months of C) and in figure 18 the soil temperatures (average values for plots A, B and first four months of C) are plotted against the numbers of soil mesofauna (average values for plots A, B and the first four months of plot C for each sampling date). In the first scatter diagram (figure 17) the points are rather widely dispersed round the line of regression, but they tend to increase along the straight line. The same applies to the points in figure 18 but here, there is a general decrease in the number of animals as soil temperatures increase.

To obtain more precise information on the effect of the above factors on the soil mesofauna, the correlation coefficients (r) were calculated for the soil temperature and soil moisture percentages (averages for plots A, B and the first four months of C) and the numbers of Collembola, Acari and total mesofauna collected on the sampling dates (averages for plots A, B and first four months of C) respectively. The results of these calculations are tabulated in table 10.

From these calculations it is evident that the numbers of the mesofauna in the 0-5 cm layer of soil are to a great extent influenced by the temperature of the soil as well as by the quantity of soil moisture. There exists a positive correlation between the number of organisms and the soil moisture content. This

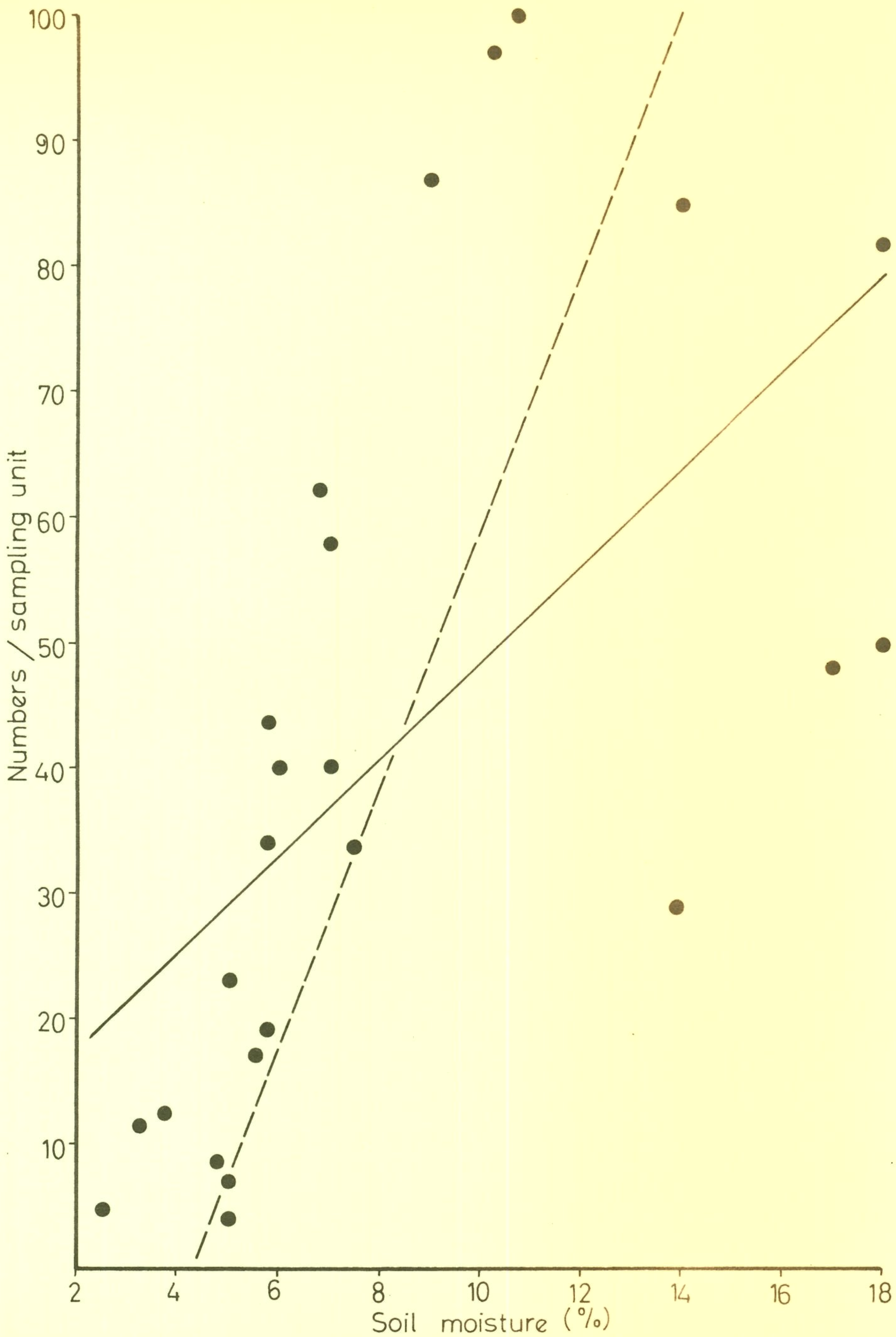


Fig. I7. Scatter diagram of numbers of soil mesofauna and soil moisture.

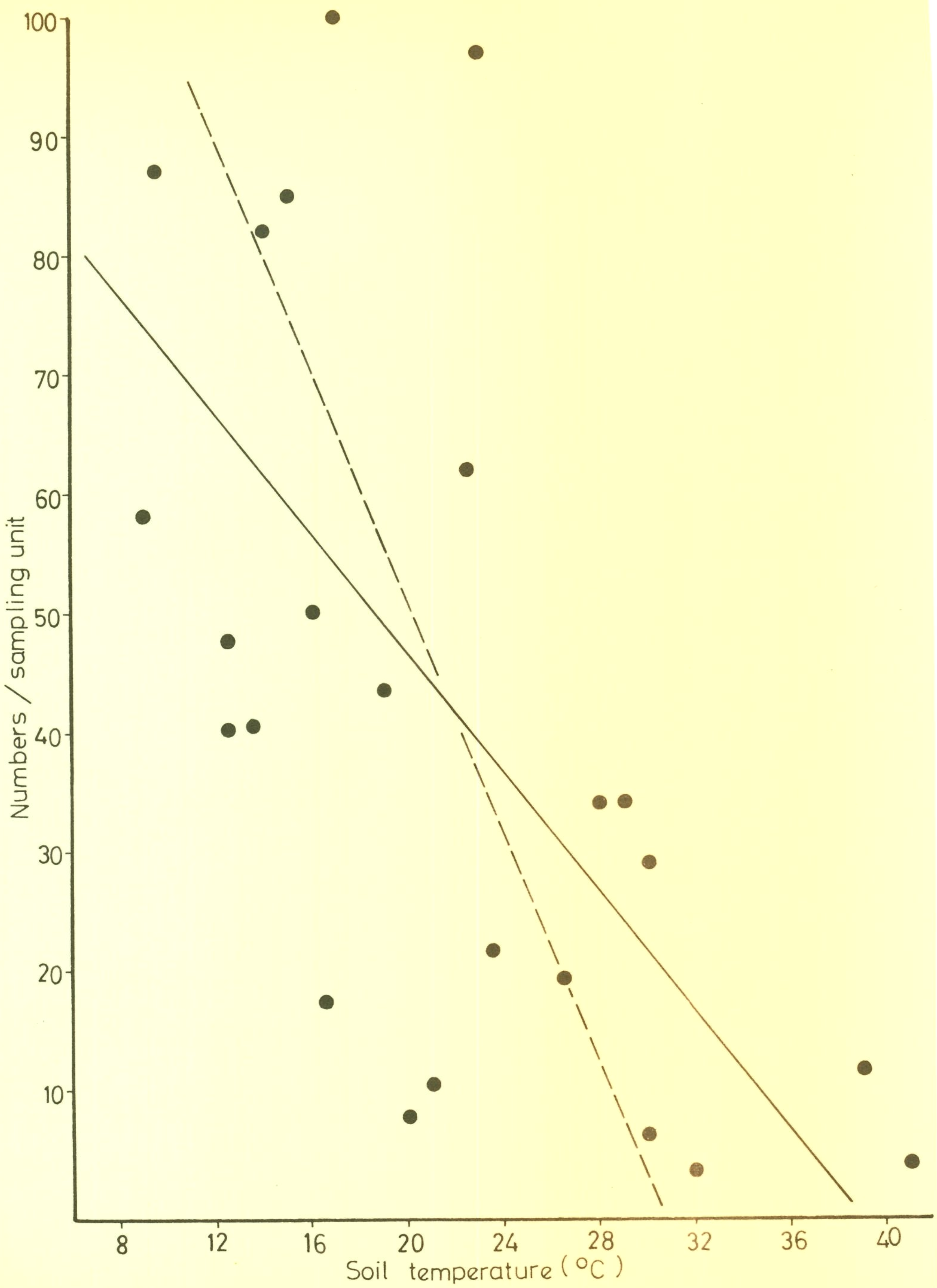


Fig. 18. Scatter diagram of numbers of soil mesofauna and soil temperature.

TABLE 10

Population densities and percentage water content on the date of sampling. Values for r and P.

	r	P (n = 24)	
Collembola	+ 0.832	.001	Highly significant
Acari	+ 0.413	.05 - .02	Fairly significant
Total mesofauna	+ 0.619	.001	Highly significant

Population densities and soil temperature on the date of sampling. Values for r and P.

	r	P (n = 24)	
Collembola	- 0.338	0.10	Not significant
Acari	- 0.585	0.001	Highly significant
Tot. mesofauna	- 0.708	0.001	Highly significant

correlation is very highly significant for Collembola, highly significant for the total fauna and fairly significant for Acari.

The negative correlation between soil temperature and numbers of Acari and total mesofauna is highly significant but no correlation could be found between soil temperature and numbers of Collembola.

8. DISCUSSION

As a whole, the spring and summer months were characterised by high soil and air temperatures, low percentage soil moisture content and by a low number of soil mesofauna. The autumn and winter months, on the other hand, were characterised by low soil temperatures, higher soil moisture values and by a high number of soil mesofauna. Whether this picture of the differences in the size of the population of the fauna at different times of the year will be repeated every year is open to doubt, because the period of investigation was characterised by an abnormal rainfall compared to the long-term average; as has been previously indicated, there exists a close correlation between the numbers of the soil fauna and the rainfall which determines the soil moisture content. It seems, therefore, that no real seasonal fluctuations occurred as have been found by many authors in overseas soils e.g. Hammer (1944) in Greenland, Thompson (1924) in England, Dammerman (1922) in the West Indies and Frenzel (1936) in European soils. A seasonal maximum in population numbers during summer (with a relatively high rainfall) and a minimum in winter (with little or no rainfall) seem possible in this soil during normal years, since during the present study the maximum numbers were observed in summer when relatively high soil temperatures and high soil moisture prevailed, environmental conditions which are apparently optimal for the fauna of this soil.

The rainfall is very important in the maintainance of high numbers of the soil mesofauna. This is more marked in the case of the hot summer months when the high air temperatures cause a high rate of evaporation. The effect of drought was more marked in the summer months when the drought conditions were coupled with high temperatures than in the winter months when the soil and air temperatures were considerably lower. This is clearly illustrated in the graph for the soil moisture content where it can be seen that the soil moisture content in the dry autumn and winter months never reached as low levels as in the dry summer months of October, December and January when relatively high temperatures prevailed.

The Collembola depend to a very large extent on the rainfall and in particular on high soil moisture, and the conclusion can be made that mites are more resistant to drought conditions than the Collembola. This were also found by Frenzel (1936), Ford (1935), Belfield (1956), Snell (1933), and Thompson (1944).

Although quite distinct correlations could be observed between the soil temperature and soil moisture content, and the size of the population of the fauna of the soil, it must be borne in mind that a mutual interaction exists between these two physical factors as well as various other factors in the soil, all of which exert their influence on the soil mesofauna.

As found/......

As found by most investigators (Frenzel 1936), the Acari was the numerically dominant and the Collembola the subdominant group of the mesofauna. In the soil covered by E. curvula, Mesostigmata, Oribatei and Acaridiae were present only in relatively low numbers, with relatively high numbers of Trombidiformes and lower numbers of Collembola. The low numbers of Mesostigmata and Sarcoptiformes as compared with the Trombidiformes, must be attributed to a combination of factors. The low numbers could partly have been due to the extraction technique employed. Furthermore, the soil investigated could have been of such a nature that it could not support these organisms in high numbers. According to Trägårdh (quoted by Kühnelt, 1961), the mite groups other than Trombidiformes predominante in soils of cool moist regions, while the Trombidiformes are especially rich in warm dry areas. The present study was carried out in a soil which is subject to the latter conditions.

The fact that the soil was under a standard crop rotation and therefore under constant cultivation (on plot A the grass was planted shortly before sampling started) could also have been a reason for the low numbers of Mesostigmata and Sarcoptiformes. According to Kühnelt (1961), the soil fauna of arable land is an impoverished pasture fauna. This soil could, due to the regular cultivation, also be considered as arable soil. The impoverishment of the soil fauna is not uniform but affects certain groups more than others. In the Eragrostis soil the Parasitiformes were present in higher numbers than the Oribatei but were still very low as compared to the Trombidiformes. According to

Kühnelt/......

Kühnelt the absence of detritus feeders (e.g. Oribatei) is probably also connected with the lack of organic substances noticeable in arable soils. The organic content of the soil under investigation was conspiciously low (an average of two per cent organic content was found for the three plots).

Not only was the organic content of the soil very low, but also the amount of cover given by vegetation and organic material, factors that were considered by Belfield (1956) as very important in considering the numbers of arthropods in West African soil. The relative scarcity of vegetal cover can be observed in plates IV and V, and as was previously mentioned, only a thin layer of undecomposed grass was found on top of the soil. The denser the cover the less water will be evaporated from the soil below, and therefore, the more effective the rainfall will be in moistening the soil. The great fluctuations in the population curve of the soil mesofauna within a short period of time can possibly be ascribed to the fact that the soil water evaporates at a high rate shortly after rain as a result of the heat of the sun, which, in the absence of futher rain, transforms the top centimeters of soil into a hard-baked and completely dry layer; these conditions cause a notable reduction of the soil fauna in the top soil layer.

The results obtained in the present investigation can be compared with those found in other parts of the African continent. Studies made on African soils are those of Salt (1953, 1955) and Belfield (1956). Both investigators used a flotation technique in separating the animals from the soil. The different extraction

techniques/.......

techniques used, however, makes it difficult to compare their results with those obtained in this study, for it is a well-known fact that much damage is done to the more delicate species by their method (Salt et al. 1948 and Murphy 1962 b). Furthermore, the sample cores were of different size, so that comparison with results of this investigation cannot be very reliable. Belfield (1956) in his study of the vertical, horizontal and seasonal distribution and variation of the Arthropoda of pasture soil on the Accra Plains in the Gold Coast (Ghana), West Africa, compared his results with those obtained by Salt (1952). In both of these studies the Collembola and Acari accounted for a very high proportion of the population i.e. England 88%, East Africa 86% and West Africa 80%. There was, however a difference in the proportions of the two groups. In the soil covered with E. curvula the Acari and Collembola constituted 97.7% of the total soil mesofauna which is a much higher percentage. The proportions Acari 85% and Collembola 13% are nearer to those of East Africa (Acari 70% and Collembola 17%) than to those of West Africa (Acari 50% Collembola 31%) and of England (Acari 60% and Collembola 28%).

Salt (1953) studied eleven soil samples (4 ins. diameter, 6 ins. deep) from pastures near Moshi, Tanganjika and at Kawanda, Uganda, East Africa, and obtained an average of 38,417 arthropods (18,774 Acari and 6,538 Collembola) per sq. metre. Nine soil samples from cultivated fields yielded 24,423 arthropods (13,704 Acari and 4,909 Collembola) per sq. metre in the top 12 ins. of soil; compared with soil samples from a pasture near Cambridge, England, Salt

found that/.......

found that the arthropod population in the uppermost 6 ins. of East African pasture soil is only about half as large as that in the English pasture. Six soil samples analysed by Salt (1955) from elephant grass (Pennisetum purpureum) leys at Kawanda, Uganda, gave collections of 87,147 arthropods (23,200 Acari) per sq. metre in the top 12 ins. of soil. In another six samples from adjacent cultivated ground 26,150 arthropods (16,165 Acari) per sq. metre were found. The larger population under elephant grass is partly attributed to the protection afforded by elephant grass against insolation. Because Salt (1953 and 1955) was interested only in quantitative information about the arthropods inhabiting East African (tropical) soil, no seasonal studies on the soil fauna were made. Unfortunately Salt and Belfield do not give analyses of the numbers of the various groups of Acari so that a comparison in this respect is not possible. In the samples from the soil covered by Eragrostis curvula the numbers of the soil fauna fluctuated from a minimum of 2,088 (2,040 Acari) per sq. metre to a maximum of 52,717 (48,589 Acari and 3,701 Collembola) per sq. metre. A comparison of the number of animals found in West Africa with the numbers found in East African pastures, showed that the density of animals is less in the West African area than in East Africa (Belfield 1956) and this difference was ascribed to many factors such as extraction technique, rainfall and amount of cover by vegetation. Apparently, the fauna numbers of the present study is lower than that of the East and West African pasture soils, since the maximum number obtained by Salt (1955) is much higher than the maximum obtained in the present study (if any quantitative comparison is justified) and/.......

justified) and would even be higher if the losses of delicate species in East African soils are also taken into consideration.

It seems on the whole, according to the work done on European pasture soils by Salt et. al. (1948), Weis-Fogh (1948), Macfadyen (1952) a.o., that the numbers of the soil mesofauna per sq. metre are far higher in European soils than in the African soils covered by grass.

9. SUMMARY

1. A total of 360 sampling units were taken on three plots covered by Eragrostis curvula during the period between November 1st, 1962, and October 17th, 1963. The fauna was extracted by means of the Auerbach and Crossley extraction apparatus.

2. Estimations of the water content of the soil were made and the soil temperatures were taken on each sampling occasion.

3. The Acari was the most numerous of the soil mesofauna in this soil. The Acari and Collembola constituted 97.7 per cent of the total mesofauna collected.

4. The Trombidiformes made up 94.8 per cent of the total acarofauna. Very few Oribatei were collected.

5. The quantitatively most important families of the Trombidiformes in this soil were Tydeidae, Eupodidae, Nanorchestidae, Tarsonemidae and Pyemotidae; /.......

Pyemotidae; Protogamasellus sp. a was numerically the most important of the Mesostigmata.

6. The approximate biomass was estimated for the total mesofauna, Acari, Collembola, other insects, Trombidiformes, Mesostigmata, Sarcoptiformes and the quantitatively important families of the Trombidiformes and Mesostigmata.

7. No distinct seasonal fluctuations occurred but this was probably due to the abnormal weather conditions which prevailed during the period of investigation.

8. Distinct fluctuations however, were observed in the soil populations which could be correlated with drought and high temperatures, and moisture and lower soil temperatures. The correlation between population density and soil moisture percentage was found to be positive and between population density and soil temperature to be negative.

9. The interaction of soil temperature and moisture most probably gave rise to a summer maximum in the population density and in the biomass of the soil mesofauna.

10. The Collembola were found to be extremely sensitive to moisture and a strong positive correlation existed between the Collembola numbers and the soil moisture percentages. The correlation between collembolan numbers and soil temperatures was not significant.

11. Ploughing of the soil tends to reduce the numbers of the fauna in the first 5 cm of soil.

12. From a/......

12. From a single series of samples, a higher concentration of the soil mesofauna was found in the 5-10 cm layer of the soil.

13. Lower numbers of the soil mesofauna per sq. metre were found during this investigation as compared to the numbers found in the tropical soils of West and East Africa, and much lower numbers as compared to the fauna of grassland soil in Europe.

10. ACKNOWLEDGEMENTS

I am greatly indebted to Prof. P.A.J. Ryke, Director of the Institute for Zoological Research under who's supervision this investigation was carried out, for his helpfulness and encouragement. Sincere thanks are due to Prof. J.A. van Eeden, Head of the Department of Zoology for encouragement and the interest he has tåken in my work.

My sincerest thanks are also due to Dr. M.K.P. Meyer for the identification of some of the Trombidiformes and to Mr. G.G. van der Merwe for the identification of the Phytoseiidae. My thanks are extended to Mr. T.J.D. Coates for linguistic help and to Miss S. Tamsen for valuable help in type-writing the manuscript.

I am indebted to the Department of Agricultural Technical Services and the Maize Board for financial assistance without which the present study would not have been possible, as well as to the Potchefstroom Agricultural College and Research Institute for the

facilities/......

facilities put at my disposal. I wish to thank Fisons (Pty.) Ltd. for the chemical analysis of the soil samples.

Finally and especially, I wish to express my sincere thanks to my parents, for their encouragement, interest and financial aid during my years of study.

11. REFERENCES

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TABLE 11

Mesostigmata collected during the sampling period 1 Nov. 1962 - 17 Oct. 1963. The sampling date, numbers of the sampling units and the total numbers of Mesostigmata for each sampling unit are given

Sampling unit		Total/ sampling unit
	1 November 1962	
	No Mesostigmata	
	7 November 1962	
2/A3	Aceosejidae : Protogamasellus sp. a : 1 ♀	1
2/A4	Laelaptidae : Gaeolaelaps sp. : 1 ♂	1
2/B3	" " : 1 ♂	1
2/B4	Unident. Mesostigmata : 1	1
2/B5	Aceosejidae : Protogamasellus sp. a : 2 ♀	2
2/C1	" : Gamasellodes seminudus (Ryke) : 1 ♀	1
2/C5	" : Protogamasellus sp. a : 1 ♀	1
	4 December 1962	
	No Mesostigmata	
	11 December 1962	
4/A2	Unident. larva	1
4/A3	Phytoseiidae : Amblyseius sp. : 1 ♀	1
4/A5	Aceosejidae : Gamasellodes seminudus (Ryke) : 1 ♀	

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
	Phytoseiidae : Amblyseius sp. : 1 ♂	
	1♀, 1 nymph	4
4/C5	Aceosejidae : Protogamasellus sp. c :	
	1 ♀	1
	3 January 1963	
5/B3	Phytoseiidae : Amblyseius sp.:	
	deutonymph	1
5/C5	Unident. Mesostigmata : 1	1
	11 January 1963	
6/A1	Aceosejidae : Protogamasellus sp. :	
	1 ♀	
	Phytoseiidae : Amblyseius sp.: 1 ♂, 1 ♀	3
6/B5	Unident. Mesostigmata : 1	1
6/C2	Laelaptidae : Gaeolaelaps sp. 1 ♀	
	Unident. Mesostigmata : 1	2
6/C4	Aceosejidae : Protogamasellus sp. a :	
	1 ♀	
	Aceosejidae : Protogamasellus sp. c :	
	1 ♀	
	Unident. Mesostigmata : 2	4
	5 February 1963	
7/A1	Aceosejidae : Gamasellodes seminudus	
	(Ryke) : 1 ♀	
	Phytoseiidae : Amblyseius sp. :	
	1 deutonymph	
	Aceosejidae : Protogamasellus sp. a :	
	1 ♀	
	Unident. larva	4

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
7/A2	Aceosejidae : Protogamasellus sp. b : 2 ♀	
	" : Protogamasellus sp. c : 1 ♀	
	" : Protogamasellus sp. a : 1 ♀	
	Phytoseiidae : Amblyseius sp. : 1 ♀	5
7/A3	Aceosejidae : Protogamasellus sp.a : 3 ♀	
	Unident. larva	4
7/A4	Aceosejidae : Lasioseius sp. : 1 ♀	
	" : Protogamasellus sp. a : 2	3
7/A5	" : Protogamasellus sp. a : 4	
	Phytoseiidae: Amblyseius sp.: 2 nymphae	6
7/B3	Aceosejidae : Antennoseius sp. : 1 ♂, 1 ♀	
	Unident. nymph	
	Aceosejidae : Protogamasellus sp. a : 2	5
7/B4	" " : 1	1
7/B5	" : Gamasellodes seminudus (Ryke) : 1 ♀	
	" : Protogamasellus sp. a : 2 ♀	
	Ameroseiidae : Kleemannia sp. : 1 ♀	
	Unident. Mesostigmata : 1	5
7/C1	Aceosejidae : Lasioseius sp. : 1 ♂, 1 nymph	
	Unident. Mesostigmata : 1	
	Aceosejidae : Protogamasellus sp. a : 1 ♀	4

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
7/C2	Aceosejidae : Protogamasellus sp. a : 3 ♀	
	" : Lasioseius sp.: 1 ♂, 1 ♀ 1 nymph	6
7/C3	" : Protogamasellus sp. a : 9, 2 larvae	
	" : Antennoseius sp. : 1	
	Phytoseiidae : Amblyseius sp. : 1 ♂, 1 nymph	
	Aceosejidae : Lasioseius sp. : 1 ♂	15
7/C4	" " : 4 ♂	4
7/C5	" : Protogamasellus sp. a : 1	
	Phytoseiidae : Amblyseius sp. : 4 nymphae	
	Unident. Mesostigmata : 1	6
	12 February 1963	
8/A2	Phytoseiidae : Amblyseius sp. : 2 nymphae	2
8/B1	Aceosejidae : Protogamasellus sp. a : 1 ♀	1
8/B3	Phytoseiidae : Amblyseius sp. : 1 nymph	1
8/C1	" Amblyseius sp. : 1 ♀	1
8/C3	" " : 1 ♀	1
	5 March 1963	
9/C4	Laelaptidae : Cosmolaelaps sp. : 1 larva	1

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
	12 March 1963	
10/A1	Aceosejidae : Protogamasellus sp. c : 2 ♀	
	" : Protogamasellus sp. a : 2 nymphae	4
10/A2	" : Protogamasellus sp. a : 4 ♀	4
10/A3	" : Protogamasellus sp. a : 3 ♀	
	Unident. nymphae : 2	5
10/A4	Aceosejidae : Protogamasellus sp. c : 1 ♀	
	" : Protogamasellus sp. a : 1 ♀, 1 nymph	
	Laelaptidae : Gaeolaelaps sp. : 3 ♀	
	Unident. Mesostigmata : 3	9
10/A5	Aceosejidae : Protogamasellus sp. a : 2 ♀	
	Unident. Mesostigmata : 2	4
10/B1	Aceosejidae : Protogamasellus sp. a : 8 ♀, 2 nymphae	
	Unident. Mesostigmata : 3	13
10/B2	Aceosejidae : Protogamasellus sp. a : 3 ♀, 1 nymph	4
10/B5	" : Protogamasellus sp. a : 1 ♀	
	Aceosejidae : Protogamasellus sp. c : 1 ♀	2
10/C2	" : Protogamasellus sp. a : 1 ♀	1

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
10/C3	Aceosejidae : Protogamasellus sp. a : 1 ♀	1
	9 April 1963	
11/A2	Unident. Mesostigmata : 1	1
11/A4	Phytoseiidae : Amblyseius sp. : 1 nymph	1
11/A5	Aceosejidae : Protogamasellus sp. a : 3 ♀	3
11/B1	" : Protogamasellus sp. a : 4 ♀	
	Rhodacaridae : Rhodacarus sublapidus Ryke : 1 ♀	
	Phytoseiidae : Amblyseius sp. : 1 ♀	6
11/B2	Unident. Mesostigmata : 1	
	Aceosejidae : Protogamasellus sp. a : 1 ♀	2
11/B3	" : Protogamasellus sp. a : 1 ♀	
	Laelaptidae: Gaeolaelaps sp. : 1 ♂, 1 ♀, 1 nymph	4
11/B4	Aceosejidae : Protogamasellus sp. c : 1 ♀	
	Laelaptidae : Gaeolaelaps sp. : 1 ♀	2
11/B5	Aceosejidae : Protogamasellus sp. a : 3 ♀	
	Laelaptidae : Gaeolaelaps sp. : 1 nymph	4
11/C1	" " " : 1 ♀	
	Aceosejidae : Lasioseius sp. : 1 ♀	
	" : Protogamasellus sp. a : 1 ♀	3
11/C2	" : Protogamasellus sp. a : 1, 9 ♀	10

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
11/C3	Aceosejidae : Protogamasellus sp. a : 1, 8 ♀, 2 nymphae	11
11/C4	" : Protogamasellus sp. a : 1 ♀	1
11/C5	" : Protogamasellus sp. a : 14 ♀, 2 nymphae	16
	17 April 1963	
12/A1	Laelaptidae : Gaeolaelaps sp. : 1 ♀ Unident. larva Aceosejidae : Protogamasellus sp. a : 1 ♀	3
12/A2	" : Protogamasellus sp. a : 1 ♀	1
12/A3	" : Protogamasellus sp. a : 1 ♀	1
12/A4	" : Protogamasellus sp. a : 1 ♀, 2 nymphae	3
12/A5	" : Protogamasellus sp. a : 2, 7 ♀	9
12/B1	" : Protogamasellus sp. a : 1, 3 ♀ Laelaptidae : Androlaelaps sp. : 1 ♂, 2 ♀	7
12/B2	Aceosejidae : Protogamasellus sp. a : 1 ♀, 1 nymph	2
12/B3	" : Protogamasellus sp. a : 1, 2 ♀	3
12/B4	Laelaptidae : Cosmolaelaps sp. : 1 ♀, 1 nymph	2
12/B5	Unident. Mesostigmata : 3	3

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
12/C1	Aceosejidae : <u>Gamasellodes seminudus</u> (Ryke) : 1 ♀	
	" : <u>Protogamasellus</u> sp. a : 12, 23 ♀, 2 nymphae	38
12/C2	" : <u>Protogamasellus</u> sp. a : 1 ♀, 2 nymphae	3
12/C3	" : <u>Protogamasellus</u> sp. a : 1 ♀	
	Unident. Mesostigmata : 7	8
12/C4	Aceosejidae : <u>Protogamasellus</u> sp. a : 5 ♀	5
12/C5	" : <u>Protogamasellus</u> sp. b : 10 ♀, 1 nymph	
	" : <u>Gamasellodes seminudus</u> (Ryke) : 2 ♀	
	" : <u>Protogamasellus</u> sp. c : 1 ♀	14
	<u>1 May 1963</u>	
13/A3	Aceosejidae : <u>Protogamasellus</u> sp. a : 1 nymph	1
13/B3	Phytoseiidae : <u>Amblyseius</u> sp. : 1 ♀	1
13/B4	" " " : 1 ♀	1
13/B5	" " " : 1 ♂	1
13/C4	Aceosejidae : <u>Protogamasellus</u> sp. a : 1 ♀	1
	<u>8 May 1963</u>	
1[illegible]/B1	Aceosejidae : <u>Protogamasellus</u> sp. a : 1 ♀	
	Unident. larva	2

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
14/B4	Phytoseiidae - Amblyseius sp.: 1 ♀	1
14/C4	Aceosejidae : Gamasellodes seminudus (Ryke) : 1 ♀	
	" : Protogamasellus sp. a : 2 ♀	3
	5 June 1963	
15/B2	Phytoseiidae : Amblyseius sp. : 1 nymph	
	Aceosejidae : Protogamasellus sp. a : 1 ♀	2
15/B4	" : Protogamasellus sp. a : 1	
	Phytoseiidae : Amblyseius sp.: 1 ♂	2
15/B5	Aceosejidae : Protogamasellus sp. a : 1	1
15/C1	" : Gamasellodes seminudus (Ryke) : 1 ♀	
	" : Protogamasellus sp. a : 3 ♀, 1 nymph	5
15/C3	" : Protogamasellus sp. a : 1	1
15/C5	" : " " " : 1 ♀	1
	13 June 1963	
16/A2	Aceosejidae : Protogamasellus sp. a : 1 ♀	1
16/C2	" : Protogamasellus sp. a : 2 ♀	2
16/C3	Laelaptidae : Gaeolaelaps sp. : 1 ♀	1
	1 July 1963	
17/A2	Aceosejidae : Protogamasellus sp. a : 2 ♀	2

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
17/A3	Aceosejidae : *Protogamasellus* sp. a : 5 ♀	5
17/A4	" : *Protogamasellus* sp. a : 1 ♀	1
17/B3	" : *Protogamasellus* sp. a : 1 ♀	1
17/B4	" : *Protogamasellus* sp. a : 1 ♀	1
17/B5	" : *Protogamasellus* sp. a : 1 ♀	1
17/C1	Laelaptidae : *Gaeolaelaps* sp. : 1 ♀	1
17/C2	Aceosejidae : *Protogamasellus* sp. a : 2 ♀	2
17/C3	" : *Protogamasellus* sp. a : 1 ♀	1
17/C4	" : *Protogamasellus* sp. a : 1 ♀	1
17/C5	" : *Protogamasellus* sp. a : 1 ♀	
	Uniden. Mesostigmata : 1	2
	26 July 1963	
18/A3	Phytoseiidae : *Amblyseius* sp. : 2 ♀	2
18/A5	" : " 1 ♀	
	Aceosejidae : *Protogamasellus* sp. a : 1 ♀, 1 nymph	3
18/I1	" : *Protogamasellus* sp. a : 3 ♀	
	Phytoseiidae : *Amblyseius* sp. : 1 ♀	4

TABLE 11 (Continued)

Sampling unit		Total/ sampling unit
	6 August 1963	
19/A4	Phytoseiidae : Amblyseius sp. : 1 ♀	1
19/C4	Aceosejidae : Protogamasellus sp. c.: 1 ♀	
	" : Gamasellodes seminudus (Ryke) : 15 ♀, 1 nymph	
	" : Protogamasellus sp. a. : 5 ♀	
	Laelaptidae : Androlaelaps sp. : 1 ♀	23
	14 August 1963	
20/B3	Phytoseiidae : Amblyseius sp. : 1 ♀	1
20/C5	Aceosejidae : Gamasellodes seminudus (Ryke): 1 ♀	1
	4 September 1963	
21/A1	Phytoseiidae : Amblyseius sp. : 1 ♀	1
21/A4	Rhodacaridae : Unident. nymph	1
	11 September 1963	
	No Mesostigmata	
	2 October 1963	
23/B1	Aceosejidae : Protogamasellus sp. a : 1 ♀	1
23/C1	" : Protogamasellus sp. a : 1 ♀	1
	17 October 1963	
	No Mesostigmata	

TABLE 12

Number of organisms per sampling unit from each plot on each sampling date

	1 November 1962														
	1/A1	1/A2	1/A3	1/A4	1/A5	1/B1	1/B2	1/B3	1/B4	1/B5	1/C1	1/C2	1/C3	1/C4	1/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Eupodes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	2	-	-	-	-	-	-	-	-	1
Microtydeus sp. } Coccotydeus sp. }	-	7	-	1	-	1	-	-	11	3	-	-	-	-	6
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	3	13	7	2	10	9	-	-	5	-	-	3	1	-	-
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	1	1	1	1	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	3	26	9	5	13	12	-	2	16	3	-	4	1	1	7
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-
MESOSTIGMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. ACARI	3	26	9	5	13	12	-	3	18	3	-	4	1	1	7
COLLEMBOLA	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
OTHER INSECTS	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 12 (Continued)

	7 November 1962														
	2/A1	2/A2	2/A3	2/A4	2/A5	2/B1	2/B2	2/B3	2/B4	2/B5	2/C1	2/C2	2/C3	2/C4	2/C5
TROMBIDIFORMES unident.	1	-	-	-	-	-	-	1	1	-	-	1	1	1	1
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Achidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	2	5	-	-	2	-	-	-	1	1	-	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	1	-	-	-	8	3	-	-	-	4	-	-	-	-	-
Eupodes spp.	-	-	-	-	-	-	-	-	1	4	-	1	2	5	3
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-
Microtydeus sp. } Cocootydeus sp. }	-	18	5	2	11	6	5	-	1	2	-	-	-	1	-
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	2	8	2	6	2	-	-	1	-	-	-	-	-	-	-
Speleorchestes sp.	12	3	3	16	10	2	5	1	2	4	2	-	-	-	-
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	1	-	2	1
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	1	-	1	2	-	-	-	-	-	1	-	-	-	-	-
Cheletomimus sp.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	20	35	13	27	34	11	10	4	6	21	2	5	3	8	5
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	-	-	1	1	-	-	-	1	1	2	1	-	-	-	1
Tot. ACARI	20	35	14	28	34	11	10	5	7	23	3	5	3	8	6
COLLEMBOLA	-	-	-	1	-	1	-	-	1	10	5	45	15	117	20
[illegible]									-	1	-	4	-	-	1

TABLE 12 (Continued)

	4 December 1962														
	3/A1	3/A2	3/A3	3/A4	3/A5	3/B1	3/B2	3/B3	3/B4	3/B5	3/C1	3/C2	3/C3	3/C4	3/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eupodes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdelloides (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus sp.	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-
Microtydeus sp.) *Coccotydeus* sp.)	4	6	2	5	3	1	1	-	-	-	-	-	-	3	-
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	2	3	3	-	-	1	4	1	1	1	1	-	1	2	-
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	2	-	2	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	6	12	7	9	3	3	5	1	1	1	3	-	1	7	-
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. ACARI	6	12	7	9	3	3	5	1	1	1	3	-	1	7	-
COLLEMBOLA	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-
OTHER INSECTS	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	11 December 1962														
	4/A1	4/A2	4/A3	4/A4	4/A5	4/B1	4/B2	4/B3	4/B4	4/B5	4/C1	4/C2	4/C3	4/C4	4/C5
TROMBIDIFORMES unident.	-	-	1	-	1	-	-	-	5	-	-	-	-	-	1
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	2	-	-	-	1	1	-	-	1	-	-	-	1	1	-
Eupodes spp.	3	3	1	-	-	-	-	-	-	-	-	-	-	-	1
Protereunetes sp.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	2	1	-	23	-	-	-	1	-	2
Microtydeus sp.) Coccotydeus sp.)	-	-	1	-	-	4	1	7	17	-	-	-	-	13	10
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	-	3	2	-	-	-	1	2	-	1	1	-	-	-	-
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	6	7	5	-	5	7	3	9	50	2	2	-	3	15	15
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
MESOSTIGMATA	-	1	1	-	4	-	-	-	-	-	-	-	-	-	1
Tot. ACARI	6	8	6	-	9	7	3	9	50	2	2	-	4	15	16
COLLEMBOLA	1	-	1	-	8	-	1	-	11	-	-	-	-	-	-
OTHER INSECTS	-	-	-	-	1	1	-	-	8	-	-	12	1	-	5
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	3 January 1963														
	5/A1	5/A2	5/A3	5/A4	5/A5	5/B1	5/B2	5/B3	5/B4	5/B5	5/C1	5/C2	5/C3	5/C4	5/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (_Telodispus_) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
_I._ (_Imparipes_) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
_I._ (_Archidispus_) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (_Variatipes_) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Eupodes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (_Hoploscirus_) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtydeus sp.)	3	3	9	10	4	-	-	4	-	-	-	-	-	10	3
Coccotydeus sp.)															
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	1	-	1	1	-	-	-	2	-	-	-	-	-	-	-
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	4	3	12	11	4	1	1	6	-	-	-	1	-	12	5
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
MESOSTIGMATA	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Tot. ACARI	4	3	12	11	4	1	1	7	-	-	-	2	-	12	6
COLLEMBOLA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER INSECTS	-	-	-	1	-	-	-	-	-	-	-	-	3	2	-
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ARANEAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	11 January 1963														
	6/A1	6/A2	6/A3	6/A4	6/A5	6/B1	6/B2	6/B3	6/B4	6/B5	6/C1	6/C2	6/C3	6/C4	6/C5
TROMBIDIFORMES unident.		2	-	2	-	4	-	-	-	-	4	4	2	2	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	13	7	3	6	16	6	-	-	77	-	1	1	1	8	19
Eupodes spp.	-	-	1	-	2	-	-	-	-	-	2	-	1	-	3
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	1	-	-	-	-	1	-	2	1	3
Microtydeus sp. }													2	1	
Coccotydeus sp. }	11	9	36	7	47	1	-	2	36	3	5	31		2	5
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	1	3	3	1	-	-	-	-	1	1	-	3	-	-	-
Speleorchestes sp.	2	6	5	-	8	-	3	-	3	1	-	-	-	-	3
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Molothrognathus spp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrolophus spp.	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	37	27	49	16	74	13	3	2	117	5	18	45	8	14	37
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
MESOSTIGMATA	3	-	-	-	-	-	-	-	-	1	-	2	-	4	-
Tot. ACARI	40	27	49	16	74	13	3	2	117	6	18	47	8	18	40
COLLEMBOLA	-	-	-	-	-	-	-	-	1	-	-	3	2	2	-
OTHER INSECTS	1	1	1	-	2	1	-	-	-	-	-	7	2	2	1
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ARANEAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	5 February 1963														
	7/A1	7/A2	7/A3	7/A4	7/A5	7/B1	7/B2	7/B3	7/B4	7/B5	7/C1	7/C2	7/C3	7/C4	7/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	2	-	-	1	-	1
ERIOPHYIDAE	1	-	-	-	-	-	-	-	-	-	-	-	2	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	7	68	3	2	37	1	13	-	-	6	-	1	10	3	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	19	53	22	24	33	3	3	3	6	33	1	-	5	7	3
Eupodes spp.	5	10	8	10	7	-	-	-	-	-	-	4	8	4	1
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	-	2	-	-	-	1	2	3	2	10
Microtydeus sp.) Coccotydeus sp.)	38	106	86	42	100	20	14	5	54	18	3	12	72	9	2
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Nanorchestes sp.	6	6	17	35	1	-	-	-	-	-	-	-	2	2	-
Speleorchestes sp.	2	4	2	1	2	1	4	-	-	-	-	1	1	-	7
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	1	-	-	-	1	-	-	-	2	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	5	14	5	-	1	-	3	4	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Tot. TROMBIDIFORMES	85	262	146	114	182	27	39	13	62	59	6	20	110	27	26
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	1	-	-	-	-	-	-	1	1	1	5	-	2
MESOSTIGMATA	4	5	4	3	6	-	-	5	1	5	4	6	15	4	6
Tot. ACARI	89	267	151	117	188	27	39	18	63	65	11	27	130	31	34
COLLEMBOLA	-	14	-	1	4	-	1	46	1	11	2	16	45	8	5
OTHER INSECTS	2	1	7	3	2	2	3	3	1	1	1	4	3	1	5
MYRIAPODA	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-
ARANEAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. MESOFAUNA	91	282	158	122	194	29	43	67	65	77	15	47	178	40	44

TABLE 12 (Continued)

	12 February 1963														
	8/A1	8/A2	8/A3	8/A4	8/A5	8/B1	8/B2	8/B3	8/B4	8/B5	8/C1	8/C2	8/C3	8/C4	8/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	4	-	-	-	-	-	1	-	46	3	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Tarsonemus spp.	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-
Eupodes spp.	8	1	2	-	6	-	2	5	-	-	1	1	1	-	1
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibiella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	-	-	-	-	1	8	1	15	2	-
Microtydeus sp. } Coccotydeus sp. }	2	4	6	21	4	26	20	3	3	8	109	17	10	14	8
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	3	1	1	-	3	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	4	1	-	3	2	-	-	17	-	-	-	1	1	-	3
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	1	-	-	-	2	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	3	-	3	2	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	1	-	-	-	1	-	-	-	-	-	1	-	1	-	1
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	19	14	9	28	19	26	24	26	3	58	125	21	29	16	14
ACARIDIAE	-	-	-	-	1	-	-	-	-	-	3	2	2	6	1
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	-	2	-	-	-	1	-	1	-	-	1	-	1	-	-
Tot. ACARI	19	16	9	28	20	27	24	27	3	58	129	23	32	22	15
COLLEMBOLA	3	1	-	-	-	-	-	1	-	1	5	1	-	-	-
OTHER INSECTS	8	2	-	5	-	-	-	4	-	3	4	13	3	2	-
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	5 March 1963														
	9/A1	9/A2	9/A3	9/A4	9/A5	9/B1	9/B2	9/B3	9/B4	9/B5	9/C1	9/C2	9/C3	9/C4	9/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Eupodes spp.	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtydeus sp. }	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Coccotydeus sp. }	5	1	16	3	4	4	44	18	9	2	-	1	-	1	-
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	4	3	4	3	2	6	3	17	10	5	3	1	1	2	4
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermulleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletominus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmulleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	10	6	22	8	6	10	48	36	20	8	3	2	1	3	4
ACARIDIAE	-	-	-	2	-	-	2	1	3	2	-	2	1	2	2
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Tot. ACARI	10	6	22	10	6	10	50	37	23	10	3	4	2	6	6
COLLEMBOLA	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1
OTHER INSECTS	1	-	-	1	1	1	-	1	-	-	-	-	-	2	-
MYRIAPODA	-	-	-	-											

TABLE 12 (Continued)

	12 March 1963														
	10/A1	10/A2	10/A3	10/A4	10/A5	10/B1	10/B2	10/B3	10/B4	10/B5	10/C1	10/C2	10/C3	10/C4	10/C5
TROMBIDIFORMES unident.	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
ERIOPHYIDAE	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	14	18	4	1	2	63	6	10	15	7	-	1	3	9	-
Eupodes spp.	2	1	3	7	2	2	-	-	-	1	4	-	-	-	1
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	2	-	-	1	-	1	1	20	-	-	4	7
Microtydeus sp. } Coccotydeus sp. }	40	17	12	16	28	106	78	116	82	26	2	-	15	11	14
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	4	3	6	4	-	3	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	1	1	2	2	1	15	6	8	3	10	11	4	4	6	9
Pachygnathus (?) sp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	1	-	-	1	3
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	61	41	27	33	34	191	91	138	101	46	38	5	24	32	34
ACARIDIAE	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	4	4	5	9	4	13	4	-	-	2	-	1	1	-	-
Tot. ACARI	65	45	33	42	38	207	95	138	101	48	38	6	25	32	34
COLLEMBOLA	9	-	8	15	146	2	1	-	-	-	-	-	2	1	-
OTHER INSECTS	-	-	-	3	2	-	-	-	2	1	1	-	1	-	-
MYRIAPODA	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	9 April 1963														
	11/A1	11/A2	11/A3	11/A4	11/A5	11/B1	11/B2	11/B3	11/B4	11/B5	11/C1	11/C2	11/C3	11/C4	11/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-
ERIOPHYIDAE	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	1	3	-	1	1	2
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	15	-	-	4	3	1	2	2	1	1	5	3	1	16	4
Eupodes spp.	2	4	1	8	14	6	-	8	7	1	15	5	3	3	4
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	2	-	-	-	-	1	5	2	1	-	-	1	-	1
Microtydeus sp. } Coccotydeus sp. }	12	2	11	24	14	30	38	24	12	10	2	3	2	10	1
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	2	-	-	-	1	-	-	1	-
Nanorchestes sp.	4	12	-	20	39	-	1	-	-	-	-	1	-	2	-
Speleorchestes sp.	-	1	1	2	4	1	8	5	5	5	1	3	6	1	-
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	33	21	13	61	79	39	52	44	27	19	32	16	14	28	12
ACARIDIAE	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
ORIBATEI	+	1	1	-	3	1	1	1	3	-	1	-	-	-	-
MESOSTIGMATA	-	1	-	1	3	6	2	4	2	4	3	10	11	1	16
Tot. ACARI	34	23	14	62	85	47	55	49	32	23	36	26	25	29	28
COLLEMBOLA	-	5	2	3	3	10	10	5	17	2	2	-	-	1	3
OTHER INSECTS	-	2	-	3	2	4	-	3	-	1	2	1	1	-	1
MYRIAPODA	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	17 April 1963														
	12/A1	12/A2	12/A3	12/A4	12/A5	12/B1	12/B2	12/B3	12/B4	12/B5	12/C1	12/C2	12/C3	12/C4	12/C5
TROMBIDIFORMES unident.	-	1	-	-	-	-	-	-	-	-	-	13	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	3	-	4
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	3	3	-	5	2	-	-	1	-	-	2	2	-	-	5
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	4	2	25	15	45	9	1	1	-	3	23	27	-	2	50
Eupodes spp.	18	23	8	8	5	3	6	1	1	2	5	4	4	-	29
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	1	2	1	-	-	-	-	2	-	3	2	-	-	6
Microtydeus sp.) Coccotydeus sp.)	15	9	32	26	32	20	9	15	25	13	1	4	1	-	3
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	7	30	6	5	13	1	2	-	-	2	1	3	2	-	-
Speleorchestes sp.	2	-	-	-	1	-	2	-	2	1	5	9	3	-	1
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	51	70	73	60	98	33	20	20	30	22	42	66	13	2	100
ACARIDIAE	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	2	-	1	-	-	-	-	1	4	-	-	1	-	-	4
MESOSTIGMATA	3	1	1	3	9	7	2	3	2	3	33	3	8	5	14
Tot. ACARI	57	71	75	63	107	40	22	24	36	25	80	70	21	7	118
COLLEMBOLA	183	15	-	7	8	33	17	5	40	12	-	2	1	-	5
OTHER INSECTS	2	-	-	3	1	-	-	-	-	-	1	-	-	1	1
MYRIAPODA	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	1 May 1963														
	13/A1	13/A2	13/A3	13/A4	13/A5	13/B1	13/B2	13/B3	13/B4	13/B5	13/C1	13/C2	13/C3	13/C4	13/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	2	1	1	1	87	-	-	7	-	1	-	-	-	4	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	5	-	1	2	-	-	10	-	-	1	-	-	1	3
Eupodes spp.	-	10	4	1	9	-	-	6	1	-	1	1	1	1	3
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	11	2	1	-	-	-	-	3	5	1	-	1	3	2
Microtydeus sp. } Coccotydeus sp. }	36	42	4	31	39	10	10	42	98	48	5	14	9	5	9
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	4	5	1	4	1	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	3	-	4	6	4	3	2	1	4	2	2	11	5	4	4
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	1	1	-	-	-	-	-	-	-	1	-	-	-
Pseudocheylus sp.	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	45	73	21	43	151	15	12	66	106	57	11	27	16	18	21
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	1	-	1	1	-	1	1	1	1	-	-	-
MESOSTIGMATA	-	-	1	-	-	-	-	1	1	1	-	-	-	1	-
Tot. ACARI	45	73	22	44	151	16	13	67	108	59	12	28	16	19	21
COLLEMBOLA	-	-	-	1	3	-	-	2	1	-	-	-	-	1	2
OTHER INSECTS	1	2	-	1	2	-	2	-	1	5	1	-	-	-	-
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	8 May 1963														
	14/A1	14/A2	14/A3	14/A4	14/A5	14/B1	14/B2	14/B3	14/B4	14/B5	14/C1	14/C2	14/C3	14/C4	14/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	1	-	-	15	-	-	2	2	2	-	2	9	6
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	5	1	4	-	11	1	2	-	1	-	-	-	-	-
Eupodes spp.	-	1	-	2	-	3	1	1	1	1	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	1	-	1	-	-	4	1	1	9	1	2	-	1	3	-
Microtydeus sp. }	27	28	14	52	6	43	50	46	30	15	-	-	-	6	8
Coccotydeus sp. }											1	-	-		
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	1	-	-	-	-	-	-	4	-	-	-	-
Speleorchestes sp.	3	1	1	14	4	1	-	-	-	4	-	4	6	13	6
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	31	35	19	73	11	77	53	51	42	24	10	4	9	33	21
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
MESOSTIGMATA	-	-	-	-	-	2	-	-	1	-	-	-	-	3	-
Tot. ACARI	31	35	19	73	11	79	53	51	44	24	10	4	9	36	21
COLLEMBOLA	-	-	-	3	-	3	1	-	2	-	-	-	-	-	2
OTHER INSECTS	-	1	-	2	-	1	-	1	-	1	1	-	-	-	1
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	5 June 1963														
	15/A1	15/A2	15/A3	15/A4	15/A5	15/B1	15/B2	15/B3	15/B4	15/B5	15/C1	15/C2	15/C3	15/C4	15/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
ERIOPHYIDAE	1	29	-	1	1	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	3	-	-	1	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	2	-	10	-	-	-	-	1	10	3	-	2	-	4
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	1	4	-	1	-	30	22	2	-	-	1	2	1	-	1
Eupodes spp.	5	9	3	2	-	1	6	4	2	1	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	1	3	-	5	1	2	2	-	5	7	1	1	-	-	1
Microtydeus sp. } Coccotydeus sp. }	10	6	21	10	15	160	72	43	5	11	1 / 7	5	10	6	12
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	5	1	1	-	-	1	-	-	-	-	1	-	-	4
Speleorchestes sp.	2	1	3	1	-	1	-	3	-	1	2	-	1	-	-
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	20	60	29	31	17	194	103	52	15	30	19	9	14	8	22
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	3	-	-	-	1	1	-	-	1
MESOSTIGMATA	-	-	-	-	-	-	2	-	2	1	5	-	1	-	1
Tot. ACARI	20	60	29	31	17	194	108	52	17	31	25	10	15	8	24
COLLEMBOLA	-	-	1	-	-	1	4	5	-	-	4	-	-	-	1
OTHER INSECTS	1	2	3	-	1	2	-	-	-	1	-	-	-	-	-

TABLE 12 (Continued)

	13 June 1963														
	16/A1	16/A2	16/A3	16/A4	16/A5	16/B1	16/B2	16/B3	16/B4	16/B5	16/C1	16/C2	16/C3	16/C4	16/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	2	-	-	1	1	-	4	-	-	2	-	2	-	-	2
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	2	-	1	6	1	1	-	1	1	4	1	4	-	-	-
Eupodes spp.	16	-	4	4	-	2	1	-	1	-	-	4	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	2	-	-	-	1	5	2	7	4	6	2	2	1	-	1
Microtydeus sp.)	1						4			1			-		
Coccotydeus sp.)	6	5	7	6	10	13	12	18	12	15	2	7	-	3	5
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	1	-	-	-	-	-	-	-	10	1	1	-
Speleorchestes sp.	-	-	-	-	-	-	1	1	6	4	1	-	-	-	3
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	29	5	13	18	13	22	24	28	25	32	6	29	2	4	11
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	2	-	-	-	-	1	-
MESOSTIGMATA	-	1	-	-	-	-	-	-	-	-	-	2	1	-	-
Tot. ACARI	29	6	13	18	13	22	24	28	27	32	6	31	3	5	11
COLLEMBOLA	24	8	17	22	-	53	30	32	32	34	-	-	1	1	-
OTHER INSECTS	-	-	1	1	-	3	1	1	-	7	1	1	-	-	-

TABLE 12 (Continued)

	1 July 1963														
	17/A1	17/A2	17/A3	17/A4	17/A5	17/B1	17/B2	17/B3	17/B4	17/B5	17/C1	17/C2	17/C3	17/C4	17/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	43	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	2	1	-	2	2	11	-	3	3	1	1	2	-
Siteroptes spp.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Tarsonemus spp.	-	5	16	2	8	8	5	37	4	2	-	-	3	2	-
Eupodes spp.	2	3	10	6	21	-	2	5	4	1	-	-	-	-	2
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	1	5	1	-	1	-	1	5	8	1	-	-	-	-
Microtydeus sp. }	-	-	-				1		6	15	1	1		-	-
Coccotydeus sp. }	22	13	15	34	15	23	51	40	18	23	2	1	4	6	6
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	1	6	-	1	4	-	-	-	-	-	1	-	-	-	-
Speleorchestes sp.	1	-	-	1	1	1	-	-	-	1	4	2	3	-	1
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	26	28	48	46	50	37	61	95	41	96	12	5	13	10	9
ACARIDIAE	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	1	-	-	1	-	3	6	1	1	1	2	-	1
MESOSTIGMATA	-	2	5	1	-	-	-	1	1	1	1	2	1	1	2
Tot. ACARI	26	30	54	47	50	39	61	99	48	98	14	9	16	11	12
COLLEMBOLA	15	14	15	35	13	52	36	12	40	20	-	4	1	-	1
OTHER INSECTS	-	-	-	-	-	2	1	-	1	1	-	-	-	-	-

TABLE 12 (Continued)

	26 July 1963														
	18/A1	18/A2	18/A3	18/A4	18/A5	18/B1	18/B2	18/B3	18/B4	18/B5	18/C1	18/C2	18/C3	18/C4	18/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	53	-	1	20	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	5	3	-	3	-	1	-	1	1	5	1	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	17	8	-	25	3	-	1	-	-	4	-	-	-	1
Eupodes spp.	3	21	35	1	21	2	-	-	2	-	-	-	-	4	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	10	26	-	56	21	7	6	5	3	-	-	-	1	-
Microtydeus sp.)	21	22	14	30	30	27	52	136	35	29	12	13	10	3	5
Coccotydeus sp.)						31									
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	1	7	2	-	3	-	-	-	-	-	-	-	-	-	3
Speleorchestes sp.	3	2	3	2	2	2	-	1	2	-	1	-	-	3	2
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	1	-	-	-	-	5	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	29	84	91	33	141	144	62	145	65	33	22	14	10	11	11
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	1	1	-	-	-	1	-	-	1	3	-	1	2	5
MESOSTIGMATA	-	-	2	-	3	4	-	-	-	-	-	-	-	-	-
Tot. ACARI	29	85	94	33	144	148	63	145	65	34	25	14	11	13	16
COLLEMBOLA	-	6	-	2	8	2	3	1	-	-	-	-	1	1	4
OTHER INSECTS	-	-	-	-	3	-	1	-	1	1	-	-	-	-	-

TABLE 12 (Continued)

	6 August 1963														
	19/A1	19/A2	19/A3	19/A4	19/A5	19/B1	19/B2	19/B3	19/B4	19/B5	19/C1	19/C2	19/C3	19/C4	19/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (*Telodispus*) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (*Imparipes*) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
I. (*Archidispus*) spp.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Scutacarus (*Variatipes*) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Pygmephorus spp.	-	-	1	2	-	-	-	-	-	-	4	9	-	9	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	4	-	-	-	-	-	1	-	-	1	-	-	31	-
Eupodes spp.	2	14	4	5	3	3	1	4	-	1	-	-	-	-	1
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (*Hoploscirus*) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	1	6	12	1	2	-	4	2	-	1	-	1	-	-
Microtydeus sp. }	-	1	1	1			-	2	2	3	-				-
Coccotydeus sp. }	30	5	20	8	10	15	46	52	11	57	10	8	15	13	-
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	18	1	2	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	4	-	-	-	3	-	6	-	-	-	4	1	3	1	1
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	36	43	33	31	17	20	54	63	15	61	21	18	20	56	2
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
MESOSTIGMATA	-	-	-	1	-	-	-	-	-	-	-	-	-	23	-
Tot. ACARI	36	43	33	32	17	20	54	63	15	61	21	18	20	80	2
COLLEMBOLA	2	-	10	-	4	-	-	-	3	-	1	2	1	8	1
OTHER INSECTS	-	-	-	4	1	-	1	-	-	-	-	-	1	-	-
MYRIAPODA															

TABLE 12 (Continued)

	14 August 1963														
	20/A1	20/A2	20/A3	20/A4	20/A5	20/B1	20/B2	20/B3	20/B4	20/B5	20/C1	20/C2	20/C3	20/C4	20/C5
TROMBIDIFORMES unident.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	2	-	-	5	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	2	-	3
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	1	1	-	1	-	-	3	3	-	-	1	1	-	-
Eupodes spp.	2	7	6	4	5	-	1	6	-	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	22	2	3	-	-	-	-	-	-	-	1	2	-	-
Microtydeus sp.)	42	-	-	24	21	1	1	1	1	83	-	2	1	3	1
Coccotydeus sp.)		16	26			5	3	7	59		-		-		
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Nanorchestes sp.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	1	-	1	3	6	1	-	3	-	-	1	-	-	1	2
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.															
Tot. TROMBIDIFORMES	45	47	37	35	36	7	5	26	63	83	1	5	6	4	7
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Tot. ACARI	45	47	38	35	36	7	5	27	63	83	1	5	6	4	8
COLLEMBOLA	-	2	7	-	-	1	-	1	-	-	-	2	-	-	-
OTHER INSECTS	-	-	-	1	1	2	-	-	1	-	-	-	-	-	-
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	4 September 1963														
	21/A1	21/A2	21/A3	21/A4	21/A5	21/B1	21/B2	21/B3	21/B4	21/B5	21/T1	21/C2	21/C3	21/C4	21/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
Eupodes spp.	9	-	1	-	-	1	-	-	1	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	1	-	3	-	-	-	1	-	-	-	-	-	-	-	-
Microtydeus sp. } Coccotydeus sp. }	- 14	- 16	- 11	- 8	23	1 7	6	1 16	5	10	3	5	3	- -	3
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Speleorchestes sp.	-	1	-	-	-	-	1	-	-	-	-	-	-	1	4
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-?	-	-	-	-	-	1	-	-	1	-	-	1	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	2	-	-	-	-	-	2	2	-	-	-	-	-	-
Oligonychus sp.	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	28	19	15	8	26	10	11	22	10	10	5	6	4	2	7
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-
MESOSTIGMATA	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Tot. ACARI	29	19	15	9	26	10	11	23	10	10	6	6	4	2	7
COLLEMBOLA	2	-	-	2	2	-	2	-	-	-	1	-	-	1	-
OTHER INSECTS	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	11 September 1963														
	22/A1	22/A2	22/A3	22/A4	22/A5	22/B1	22/B2	22/B3	22/B4	22/B5	22/C1	22/C2	22/C3	22/C4	22/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Tarsonemus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eupodes spp.	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtydeus sp. } Coccotydeus sp.	1	16	13	4	15	-	4	13	3	1	9	4	-	3	-
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	-	1	-	4	1	-	1	-	-	-	3	1	-	1	-
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Oligonychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	1	17	13	9	18	-	7	14	3	1	12	5	1	4	-
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Tot. ACARI	1	17	13	9	18	-	7	14	3	1	12	5	1	4	1
COLLEMBOLA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER INSECTS	-	-	-	1	1	-	-	-	-	1	-	-	-	-	-
MYRIAPODA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 12 (Continued)

	2 October 1963														
	23/A1	23/A2	23/A3	23/A4	23/A5	23/B1	23/B2	23/B3	23/B4	23/B5	23/C1	23/C2	23/C3	23/C4	23/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tarsonemus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eupodes spp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtydeus sp.) Coccotydeus sp.)	4	5	3	21	7	1	-	-	5	2	2	-	2	-	3
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	3	4	-	1	2	-	11	21	2	3	4	5	-	5	1
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	-	-	-	-	2	-	-	1	-	-	-	-	-	-	-
Oligonychus sp.	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	7	10	4	22	12	1	12	24	7	6	6	5	2	5	4
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
Tot. ACARI	8	10	4	22	12	2	12	24	7	6	7	5	2	5	4
COLLEMBOLA	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-
OTHER INSECTS	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-

TABLE 12 (Continued)

	17 October 1963														
	24/A1	24/A2	24/A3	24/A4	24/A5	24/B1	24/B2	24/B3	24/B4	24/B5	24/C1	24/C2	24/C3	24/C4	24/C5
TROMBIDIFORMES unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERIOPHYIDAE	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
SCUTACARIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Imparipes (Telodispus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Imparipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. (Archidispus) spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scutacarus (Variatipes) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYEMOTIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyemotes spp.	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-
Pygmephorus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siteroptes spp.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Tarsonemus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eupodes spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protereunetes (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BDELLIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spinibdella sp.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Bdellodes (Hoploscirus) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biscirus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhagidia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tydeus spp.	-	[illegible]	-	-	-	-	1	-	-	-	-	-	-	-	-
Microtydeus sp.)	15	30	1	10	6	10	9	3	10	23	-	4	1	5	-
Coccctydeus sp.)			26												
Pronematus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxa spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunaxoides spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nanorchestes sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Speleorchestes sp.	3	-	12	8	-	4	4	2	7	1	-	3	3	3	6
Pachygnathus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CALIGONELLIDAE unident.	-	-	-	1	-	-	2	-	-	-	-	-	-	-	-
Molothrognathus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stigmagnathus sp.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
STIGMAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ledermülleria spp.	-	-	-	-	-	1	-	-	2	-	-	1	-	-	-
RAPHIGNATHIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raphignathus sp.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Acheles sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acheles (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRANYCHIDAE unident.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Aplonobia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eotetranychus sp.	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Monoceronychus sp.	1	-	2	1	-	1	-	-	1	-	-	-	-	-	-
Oligonychus sp.	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Schizotetranychus sp.	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Linotetranus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocheylus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chaussieria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHEYLETIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheyletia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cheletomimus (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ERYTHRAEIDAE unident.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauptmannia spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrolophus spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtrombidium (?) sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ettmülleria sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. TROMBIDIFORMES	20	36	42	22	7	16	22	6	22	25	-	8	5	8	6
ACARIDIAE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORIBATEI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MESOSTIGMATA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tot. ACARI	20	36	42	22	7	16	22	6	22	25	-	8	5	8	6
COLLEMBOLA	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
OTHER INSECTS	-	1	-	1	1	-	-	1	1	1	-	-	-	-	-

TABLE 13 Mean number and biomass of organisms of 5 sampling units, mean number/m^2 and mean biomass / m^2 from each plot on each sampling date.

Coccotydeus & Microtydeus spp.

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	1.6	0.0024	759.2	1.1388	3.0	0.0045	1423.5	2.1353	1.2	0.0018	569.4	0.8541
7 Nov. 1962	7.2	0.0108	3416.4	5.1246	2.6	0.0039	1233.7	1.8506	0.2	0.0003	94.9	0.1424
4 Dec. 1962	4.0	0.0060	1898.0	2.8470	0.4	0.0006	189.8	0.2847	0.6	0.0009	284.7	0.4271
11 Dec. 1962	0.4	0.0006	189.8	0.2847	5.8	0.0087	2752.1	4.1282	4.6	0.0069	2182.7	3.2741
3 Jan. 1963	5.8	0.0087	2752.1	4.1282	0.8	0.0012	379.6	0.5694	2.6	0.0039	1233.7	1.8506
11 Jan 1963	22.0	0.0330	10439.0	15.6585	8.4	0.0126	3985.8	5.9787	9.2	0.0138	4365.4	6.5481
5 Feb. 1963	74.4	0.1116	35302.8	52.9542	22.2	0.0333	10533.9	15.8009	19.6	0.0294	9300.2	13.9503
12 Feb. 1963	7.4	0.0111	3511.3	5.2669	12.0	0.0180	5694.0	8.5410	31.6	0.0474	14994.2	22.4913
5 Mar. 1963	5.8	0.0087	2752.1	4.1282	15.4	0.0231	7307.3	10.9610	0.4	0.0006	189.8	0.2847
12 Mar. 1963	22.6	0.0339	10723.7	16.0856	81.6	0.1224	38719.2	58.0788	8.4	0.0126	3985.8	5.9787
9 Apr. 1963	13.4	0.0201	6358.3	9.5375	22.8	0.0342	10818.6	16.2279	3.6	0.0054	1708.2	2.5624
17 Apr. 1963	22.8	0.0342	10818.6	16.2279	16.4	0.0246	7781.8	11.6727	1.8	0.0027	854.1	1.2812
1 May 1963	30.4	0.0456	14424.8	21.6372	41.6	0.0624	19739.2	29.6088	8.4	0.0126	3985.8	5.9787
8 May 1963	25.4	0.0381	12052.3	18.0785	36.6	0.0549	17366.7	26.0501	3.0	0.0045	1423.5	2.1353
5 Jun. 1963	12.4	0.0186	5883.8	8.8257	58.2	0.0873	27615.9	41.4239	8.2	0.0123	3890.9	5.8364
13 Jun. 1963	7.0	0.0105	3321.5	4.9823	15.0	0.0225	7117.5	10.6763	3.4	0.0051	1613.3	2.4200
1 Jul. 1963	19.8	0.0297	9395.1	14.0927	34.8	0.0522	16512.6	24.7689	4.2	0.0063	1992.9	2.9894
26 Jul. 1963	23.4	0.0351	11103.3	16.6550	62.0	0.0930	29419.0	44.1285	8.6	0.0129	4080.7	4.4888
6 Aug. 1963	15.2	0.0228	7212.4	10.8186	37.6	0.0564	17841.2	26.7618	9.2	0.0138	4365.4	6.5481
14 Aug. 1963	25.8	0.0387	12242.1	18.3632	32.2	0.0483	15278.9	22.9184	1.4	0.0021	664.3	0.9965
4 Sept. 1963	14.4	0.0216	6832.8	10.2492	9.2	0.0138	4365.4	6.5481	2.8	0.0042	1328.6	1.9929
11 Sept. 1963	9.8	0.0147	4650.1	6.9752	4.2	0.0063	1992.9	2.9894	3.2	0.0048	1518.4	2.2776
2 Oct. 1963	8.0	0.0120	3796.0	5.6940	1.6	0.0024	759.2	1.1388	1.4	0.0021	664.3	0.9965
17 Oct. 1963	17.6	0.0264	8351.2	12.5268	11.0	0.0165	5219.5	7.8293	2.0	0.0030	949.0	1.4235

TABLE 13 (Continued)

Tydeus spp.

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	0.4	0.0056	189.8	2.6572	0.2	0.0028	94.9	1.3286
7 Nov. 1962	-	-	-	-	0.4	0.0056	189.8	2.6572	-	-	-	-
4 Dec. 1962	-	-	-	-	-	-	-	-	0.8	0.0112	379.6	5.3144
11 Dec. 1962	-	-	-	-	5.0	0.0070	2372.5	33.2150	0.6	0.0084	284.7	3.9858
3 Jan. 1963	-	-	-	-	-	-	-	-	-	-	-	-
11 Jan. 1963	-	-	-	-	0.2	0.0028	94.9	1.3286	1.4	0.0196	664.3	9.3002
5 Feb. 1963	-	-	-	-	0.2	0.0028	94.9	1.3286	3.6	0.0504	1708.2	23.9148
12 Feb. 1963	-	-	-	-	0.2	0.0028	94.9	1.3286	5.2	0.0728	2467.4	34.5436
5 Mar. 1963	-	-	-	-	0.2	0.0028	94.9	1.3286	-	-	-	-
12 Mar. 1963	0.4	0.0056	189.8	2.6572	0.6	0.0084	284.7	3.9858	6.2	0.0868	2941.9	41.1866
9 Apr. 1963	0.4	0.0056	189.8	2.6572	1.6	0.0224	759.2	10.6288	0.4	0.0056	189.8	2.6572
17 Apr. 1963	0.8	0.0112	379.6	5.3144	0.4	0.0056	189.8	2.6572	2.2	0.0308	1043.9	14.6146
1 May 1963	2.8	0.0392	1328.6	18.6004	1.6	0.0224	759.2	10.6288	1.4	0.0196	664.3	9.3002
8 May 1963	0.4	0.0056	189.8	2.6572	3.2	0.0448	1518.4	21.2576	1.2	0.0168	569.4	7.9716
5 Jun. 1963	1.8	0.0282	854.1	11.9574	3.0	0.0420	1423.5	19.9290	0.6	0.0084	284.7	3.9858
13 Jun. 1963	0.6	0.0084	284.7	3.9858	4.8	0.0672	2277.6	31.8864	1.2	0.0168	569.4	7.9716
1 Jul. 1963	1.4	0.0196	664.3	9.3002	3.0	0.0420	1423.5	19.9290	0.2	0.0028	94.9	1.3286
26 Jul. 1963	18.4	0.2576	8730.8	122.2312	7.2	0.1008	3416.4	47.8296	0.2	0.0028	94.9	1.3286
6 Aug. 1963	4.0	0.0560	1898.0	26.5720	1.6	0.0224	759.2	10.6288	0.4	0.0056	189.8	2.6572
14 Aug. 1963	5.4	0.0756	2562.3	35.3682	-	-	-	-	0.6	0.0084	284.7	3.9858
4 Sept. 1963	0.8	0.0112	379.6	5.3144	0.2	0.0028	94.9	1.3286	-	-	-	-
11 Sept. 1963	-	-	-	-	-	-	-	-	-	-	-	-
2 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-
17 Oct. 1963	1.2	0.0168	569.4	7.9716	0.2	0.0028	94.9	1.3286	-	-	-	-

TABLE 13 (Continued)

<u>Eupodes</u> spp.

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
7 Nov. 1962	-	-	-	-	1.0	0.0140	474.5	6.6430	2.2	0.0308	1043.9	14.6146
4 Dec. 1962	-	-	-	-	-	-	-	-	-	-	-	-
11 Dec. 1962	1.4	0.0196	664.3	9.3002	-	-	-	-	0.2	0.0028	94.9	1.3286
3 Jan. 1963	-	-	-	-	-	-	-	-	-	-	-	-
11 Jan. 1963	0.6	0.0084	284.7	3.9858	-	-	-	-	1.2	0.0168	569.4	7.9716
5 Feb. 1963	8.0	0.1120	3796.0	53.1440	-	-	-	-	3.4	0.0476	1613.3	22.5862
12 Feb. 1963	3.4	0.0476	1613.3	22.5862	1.4	0.0196	664.3	9.3002	0.8	0.0112	379.6	5.3144
5 Mar. 1963	0.4	0.0056	189.8	2.6572	0.2	0.0028	94.9	1.3286	-	-	-	-
12 Mar. 1963	3.0	0.0420	1423.5	19.9290	0.6	0.0084	284.7	3.9858	1.0	0.0140	474.5	6.6430
9 Apr. 1963	5.8	0.0812	2752.1	38.5294	4.4	0.0616	2087.8	29.2292	6.0	0.0840	2847.0	39.5780
17 Apr. 1963	12.4	0.1736	5883.8	82.3732	2.6	0.0364	1233.7	17.2718	8.4	0.1176	3985.8	55.8012
1 May 1963	4.8	0.0672	2277.6	31.8864	1.4	0.0196	664.3	9.3002	1.4	0.0196	664.3	9.3002
8 May 1963	0.6	0.0084	284.7	3.9858	1.4	0.0196	664.3	9.3002	-	-	-	-
5 Jun. 1963	3.8	0.0532	1803.1	25.2434	2.8	0.0392	1328.6	18.6004	-	-	-	-
13 Jun. 1963	4.8	0.0672	2277.6	31.8864	0.8	0.0112	379.6	5.3144	0.8	0.0112	379.6	5.3144
1 Jul. 1963	8.4	0.1176	3985.8	55.8012	2.0	0.0280	949.0	13.2860	0.4	0.0056	189.8	2.6572
26 Jul. 1963	16.2	0.2268	7686.9	107.6166	0.8	0.0112	379.6	5.3144	0.8	0.0112	379.6	5.3144
6 Aug. 1963	5.6	0.0784	2657.2	37.2008	1.6	0.0224	759.2	10.6288	0.2	0.0028	94.9	1.3286
14 Aug. 1963	4.8	0.0672	2277.6	31.8864	1.4	0.0196	664.3	9.3002	-	-	-	-
4 Sept. 1963	2.0	0.0280	949.0	13.2860	0.4	0.0056	189.8	2.6572	-	-	-	-
11 Sept. 1963	0.4	0.0056	189.8	2.6572	-	-	-	-	-	-	-	-
2 Oct. 1963	0.2	0.0028	94.9	1.3286	-	-	-	-	-	-	-	-
17 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 13 (Continued)

Pyemotidae

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
7 Nov. 1962	0.4	0.0016	189.8	0.7592	0.4	0.0016	189.8	0.7592	-	-	-	-
4 Dec. 1962	0.2	0.0008	94.9	0.3796	-	-	-	-	-	-	-	-
11 Dec. 1962	-	-	-	-	-	-	-	-	0.4	0.0016	189.8	0.7592
3 Jan. 1963	-	-	-	-	-	-	-	-	-	-	-	-
11 Jan. 1963	-	-	-	-	-	-	-	-	1.0	0.0040	474.5	1.8980
5 Feb. 1963	23.8	0.0952	11293.1	45.1724	4.0	0.0160	1898.0	7.5920	2.8	0.0112	1328.6	5.3144
12 Feb. 1963	1.0	0.0040	474.5	1.8980	9.4	0.0376	4460.3	17.8412	0.8	0.0032	379.6	1.5184
5 Mar. 1963	-	-	-	-	-	-	-	-	-	-	-	-
12 Mar. 1963	-	-	-	-	-	-	-	-	0.2	0.0008	94.9	0.3796
9 Apr. 1963	-	-	-	-	0.2	0.0008	94.9	0.3796	1.4	0.0056	664.3	2.6572
17 Apr. 1963	1.6	0.0064	759.2	3.0368	0.2	0.0008	94.9	0.3796	1.8	0.0072	854.1	3.4164
1 May 1963	18.4	0.0736	8730.8	34.9232	1.6	0.0064	759.2	3.0368	0.8	0.0032	379.6	1.5184
8 May 1963	0.2	0.0008	94.9	0.3796	3.8	0.0152	1803.1	7.2124	3.8	0.0152	1803.1	7.2124
5 Jun. 1963	2.4	0.0096	1138.8	4.5552	2.2	0.0088	1043.9	4.1756	1.8	0.0072	854.1	3.4164
13 Jun. 1963	0.8	0.0032	379.6	1.5184	1.2	0.0048	569.4	2.2776	0.8	0.0032	379.6	1.5184
1 Jul. 1963	0.6	0.0024	284.7	1.1388	2.8	0.0112	1328.6	5.3144	1.4	0.0056	664.3	2.6572
26 Jul. 1963	2.2	0.0088	1043.9	4.1756	0.6	0.0024	284.7	1.1388	1.2	0.0048	569.4	2.2776
6 Aug. 1963	0.6	0.0024	284.7	1.1388	-	-	-	-	4.6	0.0184	2182.7	8.7308
14 Aug. 1963	-	-	-	-	-	-	-	-	1.0	0.0040	474.5	1.8980
4 Sept. 1963	0.2	0.0008	94.9	0.3796	0.2	0.0008	94.9	0.3796	0.2	0.0008	94.9	0.3796
11 Sept. 1963	-	-	-	-	-	-	-	-	0.2	0.0008	94.9	0.3796
2 Oct. 1963	-	-	-	-	0.2	0.0008	94.9	0.3796	-	-	-	-
17 Oct. 1963	-	-	-	-	0.4	0.0016	189.8	0.7592	0.2	0.0008	94.9	0.3796

TABLE 13 (Continued)

Tarsonemus spp.

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean Number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	0.4	0.0016	189.8	0.7592	-	-	-	-	-	-	-	-
7 Nov. 1962	1.8	0.0072	854.1	3.4164	1.4	0.0056	664.3	2.6572	-	-	-	-
4 Dec. 1962	-	-	-	-	-	-	-	-	-	-	-	-
11 Dec. 1962	0.6	0.0024	284.7	1.1388	-	-	-	-	0.4	0.0016	189.8	0.7592
3 Jan. 1963	-	-	-	-	-	-	-	-	0.2	0.0008	94.9	0.3796
11 Jan. 1963	9.0	0.0360	4270.5	17.0820	16.6	0.0664	7876.7	31.5068	6.0	0.0240	2827.0	11.3080
5 Feb. 1963	30.2	0.1208	[illegible]	[illegible]	9.6	0.0384	4555.2	18.2208	3.2	0.0128	1518.4	6.0736
[illegible]	-	-	-	-	0.4	0.0016	189.8	0.7592	0.2	0.0008	94.9	0.3796
5 Mar. 1963	0.4	0.0016	189.8	0.7592	-	-	-	-	-	-	-	-
12 Mar. 1963	7.8	0.0312	3701.1	14.8044	20.2	0.0808	9584.9	38.3396	2.6	0.0104	1233.7	4.9348
9 Apr. 1963	4.4	0.0176	2087.8	8.3512	1.4	0.0056	664.3	2.6572	4.6	0.0184	2182.7	8.7308
17 Apr. 1963	18.6	0.0744	8825.7	35.3028	2.8	0.0112	1328.6	5.3144	20.4	0.0816	9679.8	38.7192
1 May 1963	1.8	0.0072	854.1	3.4164	2.0	0.0080	949.0	3.7960	1.0	0.0040	474.5	1.8980
8 May 1963	2.0	0.0080	949.0	3.7960	3.0	0.0120	1423.5	5.6940	-	-	-	-
5 Jun. 1963	1.2	0.0048	569.4	2.2776	10.8	0.0432	5124.6	20.4984	1.0	0.0040	474.5	1.8980
13 Jun. 1963	2.0	0.0080	949.0	3.7960	1.4	0.0056	664.3	2.6572	1.0	0.0040	474.5	1.8980
1 Jul. 1963	6.2	0.0248	2941.9	11.7676	11.2	0.0448	5314.4	21.2576	1.0	0.0040	474.5	1.8980
26 Jul. 1963	10.0	0.0400	4745.0	18.9800	0.8	0.0032	379.6	1.5184	1.0	0.0040	474.5	1.8980
6 Aug. 1963	0.8	0.0032	379.6	1.5184	0.2	0.0008	94.9	0.3796	6.4	0.0256	3036.8	12.1472
14 Aug. 1963	0.6	0.0024	284.7	1.1388	1.2	0.0048	569.4	2.2776	0.4	0.0016	189.8	0.7592
4 Sept. 1963	0.6	0.0024	284.7	1.1388	-	-	-	-	-	-	-	-
11 Sept. 1963	-	-	-	-	-	-	-	-	-	-	-	-
2 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-
17 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 13 (Continued)

Nanorchestidae

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	7.0	0.0140	3321.5	6.6430	2.8	0.0056	1328.6	2.6572	0.8	0.0016	379.6	0.7592
7 Nov. 1962	12.8	0.0256	6073.6	12.1472	3.0	0.0060	1432.5	2.8470	0.4	0.0008	189.8	0.3796
4 Dec. 1962	1.6	0.0032	759.2	1.5184	1.6	0.0032	759.2	1.5184	0.8	0.0016	379.6	0.7592
11 Dec. 1962	1.0	0.0020	474.5	0.9490	0.8	0.0016	379.6	0.7592	0.2	0.0004	94.9	0.1898
3 Jan. 1963	0.6	0.0012	284.7	0.5694	0.4	0.0008	189.8	0.3796	-	-	-	-
11 Jan. [illegible]	5.8	[illegible]	[illegible]	5.5042	1.8	0.0036	854.1	1.7082	1.2	0.0024	569.4	1.1388
5 Feb. 1963	[illegible]	0.0300	7117.5	14.2350	1.0	0.0020	474.5	0.9490	2.6	0.0052	1233.7	2.4674
[illegible] 1963	3.6	0.0072	1708.2	[illegible]	3.4	0.0068	1613.3	3.2266	1.0	0.0020	474.5	0.9490
5 Mar. 1963	3.4	0.0068	1613.3	3.2266	8.2	0.0164	3890.9	7.7818	2.2	0.0044	1043.9	2.0878
12 Mar. 1963	4.8	0.0096	2277.6	4.5552	9.0	0.0180	4270.5	8.5410	6.8	0.0136	3226.6	6.4532
9 Apr. 1963	16.6	0.0332	7876.7	15.7534	5.0	0.0100	2372.5	4.7450	2.8	0.0056	1328.6	2.6572
17 Apr. 1963	12.8	0.0256	6073.6	12.1472	2.0	0.0040	949.0	1.8980	4.8	0.0096	2277.6	4.5552
1 May 1963	6.4	0.0128	3036.8	6.0736	2.6	0.0052	1233.7	2.4674	5.2	0.0104	2467.4	4.9348
8 May 1963	4.8	0.0096	2277.6	4.5552	1.0	0.0020	474.5	0.9490	6.6	0.0132	3131.7	6.2634
5 Jun. 1963	2.8	0.0056	1328.6	2.6572	1.2	0.0024	569.4	1.1388	1.6	0.0032	759.2	1.5184
13 Jun. 1963	0.2	0.0004	94.9	0.1898	2.4	0.0048	1138.8	2.2776	3.2	0.0064	1518.4	3.0368
1 Jul. 1963	3.0	0.0060	1423.5	2.8470	0.4	0.0008	189.8	0.3796	2.2	0.0044	1043.9	2.0878
26 Jul. 1963	5.0	0.0100	2372.5	4.7450	1.0	0.0020	474.5	0.9490	1.8	0.0036	854.1	1.7082
6 Aug. 1963	5.6	0.0112	2567.2	5.3144	1.2	0.0024	569.4	1.1388	2.0	0.0040	949.0	1.8980
14 Aug. 1963	2.4	0.0048	1138.8	2.2776	0.8	0.0016	379.6	0.7592	0.8	0.0016	379.6	0.7592
4 Sept. 1963	0.2	0.0004	94.9	0.1898	0.2	0.0004	94.9	0.1898	1.2	0.0024	569.4	1.1388
11 Sept. 1963	1.2	0.0024	569.4	1.1388	0.2	0.0004	94.9	0.1898	1.0	0.0020	474.5	0.9490
2 Oct. 1963	2.0	0.0040	949.0	1.8980	7.4	0.0148	3511.3	7.0226	3.0	0.0060	1423.5	2.8470
17 Oct. 1963	4.6	0.0092	2182.7	4.3654	3.6	0.0072	1708.2	3.4164	3.0	0.0060	1423.5	2.8470

TABLE 13 (Continued)

Trombidiformes

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	11.2	0.0316	5504.2	20.9729	6.6	0.0273	3131.7	12.9539	2.6	0.1020	1233.7	5.6940
7 Nov. 1962	25.8	0.0776	11577.8	35.3977	10.4	0.0639	4839.9	30.3206	4.6	0.0589	2182.7	27.9481
4 Dec. 1962	7.4	0.0340	3511.3	16.1496	2.2	0.0042	1043.9	1.9929	2.2	0.0137	1043.9	6.5007
11 Dec. 1962	4.6	0.0602	2277.6	29.3241	14.2	0.0571	6453.2	56.9875	7.0	0.0351	3321.5	16.6550
3 Jan. 1963	[illegible]	0.0107	3226.6	5.0772	1.4	0.0074	759.2	3.5113	3.6	0.0313	1613.3	14.8519
[illegible] 1963	40.8	0.1906	19264.7	90.4397	28.2	0.0994	13286.0	47.1653	24.4	0.1470	11557.8	69.6715
5 Feb. [illegible]	[illegible]			[illegible]	40.0	0.1909	17176.9	90.5821	37.8	0.1978	17936.1	93.8561
12 Feb. 1963	17.8	0.1507	[illegible]	71.5071	27.4	0.1036	12906.4	49.1582	41.0	0.1880	19454.5	84.8406
5 Mar. 1963	10.4	0.0257	4934.8	12.1947	[illegible]	0.0483	11577.8	22.9184	2.6	0.0050	1233.7	2.3725
12 Mar. 1963	39.4	0.1605	18695.3	63.3458	113.4	0.2546	53808.3	120.8077	26.6	0.1573	12621.7	74.5914
9 Apr. 1963	41.4	0.1743	19643.7	[illegible]	36.2	0.1458	17176.9	69.1821	20.4	0.1498	9679.8	70.8002
17 Apr. 1963	70.4	[illegible]	32835.4	155.7309	25.0	0.0970	11862.5	46.0265	44.6	0.3021	21162.7	143.3465
1 May 1963	66.6	0.2924	[illegible]	138.7438	51.2	0.1368	24294.4	64.9116	18.6	0.0746	8825.7	35.3977
8 May 1963	33.8	0.0801	[illegible]	38.0075	49.4	0.1565	23345.4	74.2593	15.4	0.0641	7307.3	29.1818
5 Jun. 1963	31.4	0.1448	14804.4	[illegible]	78.8	0.2389	37295.7	94.7577	14.4	0.0437	6832.8	20.7357
13 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.2	0.1325	12431.9	62.8713	10.4	0.0467	4934.8	22.1592
1 Jul. 1963	[illegible]	[illegible]	[illegible]	[illegible]	66.0	0.2046	30273.1	97.0827	10.0	0.0383	4745.0	18.1734
26 Jul. 1963	75.6	0.5955	35872.2	[illegible]	89.8	0.2792	42040.7	132.4806	13.6	0.0393	6453.2	17.0156
6 Aug. 1963	32.0	0.1840	[illegible]	[illegible]	42.6	0.1072	20118.8	50.8664	23.4	0.0754	11103.3	35.7773
14 Aug. 1963	40.0	0.1921	18885.1	90.6475	36.8	0.0845	17461.6	40.0953	4.6	0.0217	2182.7	10.2967
4 Sept. 1963	[illegible]	0.0950	9110.4	45.5520	12.6	0.0770	5599.1	32.1711	4.8	0.0086	2277.6	4.0987
11 Sept. 1963	11.6	0.0255	5504.2	12.0998	5.0	0.0267	2372.5	12.6692	4.4	0.0076	[illegible]	3.6062
2 Oct. 1963	11.0	0.0356	5124.6	16.8922	10.0	0.0368	4745.0	17.0820	4.4	0.0081	2087.8	3.8435
17 Oct. 1963	25.4	0.1090	12052.3	53.6185	18.2	0.0849	8351.2	35.6401	5.4	0.0130	2562.3	6.1685

TABLE 13 (Continued)

Protogamasellus spp.

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
7 Nov. 1962	-	-	-	-	0.4	0.0072	189.8	3.4164	0.4	0.0072	189.8	3.4164
4 Dec. 1962	-	-	-	-	-	-	-	-	-	-	-	-
11 Dec. 1962	0.2	0.0036	94.9	1.7082	-	-	-	-	-	-	-	-
3 Jan. 1963	-	-	-	-	-	-	-	-	-	-	-	-
11 Jan. 1963	0.2	0.0036	94.9	1.7082	-	-	-	-	0.2	0.0036	94.9	1.7082
5 Feb. 1963	2.8	0.0504	1328.6	23.9148	1.2	0.0216	569.4	10.2492	3.2	0.0576	1518.4	27.3312
12 Feb. 1963	-	-	-	-	-	-	-	-	-	-	-	-
5 Mar. 1963	-	-	-	-	-	-	-	-	-	-	-	-
12 Mar. 1963	2.6	0.0468	1233.7	22.2066	3.0	0.0540	1423.5	25.6230	0.4	0.0072	189.8	3.4164
9 Apr. 1963	0.6	0.0108	284.7	5.1246	1.8	0.0324	854.1	15.3738	7.8	0.1404	3701.1	66.6198
17 Apr. 1963	3.0	0.0540	1423.5	25.6230	1.8	0.0324	854.1	15.3738	12.0	0.2160	5694.0	102.4920
1 May 1963	0.2	0.0036	94.9	1.7082	-	-	-	-	0.2	0.0036	94.9	1.7082
8 May 1963	-	-	-	-	0.2	0.0036	94.9	1.7082	0.6	0.0108	284.7	5.1246
5 Jun. 1963	-	-	-	-	0.6	0.0108	284.7	5.1246	1.4	0.0252	664.3	11.9574
13 Jun. 1963	0.2	0.0036	94.9	1.7082	-	-	-	-	0.4	0.0072	189.8	3.4164
1 Jul. 1963	1.6	0.0288	759.2	13.6656	0.6	0.0108	284.7	5.1246	1.0	0.0180	474.5	8.5410
26 Jul. 1963	0.4	0.0072	189.8	3.4164	0.6	0.0108	284.7	5.1246	-	-	-	-
6 Aug. 1963	-	-	-	-	-	-	-	-	4.2	0.0756	1992.9	35.8722
14 Aug. 1963	-	-	-	-	-	-	-	-	0.2	0.0036	94.9	1.7082
4 Sept. 1963	-	-	-	-	-	-	-	-	-	-	-	-
11 Sept. 1963	-	-	-	-	-	-	-	-	-	-	-	-
2 Oct. 1963	-	-	-	-	0.2	0.0036	94.9	1.7082	0.2	0.0036	94.9	1.7082
17 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 13 (Continued)

Phytoseiidae

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Numbers/ m^2	Biomass/ m^2	Mean number	Biomass	Numbers/ m^2	Biomass/ m^2	Mean number	Biomass	Numbers/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
7 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
4 Dec. 1962	0.8	0.0064	379.6	3.0368	-	-	-	-	-	-	-	-
11 Dec. 1962	-	-	-	-	-	-	-	-	-	-	-	-
3 Jan. 1963	0.4	0.0032	189.8	1.5184	0.2	0.0016	94.9	0.7592	-	-	-	-
11 Jan. 1963	0.8	0.0096	379.6	4.5552	-	-	-	-	-	-	-	-
5 Feb. 1963	0.4	0.0032	189.8	1.5184	-	-	-	-	3.2	0.0576	1518.4	27.3312
12 Feb. 1963	-	-	-	-	0.2	0.0016	94.9	0.7592	0.4	0.0032	189.8	1.5184
5 Mar. 1963	0.2	0.0016	94.9	0.7592	-	-	-	-	-	-	-	-
12 Mar. 1963	-	-	-	-	-	-	-	-	-	-	-	-
9 Apr. 1963	-	-	-	-	0.2	0.0016	94.9	0.7592	0.2	0.0048	94.9	2.2776
17 Apr. 1963	-	-	-	-	-	-	-	-	-	-	-	-
1 May 1963	-	-	-	-	0.6	0.0048	284.7	2.2776	-	-	-	-
8 May 1963	-	-	-	-	0.2	0.0016	94.9	0.7592	-	-	-	-
5 Jun. 1963	-	-	-	-	0.4	0.0032	189.8	1.5184	-	-	-	-
13 Jun. 1963	-	-	-	-	-	-	-	-	-	-	-	-
1 Jul. 1963	-	-	-	-	-	-	-	-	-	-	-	-
26 Jul. 1963	0.6	0.0048	284.7	2.2776	0.2	0.0016	94.9	0.7592	-	-	-	-
6 Aug. 1963	0.2	0.0016	94.9	0.7592	-	-	-	-	-	-	-	-
14 Aug. 1963	-	-	-	-	0.2	0.0016	94.9	0.7592	-	-	-	-
4 Sept.1963	0.2	0.0016	94.9	0.7592	-	-	-	-	-	-	-	-
11 Sept.1963	-	-	-	-	-	-	-	-	-	-	-	-
2 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-
17 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 13 (Continued)

Total Mesostigmata

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
7 Nov. 1962	0.4	0.0048	189.8	2.2776	0.8	0.0116	379.6	7.2124	0.4	0.0072	189.8	3.4164
4 Dec. 1962	-	-	-	-	-	-	-	-	-	-	-	-
11 Dec. 1962	1.2	0.0104	569.4	6.6430	-	-	-	-	0.2	0.0008	94.9	0.3796
3 Jan. 1963	-	-	-	-	0.2	0.0016	94.9	0.7592	0.2	0.0004	94.9	0.3796
11 Jan. 1963	0.6	0.0068	284.7	3.2266	0.2	0.0004	94.9	1.8980	1.2	0.0096	569.4	9.6798
5 Feb. 1963	4.4	0.0620	2087.8	33.0252	2.2	0.0324	1043.9	20.4984	7.0	0.1160	3321.5	58.4584
12 Feb. 1963	0.4	0.0032	189.8	1.5184	0.4	0.0016	94.9	0.7592	0.4	0.0032	189.8	1.5184
5 Mar. 1963	-	-	-	-	-	-	-	-	0.2	0.0016	94.9	0.7592
12 Mar. 1963	5.2	0.0640	2467.4	42.3254	3.8	0.0560	1803.1	31.6966	0.4	0.0072	189.8	3.4164
9 Apr. 1963	1.0	0.0128	474.5	7.7818	3.6	0.0560	1708.2	28.2802	8.2	0.1492	3890.9	70.7954
17 Apr. 1963	3.4	0.0584	1613.3	29.4190	3.4	0.0448	1518.4	26.3822	13.6	0.2196	6453.2	104.2002
1 May 1963	0.2	0.0036	94.9	1.7082	0.6	0.0048	284.7	2.2776	0.2	0.0036	94.9	1.7082
8 May 1963	-	-	-	-	0.6	0.0056	284.7	4.3654	0.6	0.0108	284.7	5.1246
5 Jun. 1963	-	-	-	-	1.0	0.0140	474.5	6.6430	1.4	0.0252	664.3	11.9574
13 Jun. 1963	0.2	0.0036	94.9	1.7082	-	-	-	-	0.6	0.0112	284.7	5.3144
1 Jul. 1963	1.6	0.0288	759.2	13.6656	0.6	0.0108	284.7	5.1246	1.4	0.0224	664.3	12.3370
26 Jul. 1963	1.0	0.0120	474.5	5.6940	0.8	0.0124	379.6	5.8838	-	-	-	-
6 Aug. 1963	0.2	0.0016	94.9	0.7592	-	-	-	-	4.6	0.0804	13286.0	38.1498
14 Aug. 1963	-	-	-	-	0.2	0.0016	94.9	0.7592	0.2	0.0036	94.9	1.7082
4 Sept. 1963	0.4	0.0020	189.8	2.6572	-	-	-	-	-	-	-	-
11 Sept. 1963	-	-	-	-	-	-	-	-	-	-	-	-
2 Oct. 1963	-	-	-	-	0.2	0.0036	94.9	1.7082	0.2	0.0036	94.9	1.7082
17 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 13 (Continued)

Oribatei

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	0.6	0.0080	284.7	3.7865	-	-	-	-
7 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
4 Dec. 1962	-	-	-	-	-	-	-	-	-	-	-	-
11 Dec. 1962	-	-	-	-	-	-	-	-	0.2	0.0027	94.9	1.2622
3 Jan. 1963	-	-	-	-	-	-	-	-	0.2	0.0027	94.9	1.2622
11 Jan. 1963	-	-	-	-	-	-	-	-	0.6	0.0080	284.7	3.7864
5 [illegible] 1963	0.2	0.0027	94.9	1.2622	0.2	0.0027	94.9	1.2622	1.8	0.0259	854.1	11.3595
12 Feb. 1963	-	-	-	-	-	-	-	-	-	-	-	-
5 Mar. 1963	-	-	-	-	-	-	-	-	-	-	-	-
12 Mar. 1963	-	-	-	-	0.2	0.0027	94.9	1.2622	-	-	-	-
9 Apr. 1963	1.0	0.0133	474.5	6.3109	1.2	0.0160	569.4	7.5730	0.2	0.0027	94.9	1.2622
17 Apr. 1963	0.6	0.0080	284.7	3.7865	1.0	0.0133	474.5	6.3109	1.0	0.0133	474.5	6.3109
1 May 1963	0.2	0.0027	94.9	1.2622	0.8	0.0106	379.6	5.0487	0.4	0.0053	189.8	2.5243
8 May 1963	-	-	-	-	0.2	0.0027	94.9	1.2622	-	-	-	-
5 Jun. 1963	-	-	-	-	0.6	0.0080	284.7	3.7864	0.6	0.0080	284.7	3.7865
13 Jun. 1963	-	-	-	-	0.4	0.0053	189.8	2.5243	0.2	0.0027	94.9	1.2622
1 Jul. 1963	0.2	0.0027	94.9	1.2622	2.2	0.0293	1043.9	13.8839	1.0	0.0133	474.5	6.3109
26 Jul. 1963	0.4	0.0053	189.8	2.5243	0.4	0.0053	189.8	2.5243	2.2	0.0293	1043.9	13.8839
6 Aug. 1963	-	-	-	-	-	-	-	-	0.2	0.0027	94.9	1.2622
14 Aug. 1963	0.2	0.0027	94.9	1.2622	-	-	-	-	-	-	-	-
4 Sept.1963	-	-	-	-	0.2	0.0027	94.9	1.2622	0.2	0.0027	94.9	1.2622
11 Sept.1963	-	-	-	-	-	-	-	-	0.2	0.0027	94.9	1.2622
2 Oct. 1963	0.2	0.0027	94.9	1.2622	-	-	-	-	-	-	-	-
17 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 13 (Continued)

Acaridiae

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
7 Nov. 1962	-	-	-	-	-	-	-	-	-	-	-	-
4 Dec. 1962	-	-	-	-	-	-	-	-	-	-	-	-
11 Dec. 1962	-	-	-	-	-	-	-	-	-	-	-	-
3 Jan. 1963	-	-	-	-	-	-	-	-	-	-	-	-
11 Jan. 1963	-	-	-	-	-	-	-	-	-	-	-	-
5 Feb. 1963	-	-	-	-	-	-	-	-	-	-	-	-
12 Feb. 1963	0.2	0.0028	94.9	1.3286	-	-	-	-	2.8	0.0392	1328.6	18.6004
5 Mar. 1963	0.4	0.0056	189.8	2.6572	1.6	0.0224	759.2	10.6288	1.4	0.0196	664.3	9.3002
12 Mar. 1963	0.2	0.0028	94.9	1.3286	0.4	0.0056	189.8	2.6572	-	-	-	-
9 Apr. 1963	0.2	0.0028	94.9	1.3286	0.2	0.0028	94.9	1.3286	-	-	-	-
17 Apr. 1963	0.2	0.0028	94.9	1.3286	-	-	-	-	-	-	-	-
1 May 1963	-	-	-	-	-	-	-	-	-	-	-	-
8 May 1963	-	-	-	-	-	-	-	-	-	-	-	-
5 Jun. 1963	-	-	-	-	-	-	-	-	-	-	-	-
13 Jun. 1963	-	-	-	-	-	-	-	-	-	-	-	-
1 Jul. 1963	-	-	-	-	0.2	0.0028	94.9	1.3286	-	-	-	-
26 Jul. 1963	-	-	-	-	-	-	-	-	-	-	-	-
6 Aug. 1963	-	-	-	-	-	-	-	-	-	-	-	-
14 Aug. 1963	-	-	-	-	-	-	-	-	-	-	-	-
4 Sept.1963	-	-	-	-	-	-	-	-	-	-	-	-
11 Sept.1963	-	-	-	-	-	-	-	-	-	-	-	-
2 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-
17 Oct. 1963	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 13 (Continued)

Total Acari

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	11.2	0.0316	5504.2	20.9729	7.2	0.0353	3416.4	16.7404	2.6	0.1020	1233.7	5.6940
7 Nov. 1962	26.2	0.0824	11767.6	37.6753	11.2	0.0755	5219.5	37.5330	5.0	0.0661	2372.5	31.3645
4 Dec. 1962	7.4	0.0340	3511.3	16.1496	2.2	0.0042	1043.9	1.9929	2.2	0.0137	1043.9	6.5007
11 Dec. 1962	5.8	0.0706	2847.0	35.9671	14.2	0.0571	6453.2	56.9875	7.2	0.0386	3511.3	18.2968
3 Jan. 1963	6.8	0.0107	3226.6	5.0772	1.8	0.0090	854.1	4.2705	4.0	0.0344	1898.0	16.3039
11 Jan. 1963	41.4	0.1974	19549.4	93.6663	28.4	0.0998	13380.9	49.0633	26.2	0.1646	12411.9	83.1378
5 Feb. 1963	162.4	0.7597	77248.6	164.0649	42.4	0.2260	18315.7	112.3427	46.6	0.3397	22111.7	163.6740
12 Feb. 1963	18.4	0.1567	8730.8	74.3541	27.8	0.1052	13001.3	49.9174	44.2	0.2304	20972.9	104.9594
5 Mar. 1963	10.8	0.0313	5124.6	14.8519	26.0	0.0707	12337.0	33.5472	4.2	0.0262	1992.9	12.4319
12 Mar. 1963	44.8	0.2273	21257.6	106.9998	117.8	0.3189	55896.1	156.4237	27.0	0.1645	12811.5	78.0078
9 Apr. 1963	43.6	0.2032	20687.6	98.1267	41.2	0.2206	19549.4	106.3639	28.8	0.3017	13665.6	142.8578
17 Apr. 1963	74.6	0.3974	34828.3	190.2650	29.4	0.1551	13855.4	78.7196	59.2	0.5350	29134.3	253.8576
1 May 1963	67.0	0.2987	31981.3	141.7142	52.6	0.1522	24958.7	72.2379	19.2	0.0835	9110.4	39.6302
8 May 1963	33.8	0.0801	16038.1	38.0075	50.2	0.1648	23725.0	79.8869	16.0	0.0749	7592.0	34.3064
5 Jun. 1963	31.4	0.1448	14804.4	67.2841	80.4	0.2609	38054.9	105.1871	16.4	0.0769	7781.8	36.4796
13 Jun. 1963	15.8	0.1105	7497.1	52.4323	26.6	0.1378	12621.7	65.3956	11.2	0.0606	5314.4	28.7358
1 Jul. 1963	42.4	0.2320	19644.3	110.0651	69.0	0.2475	31696.6	117.4198	12.4	0.0740	5883.8	36.8213
26 Jul. 1963	77.0	0.6128	36536.5	274.1281	91.0	0.2969	42610.1	140.8887	15.8	0.0686	7497.1	30.8995
6 Aug. 1963	32.2	0.1856	15373.8	88.0672	42.6	0.1072	20118.8	50.8664	28.2	0.1585	13380.9	75.1893
14 Aug. 1963	40.2	0.1948	18885.1	91.9097	37.0	0.0861	17556.5	40.8545	4.8	0.0253	2277.6	12.0049
4 Sept.1963	19.6	0.0980	9300.2	48.2092	12.8	0.0797	5694.0	33.4333	5.0	0.0133	2372.5	5.3609
11 Sept.1963	11.6	0.0255	5504.2	12.0998	5.0	0.0267	2372.5	12.6692	4.6	0.0103	2182.7	4.8684
2 Oct. 1963	11.2	0.0383	5219.5	18.1544	10.2	0.0404	4839.9	18.7902	4.6	0.0117	2182.7	5.5517
17 Oct. 1963	25.4	0.1090	12052.3	53.6185	18.2	0.0849	8351.2	35.6401	5.4	0.0130	2562.3	6.1685

TABLE 13 (Continued)

Collembola

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	-	-	-	-	-	-	-	-	0.2	0.0050	94.9	2.3915
7 Nov. 1962	0.2	0.0050	94.9	2.3915	2.4	0.0605	1138.8	28.6978	40.4	1.0181	19169.8	483.0790
4 Dec. 1962	-	-	-	-	0.6	0.0151	284.7	7.1744	-	-	-	-
11 Dec. 1962	2.0	0.0504	949.0	23.9148	2.4	0.0605	1138.8	28.6978	-	-	-	-
3 Jan. 1963	-	-	-	-	-	-	-	-	-	-	-	-
11 Jan. 1963	-	-	-	-	0.2	0.0050	94.9	2.3915	1.4	0.0353	664.3	16.7404
5 Feb. 1963	3.8	0.0958	1803.1	45.4381	11.8	0.2974	5599.1	141.0973	15.2	0.3830	7212.4	181.7525
12 Feb. 1963	0.8	0.0202	379.6	9.5659	0.4	0.0101	189.8	4.7830	1.2	0.0302	569.4	14.3489
5 Mar. 1963	-	-	-	-	0.2	0.0050	94.9	2.3915	0.4	0.0101	189.8	4.7830
12 Mar. 1963	35.6	0.8971	16892.2	425.6834	0.6	0.0151	284.7	7.1744	0.6	0.0151	284.7	7.1744
9 Apr. 1963	2.6	0.0655	1233.7	31.0892	6.8	0.1714	3226.6	81.9310	1.2	0.0302	569.4	14.3489
17 Apr. 1963	42.6	1.0735	20213.7	509.3852	21.4	0.5393	10154.3	255.8884	1.6	0.0403	759.2	19.1318
1 May 1963	0.8	0.0202	379.6	9.5659	0.6	0.0151	284.7	7.1744	0.6	0.0151	284.7	7.1744
8 May 1963	0.6	0.0151	284.7	7.1744	1.2	0.0302	569.4	14.3489	0.4	0.0101	189.8	4.7830
5 Jun. 1963	0.2	0.0050	94.9	2.3915	2.0	0.0504	949.0	23.9148	1.0	0.0252	474.5	11.9574
13 Jun. 1963	14.2	0.3578	6737.9	169.7951	36.2	0.9122	17176.9	432.8579	0.4	0.0101	189.8	4.7830
1 Jul. 1963	18.4	0.4637	8730.8	220.0161	32.0	0.8064	15184.0	382.6368	1.2	0.0302	569.4	14.3489
26 Jul. 1963	3.2	0.0806	1518.4	38.2637	1.2	0.0302	569.4	14.3489	1.2	0.0302	569.4	14.3489
6 Aug. 1963	3.2	0.0806	1518.4	38.2637	0.6	0.0151	284.7	7.1744	2.6	0.0655	1233.7	31.0892
14 Aug. 1963	1.8	0.0454	854.1	21.5233	0.4	0.0101	189.8	4.7830	0.4	0.0101	189.8	4.7830
4 Sept.1963	1.2	0.0302	569.4	14.3489	0.4	0.0101	189.8	4.7830	0.4	0.0101	189.8	4.7830
11 Sept.1963	-	-	-	-	-	-	-	-	-	-	-	-
2 Oct. 1963	0.4	0.0101	189.8	4.7830	-	-	-	-	-	-	-	-
17 Oct. 1963	0.2	0.0050	94.9	2.3915	0.2	0.0050	94.9	2.3915	-	-	-	-

TABLE 13 (Continued)

Other Insects

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov.1962	0.2	0.0809	94.9	39.6103	-	-	-	-	0.2	0.0809	94.9	39.6103
7 Nov.1962	-	-	-	-	0.2	0.0809	94.9	39.6103	1.0	0.4046	474.5	191.9827
4 Dec.1962	-	-	-	-	0.4	0.1618	189.8	76.7931	-	-	-	-
11 Dec.1962	0.2	0.0809	94.9	39.6103	1.8	0.7283	854.1	345.5689	3.6	1.4566	1708.2	691.1377
3 Jan.1963	0.2	0.0809	94.9	39.6103	-	-	-	-	1.0	0.4046	474.5	191.9827
11 Jan.1963	1.0	0.4046	474.5	191.9827	0.2	0.0809	94.9	39.6103	2.4	0.9710	1138.8	460.7585
5 Feb.1963	3.0	1.2138	1423.5	575.9481	2.0	0.8092	949.0	383.9654	2.8	1.1329	1328.6	537.5516
12 Feb.1963	3.0	1.2138	1423.5	575.9481	1.4	0.5664	664.3	268.7758	4.4	1.7802	2087.8	844.7239
5 Mar.1963	0.6	0.2428	284.7	115.1896	0.4	0.1618	189.8	76.7931	0.4	0.1618	189.8	76.7931
12 Mar.1963	1.0	0.4046	474.5	191.9827	0.6	0.2428	284.7	115.1896	0.4	0.1618	189.8	76.7931
9 Apr.1963	1.4	0.5664	664.3	268.7758	1.6	0.6474	759.2	307.1723	1.0	0.4046	474.5	191.9827
17 Apr.1963	1.2	0.4855	569.4	230.3792	-	-	-	-	0.6	0.2428	284.7	115.1896
1 May 1963	1.2	0.4855	569.4	230.3792	1.6	0.6474	759.2	307.1723	0.2	0.0809	94.9	39.6103
8 May 1963	0.6	0.2428	284.7	115.1896	0.6	0.2428	284.7	115.1896	0.4	0.1618	189.8	76.7931
5 Jun.1963	1.4	0.5664	664.3	268.7758	0.6	0.2428	284.7	115.1896	-	-	-	-
13 Jun.1963	0.4	0.1618	189.8	76.7931	2.4	0.9710	1138.8	460.7585	0.4	0.1618	189.8	76.7931
1 Jul.1963	-	-	-	-	0.8	0.3237	379.6	153.5862	-	-	-	-
26 Jul.1963	0.6	0.2428	284.7	115.1896	0.6	0.2428	284.7	115.1896	-	-	-	-
6 Aug.1963	1.0	0.4046	474.5	191.9827	0.2	0.0809	94.9	39.6103	0.2	0.0809	94.9	39.6103
14 Aug.1963	0.4	0.1618	189.8	76.7931	0.6	0.2428	284.7	115.1896	-	-	-	-
4 Sept.1963	0.2	0.0809	94.9	39.6103	0.2	0.0809	94.9	39.6103	-	-	-	-
11 Sept.1963	0.4	0.1618	189.8	76.7931	0.2	0.0809	94.9	39.6103	-	-	-	-
2 Oct. 1963	0.6	0.2428	284.7	115.1896	0.2	0.0809	94.9	39.6103	-	-	-	-
17 Oct. 1963	0.6	0.2428	284.7	115.1896	0.6	0.2428	284.7	115.1896	-	-	-	-

TABLE 13 (Continued)

Total mesofauna

Date	Plot A				Plot B				Plot C			
	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2	Mean number	Biomass	Number/ m^2	Biomass/ m^2
1 Nov. 1962	11.4	0.1125	5599.1	60.5832	7.2	0.0353	3416.4	16.7404	3.0	0.1879	1423.5	47.6958
7 Nov. 1962	26.4	0.0874	11862.5	40.0068	13.8	0.2169	6453.2	105.8411	46.6	1.8788	22111.7	891.4812
4 Dec. 1962	7.4	0.0340	3511.3	16.1496	3.2	0.1811	1518.4	85.9604	2.2	0.0137	1043.9	6.5007
11 Dec. 1962	8.0	0.2019	3036.8	99.4922	18.6	0.9959	8541.0	502.4292	11.0	1.4952	5217.5	709.4345
3 Jan. 1963	7.0	0.0916	3321.5	44.6875	1.8	0.0090	854.1	4.2705	5.0	0.4390	2372.5	208.2866
11 Jan 196[illegible]	[illegible]	0.6020	[illegible]	285.6480	28.8	0.1857	13570.7	91.0651	30.0	1.1709	14215.0	560.6367
5 Feb. 1963	169.4	2.4593	80570.1	970.5061	56.2	1.3326	24863.8	637.4054	64.8	2.2456	30747.6	1068.0331
12 Feb. 1963	22.2	1.3907	10533.9	659.8681	29.6	0.6817	13855.4	323.4762	49.8	2.0408	23630.1	964.0322
5 Mar. 1963	11.4	0.2741	5409.3	130.0415	26.6	0.2375	12621.7	112.7318	5.0	0.1981	2372.5	94.0080
12 Mar. 1963	81.6	1.9190	38719.2	909.7209	119.0	0.5768	56465.5	278.7877	28.0	0.3414	13286.0	161.9753
9 Apr. 1963	48.0	1.6151	22775.4	768.1017	51.6	1.0394	23535.2	495.4672	31.0	0.7365	14709.5	348.2213
17 Apr. 1963	119.0	2.3464	55706.3	1115.0844	50.8	0.6944	24009.7	334.6080	61.4	0.8181	29134.3	388.1790
1 May 1963	69.0	0.8044	32930.3	381.6593	54.8	0.8147	26002.6	386.5846	20.2	0.1795	9490.0	86.4149
8 May 1963	35.0	0.3380	16607.5	160.3715	52.0	0.4378	24579.1	209.4254	16.8	0.2468	7971.6	115.8825
5 Jun. 1963	33.0	0.7162	15563.6	338.4514	83.0	0.5541	39288.6	244.2915	17.4	0.1021	8256.3	48.4370
13 Jun. 1963	30.4	0.6301	14424.8	299.0205	65.2	2.0210	30937.4	959.0120	12.0	0.2325	5694.0	110.3119
1 Jul. 1963	61.8	0.6957	28375.1	330.0812	102.0	1.3776	47260.2	653.6428	13.6	0.1042	6453.2	51.1702
26 Jul. 1963	80.8	0.9362	38339.6	427.5814	92.8	0.5699	43464.2	270.4272	17.0	0.0988	8066.5	45.2484
6 Aug. 1963	36.4	0.6708	17366.7	318.3136	43.4	0.2032	20498.4	97.6511	31.0	0.3049	14709.5	145.8888
14 Aug. 1963	42.4	0.4020	19929.0	190.2261	38.0	0.3390	18031.0	160.8271	5.2	0.0354	2467.4	16.7879
4 Sept.1963	21.0	0.2091	9964.5	102.1684	13.4	0.1707	5978.7	77.8266	5.4	0.0214	2562.3	10.1439
11 Sept.1963	12.0	0.1873	5694.0	88.8929	5.2	0.1076	2467.4	52.2795	4.6	0.0103	2182.7	4.8684
2 Oct. 1963	12.2	0.2912	5694.0	138.1270	10.4	0.1213	4934.8	59.4005	4.6	0.0117	2182.7	5.5517
17 Oct. 1963	26.2	0.3568	12431.9	171.1996	19.0	0.3327	8730.8	153.2212	5.4	0.0130	2562.3	6.1685