

Spiders from Some Pacific Islands, II¹

B. J. MARPLES²

I AM INDEBTED to Dr. N. L. H. Krauss for the collection of spiders which is described here. The specimens, with the exception of a paratype of the male of *Leucauge ilatele* retained in my own collection, will be deposited in the Bernice P. Bishop Museum in Honolulu. The collection contains examples of some 40 species from Tahiti, Raiatea, Moorea, and Borabora in the Society Group; from Aitutaki in the Cook Islands; from Upolu and Savaii in Western Samoa; from Tongatabu and from several localities in Viti Levu in the Fiji Islands. Experience with other collections from the islands has shown that species which are common on one occasion may be rare or absent on another, and so it has seemed advisable to list the numbers of individuals collected from each locality, whether the species has been recorded previously or not. There are many new records, inasmuch as little or no collecting has been done in some islands. In some families identification can only be tentative until a thorough revision has been carried out. It has been felt in some cases that it is zoogeographically less confusing to erect new species or genera for island spiders, than to force them into, for example, continental Australian genera which are inadequately characterised.

Attention is drawn to such doubtful cases in the text, and this should be borne in mind in any consideration of faunae. A great deal of work is still needed before we have an adequate picture of the spider fauna of the Pacific islands, and still more of its relation to those of adjacent land masses. Berland (1934*a* and *b*) has described the spiders of Tahiti and has also listed those known from Polynesia, together with their distribution. The spiders of Samoa were described by Marples (1955).

In the descriptions the measurements were made with an eyepiece micrometer and are given in millimetres. The leg indices are derived by dividing the length of each leg by the length of the carapace, and the tibial indices, which give a measure of the stoutness of the legs, by dividing the combined lengths of the tibia and patella by the proximal breadth of the patella. The eye measurements are given in direct scale readings, so indicate the proportions only.

LIST OF SPECIES RECORDED

FILISTATIDAE

Filistata bakeri. Tahiti.

ULOBORIDAE

Uloborus bistriatus. Samoa.

Uloborus geniculatus. Fiji.

Uloborus gibbosus. Samoa, Fiji.

¹ Part I was published in *Pacific Science* 9(1): 69-76, 1955. Manuscript of Part II was received May 3, 1956.

² Department of Zoology, University of Otago, Otago, New Zealand.

SICARIIDAE

- Scytodes marmorata*. Fiji.
Scytodes striatipes. Society Islands, Samoa.

CLUBIONIDAE

- Chiracanthium* spp. Society Islands, Samoa,
 Tonga.

SPARASSIDAE

- Heteropoda venatoria*. Aitutaki.

THOMISIDAE

- Diaea praetexta*. Samoa, Tonga, Fiji.

SALTICIDAE

- Bavia aericeps*. Society Islands, Aitutaki, Samoa, Fiji.
Savaiia punctata. Samoa.
Menemerus bivittatus. Society Islands, Samoa, Fiji.
Mollicia microphthalmalma. Society Islands, Aitutaki.
Plexippus payculli. Fiji.
Sandalodes calvus. Society Islands.
Ascyllus pterygodes. Samoa, Fiji.
Athamas whitmei. Samoa.
Cytaea piscula. Samoa.
Thorellia ensifera. Society Islands, Aitutaki, Samoa.
Vitia albipalpis. Fiji.

THERIDIIDAE

- Conopistha gracilis*. Samoa.
Tberidion albostriatum. Aitutaki, Fiji.
Tberidion kraussi. Fiji.

TETRAGNATHIDAE

- Tetragnatha keyserlingi*. Society Islands, Samoa.
Tetragnatha laqueata. Society Islands.
Tetragnatha macilentata. Samoa, Fiji.
Tetragnatha nitens. Society Islands.
Tetragnatha panopea. Society Islands, Samoa.
Leucauge granulata. Samoa.
Leucauge ilatele. Samoa.
Leucauge prodiga. Samoa, Fiji.
Leucauge tuberculata. Society Islands, Samoa.

EPEIRIDAE

- Anepsia rhomboides*. Samoa.
Argiope pentagona. Fiji.
Cyclosa littoralis. Samoa.
Epeira flavopunctata. Fiji.
Epeira pogisa. Samoa.
Epeira theisi. Society Islands, Samoa, Fiji.

FILISTATIDAE

Filistata bakeri Berland

- 1 ♀ Papeete, Tahiti. First record for the Society Islands. Previously recorded from the New Hebrides, Samoa, the Austral, Phoenix, and Christmas islands.

ULOBORIDAE

Uloborus bistriatus L. Koch

- 1 ♀ Sili, Savaii, Western Samoa. First record for Savaii, but it is common in Upolu and occurs also in Fiji.

Uloborus geniculatus Olivier

- A widespread species throughout the tropics. Specimens from Viti Levu, Fiji: 2 ♀ Naliumba, 1 ♀ Korolevu, 1 ♀ Suva.

Uloborus gibbosus L. Koch

- 1 ♀ Savaii, the first record. 2 ♀ Upolu, 5 ♀ Lami, Viti Levu.

SICARIIDAE

Scytodes marmorata L. Koch

- 1 ♂, 2 ♀ Singatoka and Korolevu, Viti Levu. The first record for Fiji. Previously recorded from New Caledonia, Samoa, Tahiti, and Hawaii.

Scytodes striatipes L. Koch

- 1 ♀ Raiatea. The first record for Raiatea, but a widespread species already recorded from the Society Islands. 1 ♀ Upolu.

CLUBIONIDAE

Fourteen specimens are included in the collection, but only 3 seem certainly to be mature. All appear to belong to the genus *Chiracanthium*, of which 7 species have been described from the area, but in no case could the present specimens be certainly identified. The figures given by Koch for epigyna are difficult to compare with actual specimens. The teeth on the margins of the cheliceral groove also do not correspond, and Berland (1938) states that, in *C. longimanum* at least, they are variable. In the present series the numbers of teeth vary from 3 to 5 on the promargin, and from 2 to 4 on the retro-margin. A tentative identification is 1 ♀ *C. furax* L. Koch from Nukualofa, Tongatabu, though the dark mark on the carapace is not present. This would be a new record, the species being described from Samoa. Another is 1 ♀ *C. gilvum* L. Koch from Raiatea. This species has been recorded from Australia, New Caledonia, New Hebrides, and Samoa. The 14 specimens were collected as follows: 1 from Raiatea, 1 from Borabora, 4 from Upolu, 3 from Tonga and 1 from Fiji.

SPARASSIDAE

Heteropoda venatoria (Linn.)

1 ♀ and 1 imm. Aitutaki, first record. This species has a worldwide distribution in tropical countries and is common in the Pacific area.

THOMISIDAE

Diaea praetexta L. Koch

All the Thomisids appear to be the same and to belong to this species. All however have little or no marking on the abdomen, but variation in this respect has been noted by Berland (1929). The records for Savaii 1 ♀, Nukualofa 2 ♀, and Viti Levu 11 ♀, are new.

SALTICIDAE

Bavia aericeps Simon

1 ♀ imm. Aitutaki, 1 ♀ imm. Sili, Savaii, 1 ♂

imm. Lomeri, Viti Levu. These are new records, the species having been recorded in Malaya and in various islands across the Pacific as far as the Marquesas. 1 imm. Tahiti, 1 ♀ and 1 imm. Raiatea.

Savaia gen. nov.

Unidentate. Carapace low and flat, nearly twice as long as broad. Row of bristles with dark bases on each side of carapace and on the proteral side of femur I. Spines on all legs. Resembles *Flacilla* Simon except that this is without spines.

Savaia punctata sp. nov.

1 ♀ Savaii.

FEMALE. Length 5.49 mm. Carapace chestnut brown, darker in the ocular area and black around the eyes. Light patch at the thoracic groove. Chelicerae, maxillae and lip chestnut brown, legs and sternum pale brown. Abdomen pale brown with dark dorsal pattern. This consists of a pair of elongated patches followed by two pairs of square patches partially joined middorsally, followed by a single dorsal patch immediately anterior to the anal tubercle and spinnerets which are dark.

Carapace: Length 2.01 mm., breadth 1.30 mm., breadth of anterior row of eyes 0.94 mm. Low, flat dorsally and slightly widest at the level of legs III. Posterior slope gradual, no clypeus. On each side in the pale area below the eyes, and extending the whole length of the ocular area, is a row of 10 bristles arising from dark sockets.

Eyes: Ocular quadrangle slightly wider behind. Anterior row, seen from in front, slightly recurved. Ratios of the diameters of the eyes and of their distances apart: AM, 171; AL, 91; PM, 43; PL, 105; AM-AM, 46; AM-AL, 23; AL-PM, 138; PM-PM, 553; PM-PL, 108; L-L, 288; PL-PL, 542; overall breadth of anterior row, 583; overall breadth of third row, 642.

Chelicerae: Small, with pale hairs on the prolateral surface. Groove oblique. A single pointed tooth centrally placed on the retro-margin of the groove, two teeth close together at the ventral end of the promargin.

Maxillae: Converging but not meeting, rounded anteriorly.

Lip: Longer than broad, narrower anteriorly.

Sternum: Length 0.87 mm., breadth 0.46 mm., oval.

Palp: The claw appears spoon shaped and is turned prolaterally at right angles to the axis of the tarsus. The palp is covered with pale hairs and there are three dark bristles on the patella and one on the tibia.

| | | | | | |
|---------------|------|------|------|------|------|
| <i>Legs</i> : | IV | I | III | II | Palp |
| | 1.67 | 1.32 | 1.23 | 1.16 | 0.54 |

| | PATELLA | | | | TOTAL |
|-----------------|---------|-----------|-------------|--------|-------|
| | FEMUR | AND TIBIA | META-TARSUS | TARSUS | |
| Palp | 0.47 | 9.36 | ... | 0.26 | 1.09 |
| I | 0.90 | 1.07 | 0.43 | 0.26 | 2.66 |
| II | 0.79 | 0.89 | 0.38 | 0.28 | 2.34 |
| III | 0.78 | 0.92 | 0.46 | 0.32 | 2.48 |
| IV | 1.05 | 1.25 | 0.66 | 0.41 | 3.37 |
| Tibial Index I | 3.5 | | | | |
| Tibial Index IV | 6.2 | | | | |

Leg I much the stoutest especially the femur which is somewhat flattened and expanded dorsoventrally. On the prolateral surface at the distal end is a row of 6 hairs arising from dark sockets, appearing at first sight like a black line. Claws with 2 pectinations. Spines: Metatarsi; I, 2 proventral, 1 retroventral; II, 1 proventral, 1 retroventral; III and IV, 5 spines arranged around the distal end. Tibiae: I, 1 prolateral; II, none; III, 1 proventral, 1 retrolateral; IV, 1 proventral, 1 retroventral and 1 retrolateral. Femora with 3 dorsal and 1 prodorsal stout bristles. Trichobothria in a single row on the tarsi and metatarsi and a double row on the tibiae.

Abdomen: Length 3.03 mm., breadth 1.76 mm. Elongated oval, epigynum as in Figure 1.

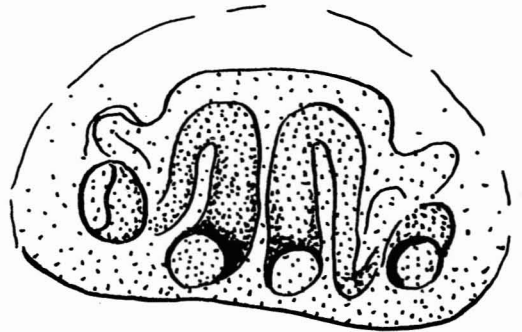


FIG. 1. *Savaiia punctata*. Epigynum.

Menemerus bivittatus Dufour

1♂ Korolevu, Viti Levu. A widespread species not apparently recorded previously from Fiji. 1♂, 2♀ Tahiti; 1♂, 1♀ Upolu.

Mollicia microphthalmalma (L. Koch)

1♂, 1♀ and 3 imm. Papeete, Tahiti. 1♂ from the mountains near Uturoa, Raiatea. 1♂ Akaiami, Aitutaki. The specimen from Raiatea is larger than the others. The species is known from New Caledonia, and the Loyalty Islands in the west, and from Rarotonga, Tahiti, the Marquesas, and Hawaii.

Plexippus payculli Audouin

1♀ RakiRaki, Viti Levu, first record from Fiji. A cosmopolitan species known from many parts of the Pacific.

Sandalodes calvus Simon

1♀ Huahine. First record from Huahine though it is known from others of the Society Islands. 1♂, 1♀ Tahiti; 12♀ Raiatea.

Ascyltus pterygodes (L. Koch)

1♂, 3♀ and 5 imm. Sili, Palauli and Tapuelele, Savaii. 2♂, 1♀ and 2 imm. Kolo-i-Suva, Korolevu, Lami and Nandarivatu, Viti Levu. Known previously from Tahiti and Upolu. 1 immature male from Lautoka, Viti Levu, may belong to another species, two of which

in this genus have been described from Fiji. Some of the females from Savaii are much smaller than usual but seem to belong to this species. 12 ♀ Upolu.

Athamas whitmei Cambridge

1♂ Upolu.

Cytaea piscula L. Koch

4♂ and 1♀ Sili and Palauli, Savaii. New record. Previously known from Upolu, Tuvalu and Australia. 5♂ Upolu.

Thorellia ensifera (Thorell)

6♂ and 2 imm., 5♀ Papeete, Tahiti. 1♀ Raiatea. 1♂ Akaiami, Aitutaki. 1♂ Upolu. It is a common and widespread species, but not previously recorded from Tahiti or Aitutaki.

Vitia gen. nov.

Fissidentate. Carapace moderately high and rounded. Palp of male long and slender with simple bulb and small apophysis.

Vitia albipalpis sp. nov.

1♂ RakiRaki, Viti Levu.

MALE. Length 5.05 mm. Carapace dark reddish brown shading to black around the eyes. Behind the eyes is a crescent-shaped area of lighter chestnut brown, its points anterior to the ALE, the broad central part extending from the level of the PLE more than half way towards the posterior margin of the carapace. Chelicerae and maxillae chestnut brown, legs darker brown especially the anterior pair. Palps brown except for the distal end of the femur, the dorsal and prolateral surfaces of the patella and the prolateral surface of the tibia. These are thickly covered with white hairs, longest on the tibia. Abdomen brown with darker mottlings and a white recurved crescent anterodorsally. Ventral surface pale.

Carapace: Length 2.67 mm., breadth 1.98 mm., breadth of anterior row of eyes 1.73

mm. Moderately high, slightly rounded in outline. Thoracic groove a black line, its anterior end level with the black of the PLE. Few bristles around the eyes.

Eyes: Anterior row recurved. Ocular quadrangle slightly wider in front. Ratios of the diameters of the eyes and of their distances apart: AM, 300; AL, 188; PM, 47; PL, 166; AM-AM, 22; AM-AL, 50; AL-PM, 234; PM-PM, 870; PM-PL, 146; PL-PL, 761; L-L, 420; clypeus, 92; overall breadth of anterior row, 1000; overall breadth of third row, 972.

Chelicerae: A bifid tooth on each margin of the groove, the prolateral being the larger and wide at the base, the retrolateral constricted at the base.

Maxillae: Slightly converging, wider and evenly rounded anteriorly.

Lip: Longer than broad, concave at the tip.

Sternum: Length 0.91 mm., breadth 0.74

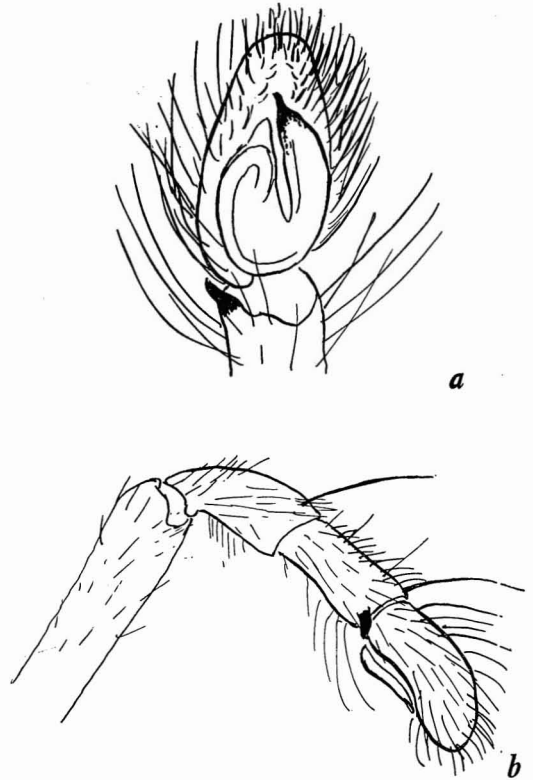


FIG. 2. *Vitia albipalpis*. a. Ventral view of right palp. b. Retrolateral view of right palp.

mm. Blunt behind, margin concave opposite coxae III and IV.

Palp: As in Figure 2. Rather long and slender with the tarsus little swollen. Short retrolateral apophysis at the distal end of the tibia. The conspicuous white hairs on the palp have been mentioned above.

| | | | | | |
|---------------|------|------|------|------|------|
| <i>Legs</i> : | III | IV | I | II | Palp |
| | 2.03 | 2.00 | 1.99 | 1.73 | 0.88 |

| | PATELLA | | | | TOTAL |
|-----------------|---------|--------------|-----------------|--------|-------|
| | FEMUR | AND TIBIA | META- TARSUS | TARSUS | |
| Palp | 0.80 | 0.96 | ... | 0.59 | 2.35 |
| I | 1.61 | 2.27 | 0.93 | 0.50 | 5.31 |
| II | 1.51 | 1.84 | 0.75 | 0.54 | 4.64 |
| III | 1.77 | 1.87 | 1.17 | 0.60 | 5.41 |
| IV | 1.53 | 1.82 | 1.38 | 0.63 | 5.36 |
| Tibial Index I | 6.1 | | | | |
| Tibial Index IV | 6.0 | | | | |

Claws: The retro with 4–6 large pectinations, the pro with 3 or 4 minute ones in addition at the proximal end of the row. *Spines*: Metatarsi I and II with 2 pairs, III with a circlet of spines at each end, IV with spines in the middle as well as at the ends. *Tibiae*: I, 3 pairs and 1 proximal prolateral; II, 2 prolateral, 2 pairs and 1 proximal retroventral; III and IV, 1 distal pair and 1 proventral, 3 pro and 3 retrolateral, 1 proximal dorsal. *Patellae*: I and II, 1 prolateral; III and IV, 1 pro and 1 retrolateral. *Femora*: 1, transverse distal dorsal row of 3 followed by 2 dorsal. II, III and IV have 4 in the transverse row. *Trichobothria*: In a single row on tarsi and metatarsi and a double row on tibiae.

Abdomen: Length 2.39 mm., breadth 1.52 mm. Ovoid.

This spider resembles some from Australia placed by Koch in several poorly characterized genera. It seems best to place it in a new genus until the position is clearer, rather than to suggest on doubtful grounds a faunal affinity between Fiji and Australia.

THERIDIIDAE

Conopistha gracilis (L. Koch)

1 ♀ Savaii. 1 ♀ Upolu.

Theridion albostriatum L. Koch

1 ♂ Aitutaki. 1 ♂, 1 ♀ Korolevu, Viti Levu. These specimens are somewhat doubtfully placed in this species, recorded from Australia and Tonga. They appear to be the same as some collected in buildings in Upolu (Marples 1955) and also tentatively placed here.

Theridion kraussi sp. nov.

1 ♀ Kolo-i-Suva, Viti Levu.

FEMALE. Length 4.58 mm. Colour brown, abdomen lighter in front and on the sides. Sternum with 3 lateral and a posterior median dark marks.

Carapace: Length 1.54 mm., breadth 1.24 mm. Heart-shaped, the cephalic part projecting forward with prominent eyes, AME overhanging the clypeus, thoracic part domed. Smooth surface with some scattered bristles almost all on the cephalic part.

Eyes: 8. AME dark, the remainder light with reddish pigment. From above the anterior row strongly recurved, posterior row straight. Breadth of eye group 0.56 mm. Ratios of the diameters of the eyes and of their distances apart: AM, 193; AL, 142; PM, 164; PL, 163; AM-AM, 135; AM-AL, 46; AM-PM, 182; PM-PM, 147; PM-PL, 138; L-L, 0; clypeus, 365.

Chelicerae: Slender, joined at base, no boss. 3 teeth on the promargin of the groove.

Maxillae: Long, very much longer than the lip, converging but not meeting. Scopula on median margin and anterior median angle. Black serrula lateral to it.

Lip: Twice as broad as long.

Sternum: Length 0.88 mm., breadth 0.79 mm. Three slight indentations on each side. Posterior blunt point between coxae IV which are well separated.

Palp: Claw with 4 pectinations and pectinated bristles on the tarsus. Two pairs of trichobothria on the tibia. Tarsal organ 24 per cent of the length of the tarsus from its distal end.

| | | | | | |
|-------|------|------|------|------|------|
| Legs: | I | IV | II | III | Palp |
| | 4.43 | 3.58 | 3.41 | 2.50 | 0.81 |

| | PATELLA AND META- | | | TARSUS | TOTAL |
|-----------------|-------------------------|-------|--------|--------|-------|
| | FEMUR | TIBIA | TARSUS | | |
| Palp | 0.37 | 0.41 | ... | 0.48 | 1.26 |
| I | 2.08 | 2.14 | 1.87 | 0.78 | 6.87 |
| II | 1.67 | 1.56 | 1.41 | 0.65 | 5.29 |
| III | 1.21 | 1.08 | 1.01 | 0.57 | 3.87 |
| IV | 1.74 | 1.71 | 1.42 | 0.67 | 5.54 |
| Tibial Index I | 10.1 | | | | |
| Tibial Index IV | 8.4 | | | | |

Three claws, the dorsal ones with 3 or 4, the median one with 1 pectination. Spurious claws, except on IV, and pectinated bristles. Bristles, pectinated on both sides, along tarsus and the distal end of metatarsus IV. No spines. Tarsal organ on I, 63 per cent of the length of the tarsus from the distal end.

Abdomen: Length 3.11 mm., breadth 2.47 mm. Rounded, spinnerets ventral. Anterior spinnerets largest, and close together. Other spinnerets in a transverse line, the median small and compressed between the posterior ones. Anal tubercle small and transverse, no colulus. Epigynum as in Figure 3.

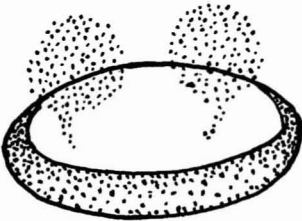


FIG. 3. *Theridion kraussi*. Epigynum.

The presence of teeth on the cheliceral groove may exclude this species from the genus *Theridion*, but it seems best to place it here tentatively.

TETRAGNATHIDAE

Several species of *Tetragnatha* have been recorded from the South Pacific area, but they seem to be subject to a considerable amount of variation in colour, in the size and position of the eyes, and in the cheliceral

teeth. The following identifications are accordingly more or less uncertain.

Tetragnatha keyserlingi Simon

2♂, 3♀ from Tahiti. These differ from the descriptions in colour and in the cheliceral teeth and are only very doubtfully placed here. 1♂ Raiatea. 2♂, 1♀ Upolu.

Tetragnatha laqueata L. Koch

1♀ from Opoa, Raiatea. Previously recorded only from Samoa.

Tetragnatha macilenta L. Koch

1♂ from Lami, Viti Levu, a new record. 12♀ Upolu, 1♂, 4♀ Savaii.

Tetragnatha nitens (Audouin)

1♀ from Baie de Cook, Moorea. This is a species with a very wide distribution, from the Mediterranean to several of the Pacific islands.

Tetragnatha panopea L. Koch

1♀ from Borabora. Previously recorded from Lord Howe Island, the New Hebrides, Ellice Islands, and Samoa. 1♀ Savaii.

Leucauge granulata Walckenaer

According to Dalmas (1917) the species referred to by L. Koch as *Leucauge granulata* Walck. is not properly so called but should be *Leucauge dromedaria* (Thorell). It occurs in Australia, New Zealand, and several of the Pacific islands as far east as Tahiti. It has not been recorded from Samoa. One specimen in the present collection from Sili, in Savaii, may belong to it. It resembles New Zealand specimens in shape and colour, but it is considerably smaller.

Leucauge ilatele Marples

2♂ Apia, Upolu. Described from the female only from Upolu.

MALE. Length 3.84 mm. Pale yellowish

brown, the abdomen covered with smaller silvery marks leaving a clear dorsal stripe. Brown round the eyes and at the thoracic groove.

Carapace: Length 1.76 mm., breadth 1.40 mm., breadth of eye group 0.63 mm. Low, with longitudinal groove smooth pear-shaped outline.

Eyes: 8, all pale. From above, anterior row strongly recurved, posterior row straight. Ratios of the diameters of the eyes and of their distances apart: AM, 135; AL, 145; PM, 160; PL, 166; AM-AM, 131; AM-AL, 117; AM-PM, 133; PM-PM, 107; PM-PL, 130; L-L, 0; clypeus, 205.

Chelicerae: Groove oblique, 3 promarginal and 4 retromarginal teeth, the proximal ones of each row situated on the rim of the articular membrane, which is large, of the fang. A blunt tooth retrolaterally placed near the last retromarginal tooth.

Maxillae: Wider distally and curving outwards.

Lip: Broader than long, truncated anteriorly where it is rebordered and has 2 bristles at each corner.

Sternum: Length 0.72 mm., breadth 0.87 mm. Heart-shaped. Margin convex and rebordered opposite coxae I, slightly concave opposite the other coxae. Extends between coxae IV as a slender process bifurcated at the waist.

Palp: As in Figure 4. Large bulb, cymbium with 2 apophyses at the proximal end, one blunt and directed dorsally, one sharp and curved and directed prolaterally.

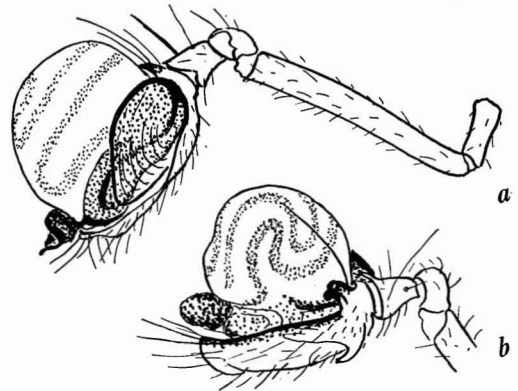


FIG. 4. *Leucauge ilatele*. a. Retrolateral view of left palp. b. Prolateral view of right palp.

Many of the spines are missing from these specimens but they seem to have been fewer than in the female. Five small trichobothria in two rows on the prolateral side of the base of femur IV.

Abdomen: Length 2.14 mm., breadth 1.22 mm. Slight dorsal hump about one third of the length from the anterior end.

***Leucauge prodiga* L. Koch**

1 ♀ Lami, Viti Levu. Previously recorded from Samoa. 2 ♀ Upolu, 2 ♀ Savaii.

***Leucauge tuberculata* Keyserling**

3 ♀ from the mountains near Uturoa, Raiatea, 1 ♀ from Baie de Cook, Moorea. First records from the Society Islands, previously recorded from Fiji, Samoa, and Tonga. 2 ♂, 5 ♀ Savaii. 8 ♀ Upolu.

EPEIRIDAE

***Anepsia rhomboides* L. Koch**

5 ♀ Sili, Savaii. The first record, but the species is common in Upolu. 11 ♀ Upolu.

***Argiope pentagona* L. Koch**

1 ♀ Lami, Viti Levu. Previously recorded from Ovalau, also in the Fiji Islands.

| | | | | | |
|---------------|------|------|------|------|------|
| <i>Legs</i> : | I | II | IV | III | Palp |
| | 7.85 | 4.67 | 3.87 | 2.25 | 1.27 |

| | PATELLA AND META- | | TARSUS | TARSUS | TOTAL |
|-----------------|-------------------------|-------|--------|--------|-------|
| | FEMUR | TIBIA | TARSUS | TARSUS | TOTAL |
| Palp | 1.03 | 3.84 | ... | 0.82 | 5.69 |
| I | 3.75 | 4.61 | 4.37 | 1.07 | 13.80 |
| II | 2.42 | 2.58 | 2.47 | 0.73 | 8.20 |
| III | 1.28 | 1.16 | 1.04 | 0.48 | 3.96 |
| IV | 2.29 | 2.12 | 1.85 | 0.52 | 6.80 |
| Tibial Index I | 18.1 | | | | |
| Tibial Index IV | 12.3 | | | | |

Cyclosa littoralis L. Koch

14 ♀ Savaii. First record. Common in Upolu and recorded also from Fiji. 1 ♀ Upolu.

Epeira flavopunctata L. Koch

1 ♂ from Nandarivatu, Viti Levu. This species was described from a single male from Fiji, and the present specimen agrees with it except in the pattern on the abdomen.

Epeira pogisa sp. nov.

1 ♀ Apia, Upolu.

FEMALE. Length 5.28 mm. Carapace, sternum, mouth parts, coxae and femora pale yellowish brown. Distal parts of legs darker and obscurely banded. Dorsal side of abdomen dark reddish brown mottled with light yellowish. Very little pattern, but an ill-defined median band of the dark colour, bordered with light. It is narrow in front but broadens about one third from the posterior end, at which point there is a procurved transverse band. Ventral side of abdomen and the spinnerets pale yellowish brown mottled with white behind the epigynum.

Carapace: Length 2.58 mm., breadth 2.05 mm., breadth of eye group 1.32 mm.

Eyes: From above, both rows recurved. Ratios of the diameters of the eyes and of their distances apart: AM, 177; AL, 165; PM, 157; PL, 144; AM-AM, 213; AM-AL, 400; AM-PM, 175; PM-PM, 146; PM-PL, 510; L-L, 0; clypeus, 95.

Chelicerae: 4 teeth on the promargin of the groove, the third from the fang being considerably the largest. 3 teeth on the retro-marginal.

Maxillae: Truncated anteriorly, ventral surface distinctly convex.

Lip: Broader than long.

Sternum: Length 1.08 mm., breadth 1.01 mm.

Palp: Claw with 9 pectinations.

Legs:

| | I | II | IV | III | Palp |
|--|------|------|------|------|------|
| | 3.59 | 3.37 | 3.24 | 1.70 | 1.01 |

| | PATELLA AND META- | | | | TOTAL |
|-----------------|-------------------------|-------|--------|--------|-------|
| | FEMUR | TIBIA | TARSUS | TARSUS | |
| Palp | 0.78 | 0.89 | ... | 0.96 | 2.63 |
| I | 2.77 | 3.53 | 2.22 | 0.96 | 9.43 |
| II | 2.50 | 3.29 | 2.04 | 0.89 | 8.72 |
| III | 1.39 | 1.43 | 0.99 | 0.58 | 4.39 |
| IV | 2.38 | 2.60 | 2.72 | 0.68 | 8.38 |
| Tibial Index I | 9.2 | | | | |
| Tibial Index IV | 7.2 | | | | |

Claws: I, pectinations, pro 8, retro 10, median 2. **Spines:** I, metatarsus, 5 proventral, 3 retroventral, 1 retrolateral, 1 dorsal. Tibia, 3 proventral, 3 prolateral, 2 retroventral, 3 retrolateral, 3 dorsal. Patella, 2 prodorsal, 2 dorsal, 2 retrodorsal. Femur, 3 proventral, 1 prolateral, 2 dorsal, 1 retrodorsal. II, metatarsus, 4 proventral, 2 dorsal, 3 retroventral, 1 retrolateral. Tibia, 2 proventral, 4 prolateral, 2 dorsal, 3 retroventral, 1 retrolateral. Patella, as in I. Femur, 1 prodorsal, 1 dorsal, 1 retrodorsal. III, no spines, some stouter bristles. IV, metatarsus, 3 proventral, 4 retroventral. Tibia, 1 ventral, 2 retroventral, 2 dorsal, 3 prodorsal, 3 retrodorsal. Patella, 1 prodorsal, 1 retrodorsal. Femur, 1 prodorsal, 1 dorsal, 1 retrodorsal.

Abdomen: Length 3.23 mm., breadth 2.39 mm. Covered with short pale hairs and long dark bristles. Epigynum a dark conspicuous broad-ended projection, as in Figure 5.

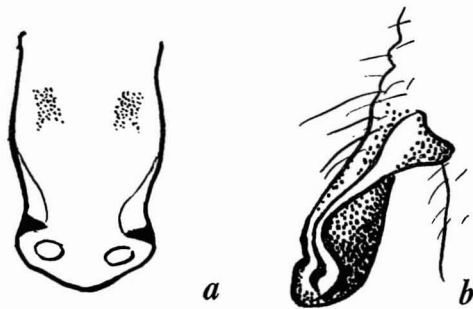


FIG. 5. *Epeira pogisa*. a. Ventral view of epigynum. b. View of epigynum from left side.

Five species of *Epeira* were recorded from Samoa by Koch. Berland recorded three of them in 1929, one represented in his collection by only a single specimen, and stated that *E. maculaticeps* appeared to be the most widespread species. As a result of four months collecting in 1945–46 and 1950–51 I obtained 93 specimens from many localities in Upolu and off-lying islets, all of which appeared to be *E. theisi*. The present specimen corresponds with none of these species, and as far as I can determine it appears to be new. The name suggested is the Samoan word for "dark," with reference to the colour.

Epeira theisi Walckenaer

This is a widespread tropical species found in many Pacific islands. In the present collection there are specimens from Tahiti, Raiatea, Borabora, Upolu, Savaii, and Viti Levu.

SUMMARY

A collection of some 40 species of spiders from the Society Islands, Aitutaki, Western Samoa, Tonga, and Fiji is described. Two new genera and four new species are proposed as follows: Salticidae, *Savaiia punctata* and *Vitia albipalpis*, Theridiidae, *Theridion kraussi*,

Epeiridae, *Epeira pogisa*. The male of *Leucauge ilatele* Marples is also described. There are many new distributional records, especially from Aitutaki, which has no previous records, and from Savaii and Viti Levu, which have few.

REFERENCES

- BERLAND, L. 1929. Araignées (Araneida). IN *Insects of Samoa*, Pt. 8: 35–78. Brit. Mus. Nat. Hist. London.
- 1934a. Les Araignées du Pacifique. IN Contribution a étude du peuplement zoologique et botanique des îles du Pacifique. *Soc. Biogéog., Pub.* 4: 155–180.
- 1934b. Les Araignées de Tahiti. *Bernice P. Bishop Mus., Bul.* 113: 97–107.
- 1938. Araignées des Nouvelles Hébrides. *Soc. Ent. de France, Ann.* 107(2): 121–190.
- DALMAS, R. DE. 1917. Araignées de Nouvelle Zélande. *Soc. Ent. de France, Ann.* 86: 317–430.
- KOCH, L., and E. KEYSERLING. 1871–1889. *Die Arachniden Australiens*. Nurnberg.
- MARPLES, B. J. 1955. Spiders from Western Samoa. *Linn. Soc. London, Jour., Zool.* 42: 453–504.