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ADDITIONAL REMARKS ON THE GENUS ANEPSION STRAND, 1929 (ARANEAE, ARGYOPIDAE)

by

FR. CHRYSANTHUS O.F.M. CAP.

Oosterhout (N.B.), The Netherlands With 16 figures and one map

Abstract. - A previous paper on the genus Anepsion (Chrysanthus, 1961) is supplemented with descriptions and/or figures of the following species: A. rhomboides (L. Koch) &, A. d. depressum (Thorell) &, A. fuscolimbatum (Simon) \heartsuit , A. peltoides (Thorell) &, A. hammeni nov. spec. \heartsuit , A. buchi nov. spec. \heartsuit , and A. wolffi nov. spec. \heartsuit . A new key to the species is added and, as far as possible, their distribution is indicated on a map.

In a previous paper (Chrysanthus, 1961) I have discussed the following species of this genus: A. rhomboides (L. Koch, 1867) \Diamond , A. maritatum (O. Pickard-Cambridge, 1877) \Diamond Å, A. semialbum (Simon, 1880) \Diamond , A. d. depressum (Thorell, 1877) \Diamond , A. depressum birmanicum (Thorell, 1895) \Diamond , A. villosum (Thorell, 1877) \Diamond , A. maculatum (Thorell, 1897) \Diamond , A. peltoides (Thorell, 1878) \Diamond , and A. wichmanni (Kulczynski, 1911) \Diamond ; of all these species I could give figures of their outward appearance and copulatory organs. The \Diamond of A. rhomboides seems to be lost and at that time I did not know the whereabouts of the holotype (and only specimen) of A. fuscolimbatum (Simon, 1901); apart from this, the discussion of the genus was complete. Furthermore, I have given descriptions and figures of the unknown \Diamond of A. wichmanni, and of the new species A. jacobsoni \Diamond , A. roeweri \Diamond \Diamond , and A. reimoseri \Diamond .

I now can extend our knowledge of this genus.

Anepsion rhomboides (L. Koch, 1867) (fig. 10)

For comparison I copied the figure of the δ palp, given by L. Koch (Pl. 3 fig. 9a).

Anepsion d. depressum (Thorell, 1877) (figs. 3-5)

From Dr. D. H. Murphy, Singapore, I received three \mathcal{Q} and a \mathcal{J} of this species, captured in the environs of that city; until now, the \mathcal{J} was unknown.

Male. — Cephalothorax (fig. 3): length 2.0 mm, width 1.6 mm; greyish yellow, the eyes surrounded with black; width of the eye region 0.9 mm, the median eyes occupying 0.3 mm. Chelicerae greyish yellow, with brown fangs. Maxillae and labium dark brown. Sternum: length 0.7 mm, width 0.6 mm, black. Legs: basal part greyish yellow, from patella (leg I) or from mid-femur (other legs) to the tip dark brown; measurements: I 3.7, II 3.5, III 3.0, IV 4.0 mm. Palp: figs. 4, 5, dark brown.

Abdomen (fig. 3): length 3.2 mm, width 2.2 mm; very flat, grey, scattered with small brownish pits, without dorsal sigilla; ventral side greyish yellow, lateral borders grey with three yellowish sigilla on each side; a broad dark brown blot extends from the epigastric furrow nearly to the tip of the abdomen, surrounding the dark brown spinnerets.

Anepsion fuscolimbatum (Simon, 1901) (figs. 1, 2)

Through the kindness of Dr. C. B. Goodhart, University Museum, Cambridge, I was recently enabled to study the holotype of this species (fig. 1). Simon's description (in Latin) is correct; the translation runs as follows.

" Ω long 3 mm. — It differs from [A.] depressa Thorell, which it resembles, in the following points. The length is half that of depressa or even less; the cephalothorax is smooth and shining, pale yellow with eye region and clypeus brownish; the sternum is yellow (not black); the abdomen is shorter, nearly round, its dorsal surface flat, shining, with a few coarse impressions and indistinct sigilla, pale yellow with broad brown margins; on the ventral side behind the epigyne there is a brown median blot, rather narrow and indistinct; the spinnerets have brown borders; the legs are nearly spineless, rather dark, olive brown, the femora of the I and II legs nearly black, the coxae and the femora of the III and IV legs, especially on the underside, lighter; the scapus of the epigyne is brown and rather blunt. Perak [Malaya]: Gunong Inas (6000 ft)".

A. jacobsoni Chrysanthus (1961: 467, figs. 19-21) is closely related to A. fuscolimbatum: A. jacobsoni is somewhat larger (holotype 4.0 mm, paratype 3.8 mm), the abdomen is darker, the lighter blots round the dorsal sigilla are more distinct, the scapus of the epigyne is pointed and occupies one half of the width of the epigyne, whereas in A. fuscolimbatum it is blunt and measures only one third of the epigyne (fig. 2).

Anepsion peltoides (Thorell, 1878) (figs. 9, 11)

A study of spiders from New Guinea (Rijksmuseum van Natuurlijke Historie, Leiden) and from the Bismarck Arch., collected by the Noona Dan Expedition 1961-1962 (Universitetets Zoologiske Museum København), demonstrated that the area of distribution of this species is larger than indicated in my first revision of the genus (Chrysanthus, 1961). Two females and two males have been collected on Mussau I. and one couple on Luf, Hermit Is., both north of East New Guinea.

Because the male has not yet been recorded, I here give its description together with a figure of the palp.

Male. — Cephalothorax as in fig. 3, length 1.0 mm, width 0.9 mm, yellow, the eyes surrounded with black; width of the eye region 0.6 mm, the median eyes occupying 0.2 mm. Chelicerae yellow. Maxillae and labium dark brown. Sternum: length 0.5 mm, width 0.4 mm, dark brown, shining. Legs yellowish, suffused with grey; measurements: I 2.5, II 2.4, III 1.8, IV 2.8 mm. Palp: fig. 11, dark brown.

Abdomen as in the female (fig. 9), length 1.6 mm, width 1.2 mm, yellow with dark grey blots; ventral side greyish yellow, a broad dark brown band extends from the epigastric furrow to beyond the brown spinnerets and is united with the posterior blot on the dorsal side; rather narrow lateral dark blots are connected with those on the dorsal side.

Anepsion hammeni nov. spec. (figs. 6, 7)

Among the large collections of spiders, made in New Guinea by members of the staff of the Rijksmuseum van Natuurlijke Historie, Leiden, and put at my disposal for study, there are two females of a new *Anepsion* species not belonging to one of the species-groups so far known: the pattern of the abdomen and especially the shape of the epigyne are quite different.

Female (holotype). — Cephalothorax (fig. 6): length 1.5 mm, width 1.4 mm; yellowish grey, the borders reticulated with brown, rather broad black rings around the eyes; width of the eye region 0.9 mm, the median eyes occupying 0.3 mm. Chelicerae: basal half brownish yellow reticulated with brown, distal half brown; fangs, maxillae and labium dark brown; sternum: length and width 0.6 mm, black. Legs: dark brown, measurements: I 3.8, II 3.3, III 2.8, IV 4.0 mm.

Abdomen (fig. 6): length 3.2 mm, width 2.8 mm; brownish yellow, with broad dark brown borders and three dark brown blots; dorsal sigilla very indistinct; lateral sigilla on the sides of the rather stout abdomen scarcely recognizable; ventral side yellow with irregular reddish blots, borders dark



Figs. 1, 2. Anepsion fuscolimbatum (Simon): 1, \mathcal{Q} ; 2, epigyne. — Figs. 3-5. A. depressum (Thorell): 3, 3; 4, 3 palp, inner side; 5, do, outside. — Figs. 6, 7. A. hammeni nov. spec.: 6, \mathcal{Q} ; 7, epigyne. — Fig. 8. A. maritatum (Cambridge): \mathcal{Q} , abdomen. — Fig. 9. A. peltoides (Thorell): \mathcal{Q} , abdomen. — Fig. 10. A. rhomboides (L. Koch): 3 palp (after Koch). — Figs. 1, 3, 6, 8, 9: × 15; 2: × 130; 4, 5: × 60; 7: × 115.

brown, a broad black central field extends from the epigyne to the tip of the abdomen and surrounds the dark brown spinnerets. Epigyne (fig. 7) very dark brown, which makes it difficult to see its actual shape.

The ground colour of the paratype is a little lighter.

The male is still unknown.

Holotype and paratype were collected by Dr. L. van der Hammen, on the island of Biak (district of Bosnik, Bamboo-forest, North of Oregon Trail), Western New Guinea, 29 November 1953; they are preserved in the Rijksmuseum van Natuurlijke Historie, Leiden.

Anepsion buchi nov. spec. (figs. 13, 14)

Two Anepsion females, collected by the Noona Dan Expedition 1961-1962 near Lemkamin (900 m, New Ireland, Bismarck Arch.), holotype 12.4.1962, paratype 11.4.1962, belong to the *peltoides* group but differ from all known species.

Female (holotype). — Cephalothorax (fig. 13): length and width 1.4 mm, the cephalic part separated from the thoracic part by a rather deep groove, greyish yellow, the eyes surrounded with black. Width of the eye region 0.8 mm, the median eyes occupying 0.3 mm. Chelicerae greyish yellow. Maxillae and labium dark brown with grey tips. Sternum: length and width 0.7 mm, dark brown, shining. Legs brownish yellow, darkening towards the tips; measurements: I 4.2, II 4.0, III 2.5, IV 3.8 mm.

Abdomen (fig. 13): length 2.6 mm, width 2.3 mm, greyish yellow, the whole border, an anterior and a posterior blot dark brown; underside greyish yellow, a dark brown band, gradually broadening, extends from the epigastric furrow to the dark border, which is also discernable on the underside. Spinnerets yellowish brown. Epigyne (fig. 14) brown.

The male is still unknown.

It is a pleasure to me to dedicate this species to Mr. William Buch, Zoological Museum, Copenhagen, who collected the greater part of the insects and spiders during the whole Noona Dan Expedition.

Anepsion wolffi nov. spec. (figs. 15, 16)

Material: \mathcal{Q} Hutuna, Rennell I., 18.3.1965 (holotype), \mathcal{Q} same locality 29.3 and 31.3.1965 (paratypes); \mathcal{J} subad. Beach Onegaghugha, S. of Hutuna, 3.4.1965 (paratype). All specimens were collected by Dr. T. Wolff, Zoological Museum, Copenhagen, and are preserved in that Museum.

The abdomens of the females are without any pattern; I suppose, however, that this is due to their rather bad condition: successively they have shrunk and swollen, resulting in a separation of the skin and the contents. It seems to me that originally they looked like the subadult male (fig. 15), which has been perfectly preserved.

Judging from the epigyne this species belongs to the *maritatum* group; moreover, the pattern of the abdomen resembles the lightest form of this species (f. *nigroanalis*).

Female (holotype). — Cephalothorax: length 1.2 mm, width 0.9 mm, greyish yellow, the eyes surrounded with black. Width of the eye region 0.6 mm, the median eyes occupying 0.2 mm. Chelicerae greyish yellow. Maxillae and labium greyish brown with lighter bases. Sternum: length 0.6 mm, width 0.5 mm, greyish brown. Legs brownish yellow; measurements: I 2.5, II 2.5, III 1.6, IV 2.5 mm.

Abdomen: length 1.7 mm, width 1.6 mm, yellowish grey, covered with numerous small pits; on the underside a gradually broadening brown band extends from the epigastric furrow and surrounds the brown spinnerets. Epigyne: fig. 16, brown.

In the subadult male paratype (fig. 15) the colour of cephalothorax and abdomen is greyish yellow, the pattern black.



Fig. 11. Anepsion peltoides (Thorell), \$, left palp, outside. — Fig. 12. A. wichmanni (Kulczynski), \$, left palp, outside, lateral processus. — Figs. 13, 14. A. buchi nov. spec.:
13, \$, 14; do., epigyne. — Figs. 15, 16. A. wolffi nov. spec.: 15, \$ subad.; 16, \$, epigyne. — Figs. 11: × 105; 12, 14: × 75; 13, 15: × 14; 16: × 200.

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Key to the Anepsion species

Ι.	Q
	ð
2.	Abdomen nearly unicoloured, without distinct darker parts (the borders may be
	gradually darkening)
	Abdomen with distinct darker parts
3.	Sternum without a darker central blot
	Sternum with a darker central blot
4.	Scapus of the epigyne blunt, its basal width one third of the width of the epigyne
	(fig. 2)
	Scapus pointed, its basal width equal to half the width of the epigyne
-	A Jacobsoni Chrysanthus
5.	Length of the scapus about equal to its basal width A. depressum (Inorell)
	Length of the scapus nearly twice its basal width A. roeweri Chrysanthus
6.	Outline of the abdomen rhomboidal, the central part light, the borders dark .
	A. rhombordes (L. Koch)
	Outline of the abdomen oval, elliptic or circular
7.	Anterior half of the abdomen light, posterior part dark A. semialbum (Simon)
	Abdomen with several dark blots
8.	Pattern of the abdomen as in fig. 6; epigyne fig. 7 A. hammen nov. spec.
	Pattern of the abdomen as in fig. 8
	Pattern of the abdomen as in fig. 15; epigyne fig. 16 A. wolffi nov. spec.
	Pattern of the abdomen as in fig. 13; epigyne fig. 14 A. buchi nov. spec.
	Pattern of the abdomen as in fig. 9
9.	Length of the scapus of the epigyne about twice its basal width
	Length of the scapus about equal to its basal width
10.	Epigyne consists of two transverse knobs, one on each side of the scapus
	A. reimoseri Chrysanthus
	Epigyne consists of one long transverse knob beneath the scapus II
11.	Width of the epigyne at most three times the basal width of the scapus .
	A. wichmanni Kulczyński
	Width of the epigyne about five times the basal width of the scapus .
	A. peltoides (Thorell)
12.	Abdomen rhomboidal
	Abdomen oval, elliptic or circular
13.	Abdomen without darker blots
	Abdomen with darker blots
14.	Abdomen oval; palp, figs. 4, 5
	Abdomen elliptic, nearly circular
15.	Dark blots scattered over the abdomen (fig. 8) A. maritatum (Cambridge)
	Dark blots on anterior, posterior and lateral borders only (fig. 9) 16
16.	Processus of the palpal organ heavy and blunt (fig. 11) A. peltoides (Thorell)
	This processus more slender (fig. 12) A. wichmanni (Kulczynski)

Distribution of the species

On map 1 the distribution of all known *Anepsion* species is given for so far this can be derived from data in the literature and from the localities indicated with museum specimens. Sometimes the locality is given very im-



precisely, e.g., "Java". It should also to be taken into account that our knowledge of the spider population of the Indo-Australian area is very incomplete.

References

CHRYSANTHUS, FR., 1961. Die Gattung Anepsion Strand, 1929. — Senck. biol., 42: 463-477.

BONNET, P., 1955. Bibliographia Araneorum. Toulouse, 2: 324-325.

KOCH, L., 1871. Die Arachniden Australiens. Nürnberg, 1: 46, pl. 3 fig. 9.

ROEWER, C. F., 1942. Katalog der Araneae. Bremen, 1: 892.