# New and rare species of the genus *Asemonea* O. P.-CAMBRIDGE, 1869 from Kenya

(Araneae: Salticidae)

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ABSTRACT. Description of three new species of *Asemonea* from Kenya are given: *A. flava, A. pallida* and *A. serrata*. New data on distribution of *A. murphyae* are presented.

Key words: arachnology, taxonomy, Araneae, Salticidae, Lyssomaninae, Asemonea, new species, Afrotropical Region.

#### INTRODUCTION

The genus Asemonea O. P.-Cambridge, 1869 represents the subfamily Lyssomaninae in the Afrotropical Region. The eyes in this group of spiders are arranged in four rows and tracheal system in the majority of species is confined to the abdomen. Their biology is rather poorly known but they are usually found among leaves, well disguised by their light coloration (generally yellow or green). Some of the lyssomanine salticids use a sheet web to capture prey (Murphy cited in Wanless 1980, Hallas & Jackson 1986). This set of characters - rather exceptional for the salticids - could justify establishment of separate family - the Lyssomanidae (Blackwall 1877) - for them. However, after detailed analysis of their morphological features, Galiano (1976) redefined the group and suggested retention of its subfamilial rank within the Salticidae.

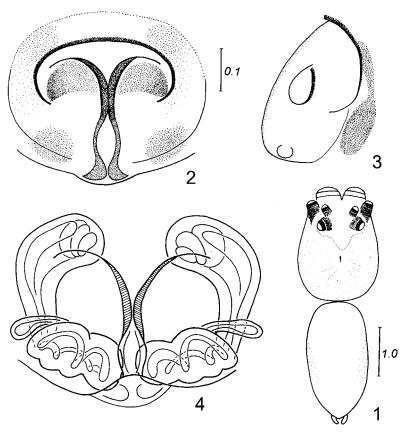
The genus Asemonea differs from other Lyssomaninae in its eye pattern. It has been revised by Wanless (1980) and comprises at the moment thirteen species

distributed in the tropical zone of the Old World. Knowledge of their biology is very scanty, the majority of species are known only from the type specimens. The paper presents descriptions of three new species from Kenya and new records for an additional one.

The material described below constitutes a part of A. Holm's collection of spiders from eastern Africa and is kept at the Museum of Evolution at Uppsala University. Measurements are given in millimetres.

#### SURVEY OF SPECIES

# Asemonea flava n. sp. (Figs 1-4)



1-4. Asemonea flava n. sp., holotype: 1 - general appearance, 2 - epigyne, 3 - ditto, lateral view, 4 - internal structure of epigyne

MATERIAL

Holotype: female, Kenya, Mt Elgon, 2350 m a.s.l., near Suam river, under tree, 9.XII.1937, col. A. Holm (no 14).

#### DIAGNOSIS

A distinctive species easily recognised by the structure of the epigyne; its anterior depression is separated by a narrow, very much elevated median septum.

#### DESCRIPTION

Measurements. Carapace length 2.2, width 1.4, height 0.8. Abdomen length 2.2, width 1.1. Eye field length 0.6, anterior width 1.1, posterior width 0.9.

Male unknown

Female. General appearance as in Fig. 1. Carapace elongated, widest posteriorly, moderately high. Coloration of carapace yellow; eye field very light, whitish with delicate green iridescence. Eye pattern typical for the genus: eyes on tubercles; largest anterior medial; anterior lateral, placed slightly behind, in second row, half as large as eyes of first row; posterior median eyes relatively large, close to each other, situated centrally in ocular area; posterior lateral eyes as large as anterior lateral; two posterior rows of eyes form trapezium. All eyes, except anterior median, surrounded by black area. Fovea distinctly marked. Chelicerae whitish-yellow, two teeth on promargin, three very small on retromargin. Abdomen elongated, narrower than carapace, light yellow, only laterally slightly darker. Spinnerets light. Legs long and thin, yellow. Blackish dot on retrolateral surface at distal end of all tibiae. Spines numerous, long, very light. Epigyne oval, with large depression anteriorly, divided by narrow, much elevated septum (Fig. 2). Central section of septum forms "bridge" above epigyne (Fig. 3). Internal structure of epigyne as in Fig. 4. Seminal ducts very wide in their initial part, receptacles form helices with three coils.

#### ETYMOLOGY

The specific name is Latin for "yellow" and refers to its coloration.

# Asemonea murphyae Wanless, 1980 (Figs 5-10)

Asemonea murphyi Wanless 1980: 231.

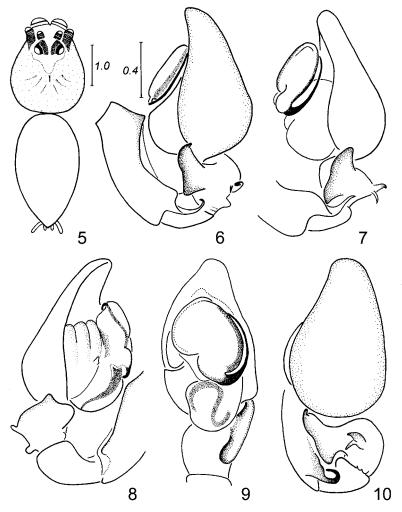
#### Material

Kenya: Mt Elgon, E side, 2250 m a.s.l., in bush at stream, 1 male, 1 juv., 15.III.1938, col. A. Holm (no 144); same locality, 2130 m a.s.l., near Kaptaga river, in bush, 1 male, 1 juv., 13.III.1938, col. A. Holm (no 138).

#### REDESCRIPTION

Measurements. Carapace length 2.0, width 1.5, height 0.7. Abdomen length 2.5, width 1.3. Eye field length 0.6, anterior width 1.0, posterior width 0.7.

Male. General appearance as in Fig. 5. Carapace pear-shaped, widest posteriorly. Coloration of carapace yellowish-orange, eye field lighter, whitish-yellow with green shine. Eyes placed on tubercles, surrounded by black rings (except anterior median). Light bristles near anterior eyes. Posterior median eyes relatively large, only slightly smaller than posterior lateral ones, placed in centre of ocular area. Fovea clearly visible. Clypeus pale yellow. Chelicerae whitish,



5 -10. Asemonea murphyae Wanless, male: 5 - general appearance, 6 - palpal organ retrolateral view, 7- ditto, ventro-retrolateral view, 8 - ditto, prolateral view, 9 - ditto, ventral view, 10 - ditto, dorsal view

with two prolateral and five retrolateral very small teeth. Sternum heart-shaped. Abdomen elongated, yellowish. Posterior spinnerets thin, long. Legs very thin and long, pale yellow, only small black patch on retrolateral surface of all tibiae, at their distal ends. Pedipalps orange-brownish. Palpal femur slender, with furrow on ventral surface. Terminal femoral apophysis thin and long (Figs 6, 7), dorsal tibial apophysis forked (Fig. 10).

#### DISTRIBUTION

This species was recorded from western and central Kenya.

### Asemonea pallida n. sp.

(Figs 11-14)

#### Material

Holotype: female, Kenya, Cherangany Hills, 1880 m a.s.l., Kapolet Forest, 19.I.1966, col. A. Holm (no 85). Paratype: together with holotype, 1 female, 8 juv. (no 85a); Warges, 1950 m a.s.l., on vegetation at brook, 1 female, 30.XII.1975, col. A. Holm (no 345a).

#### DIAGNOSIS

This species is characterised by the structure of the epigyne, which has two large rounded depressions.

#### DESCRIPTION

Measurements. Carapace length 1.9-2.2, width 1.4-1.8, height 1.0. Abdomen length 3.0-3.1, width 1.5-1.8. Eye field length 0.7, anterior width 1.2, posterior width 0.7.

Male unknown.

Female. General appearance as in Fig. 11. Carapace elongated, widest posteriorly, its coloration very light, whitish-yellow; ocular area almost white, only black rings surround eyes (except anterior median). Light bristles fringe anterior eyes. Clypeus whitish. Chelicerae light yellow, two teeth on promarginal and three teeth on retromarginal edge. Labium and maxillae light. Sternum heart-shaped, yellowish. Abdomen slender, slightly broader than carapace. Coloration of abdomen pale yellow, spinnerets light. Legs yellowish, covered with light hairs. Black dot on retrolateral surface of all tibiae, at their distal ends. Spines numerous, long, light. Epigyne oval, with two large rounded depressions (Fig. 12). Septum dividing these depressions very much elevated, forms "bridge" between anterior and posterior part of epigyne (Fig. 13). Internal structure (Fig. 14) slightly resembles that of *A. flava*, but seminal ducts shorter, their sclerotisation stronger, and receptacles larger.

#### ETYMOLOGY

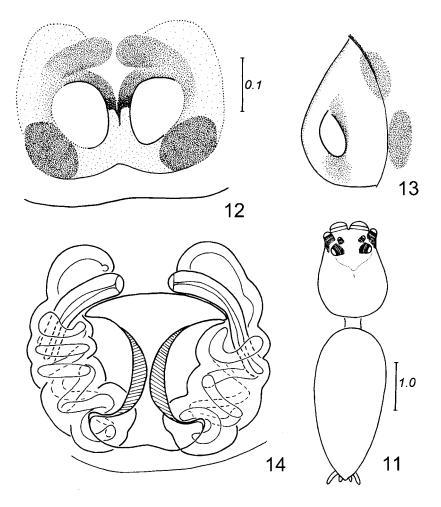
The specific name is Latin for "pale" and refers to the light coloration of this species.

## Asemonea serrata n. sp.

(Figs 15-20)

### $M_{ATERIAL} \\$

Holotype: male, Kenya, Mt Elgon, E side, 2275 m a.s.l., bush in *Podocarpus* forest, 19.II.1938, col. A. Holm (no 109).



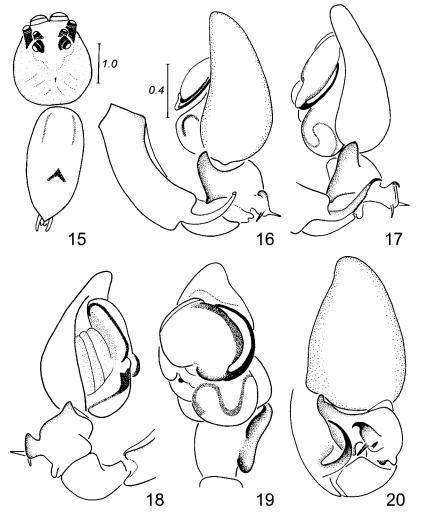
11-14. Asemonea pallida n. sp., holotype: 11 - general appearance, 12 - epigyne, 13 - ditto, lateral view, 14 - internal structure of epigyne

#### Diagnosis

A species closely related to *A. maculata* Wanless, 1980 but may be distinguished by the shape of the femoral apophysis; very thin with serrate edge in *A. serrata*, but wide and coiled like a cork-screw in *A. maculata* (cf. Fig. 17 with Fig. 13 C in Wanless 1980).

#### DESCRIPTION

Measurements. Carapace length 2.0, width 1.7, height 0.7. Abdomen length 2.5, width 1.2. Eye field length 0.6, anterior width 1.1, posterior width 0.9.



15-20. Asemonea serrata n. sp., holotype: 15 - general appearance, 16 - palpal organ retrolateral view, 17- ditto, ventro-retrolateral view, 18 - ditto, prolateral view, 19 - ditto, ventral view, 20 - ditto, dorsal view

Male. General appearance as in Fig. 15. Carapace moderately high, rounded, widest at half its length. Coloration of carapace yellowish-orange, eye field pale yellow. Vicinity of eyes black, only anterior median without dark area around. Yellow bristles near anterior eyes. Fovea distinct. Clypeus whitish. Chelicerae orange, promargin edge with two teeth, retromargin with three small teeth. Sternum wide, heart-shaped. Abdomen slender, narrower than carapace. Its coloration pale yellow, arrow-shaped blackish patch c. half its length, two narrow brown stripes anteriorly. Venter whitish. Spinnerets light, long. Legs generally yellow. First pair with narrow dark lines on lateral surfaces of femora. Small black spot on lateral surface of tibiae of all legs, at their distal ends. These spots more marked on retrolateral surfaces. Leg hairs light; spines numerous, long and slender, very pale. Pedipalps light brown. Palpal femur with large furrow on ventral surface. Terminal femoral apophysis thin and very long, with serrate dorsal edge (Fig. 17). Dorsal tibial apophysis with three sharp tips (Figs 17, 20).

Female unknown.

#### ETYMOLOGY

The specific name is Latin for "saw-toothed" and refers to the shape of the femoral apophysis of this species.

#### ACKNOWLEDGEMENTS

I wish to express my thanks to Dr Mats Eriksson for giving me access to A. Holm's eastern African salticid collection.

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