

# ***Micropholcus fauroti* (Simon) n. comb., a pantropical, synanthropic spider (Araneae: Pholcidae)**

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*Abstract:* A new genus, *Micropholcus*, has been established for *Pholcus fauroti* Simon, 1887. New junior synonyms are *P. infirmus* Thorell, 1895, *P. senegalensis* Millot, 1940, and *P. chavanei* Millot, 1946. Both sexes are redescribed. The species is synanthropic and has a cosmopolitan distribution.

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## **Introduction**

We have recently obtained numerous specimens of *Pholcus fauroti* Simon which have enabled us to redescribe the species, and to establish three new synonyms. This species shows some disparities with the type species, *Pholcus phalangioides* Fuesslin, and a large number of other species of the same genus. The most important of these differences are the globose abdomen, the unusual configuration of the male paracymbium with its hinged distal segment and the absence of external sclerotizations in the epigyne. We consider these differences to be of sufficient importance to separate *P. fauroti* from other *Pholcus* species and create a new genus for it. At present, no other species are known which share this set of characters. Dr. R. Jocqué of the Royal Museum of Middle Africa, Tervuren, Belgium, kindly put the unidentified African pholcids of the Museum at our disposal; this material consists of an astonishingly rich variety of mostly undescribed species and genera; none, however, seems to be close to *P. fauroti*.

## ***Micropholcus* nov. gen.**

*Type species:* *Pholcus fauroti* Simon.

*Diagnosis:* See species diagnosis.

*Relationships:* The form of the carapace, eye arrangement, chelicerae and bulb appendages suggest affinity with *Pholcus*. There is also a probably distant relationship to undescribed forms from southern Africa, Madagascar and the Comoros Archipelago.

## ***Micropholcus fauroti* (Simon, 1887)**

(figs. 1-9)

*Pholcus fauroti* Simon, 1887: 453 (♂ and ♀, Obock [Gulf of Aden]) (types seen).

? *Pholcus infirmus* Thorell, 1895: 72 (♀, Rangoon) (type probably lost). nov. syn.

*Pholcus unicolor* Petrunkevitch, 1929: 147, figs. 139-143, (♂ and ♀, Puerto Rico); Gertsch, 1937: 1 (Texas, New Mexico) (type not seen).

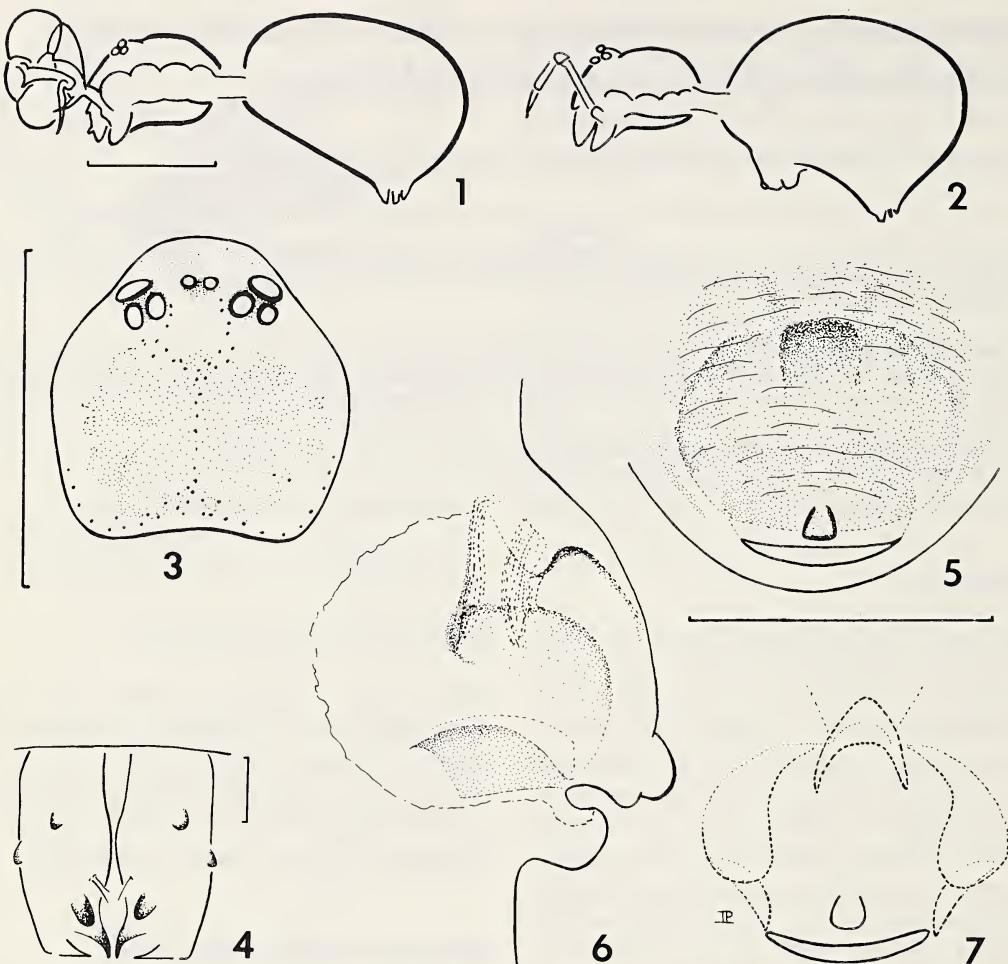
*Pholcus senegalensis* Millot, 1940: 14, fig. 5 bis (♀ Dakar, Sénégéal) (type probably lost). nov. syn.

*Pholcus chavanei* Millot, 1946: 131, fig. 2a,b (♂, Ankarana, Madagascar, in a house) (not seen). nov. syn.

*Pholcus fauroti*: Roth, 1985: B33-1 (southern U.S.A.).

## *Synonymy*

The excellent figures of *chavanei* and *senegalensis* by Millot leave no doubt about the identity of the species.



Figs. 1-7. *Micropholcus fauroti* (Simon). 1, lateral view of male carapace and abdomen; 2, lateral view of female carapace and abdomen; 3, male carapace; 4, male chelicerae; 5, epigyne; 6, vulva, lateral view; 7, vulva, ventral view. (Scale: figs. 1-3 = 1 mm; fig. 4 = 0.1 mm; figs. 5-7 = 0.5 mm).

The type of *Pholcus infirmus* could be found neither in the British Museum (Natural History), London nor in the Museo civico di Storia Naturale in Genoa and the Natural History Museum in Stockholm. According to its description, it probably is another synonym of *M. fauroti*: the combination of small size, eight eyes, globose abdomen and unsclerotized, protruding epigyne does not apply to any other pholcid genus from Asia and makes the synonymy with *Pholcus fauroti* likely.

#### New material

Cape Verde Islands: Fogo, São Filipe, 2 ♀, in building, 12-17.ix.1984, leg. A. van Harten; San Tiago, São Jorge, 21 ♂, 37 ♀, 26 juv. from numerous samples, in buildings, vii.1982-v.1985, adults at all seasons, leg. A. van Harten and J. D. Prinsen; San Tiago, Jaracunda, 1 ♀ in a house, 23.ii.1984, leg. J. D. Prinsen; Santo Antão, Ribeira Grande, 1 ♀, in building, 16.i.1985, leg. A. van Harten.

Kenya: Hola, 1 ♂, first half 1977, leg. C. Kooiman.

Indonesia: East Java, Malang, 1 ♂, in a bathroom, 18.vii.1982, leg. C. L. Deeleman; Kalimantan, Balikpapan, 1 ♂, in a bathroom, 22.vii.1982, leg. C. L. Deeleman.

The material is in the collections of the authors, with the exception of one male and one female in the Rijksmuseum van Natuurlijke Historie, Leiden, one male and one female in Musée Royal de l'Afrique Central, Tervuren and one male and one female in the Instituto Nacional de Investigação Agrária, São Jorge dos Orgaos, San Tiago, Rep. Cape Verde.

### *Diagnosis*

Carapace and eye arrangement (fig. 3) as in *Pholcus*, but head less distinctly set off from thorax. Abdomen (figs. 1, 2) globose, less than twice the length of the carapace. Male chelicerae (fig. 4) with three pairs of apophyses in addition to the normal medio-distal tooth. Paracymbium with a hinged distal segment not bearing setae (fig. 9). Embolus slightly sclerotized, conductor with two branches straddling the embolus, one branch little developed (fig. 8). Epigyne (figs. 2, 5) protruding, with chitinized knob, but no other sclerotizations. Vulva (figs. 6, 7) with a large atrium.

### *Redescription (Cape Verde Isl.)*

#### Male

Carapace 0.90-1.05 mm long, 0.85-1.05 mm wide, abdomen 1.5-2 times carapace length (5 males).

Leg measurements: see table 1.

The position of the dorsal trichobothrium is 0.09 for metatarsus I, 0.10 for metatarsus II, 0.09 for metatarsus III and 0.08 for metatarsus IV. In other males no trichobothria are apparent (lost?).

The whole spider pale yellow, though the carapace may have an indistinct pattern.

Head barely higher than thorax and separated from it by an indistinct Y-shaped groove (fig. 3). Diameter of anterior median eyes about one half of anterior lateral eyes. Chelicerae with a pair of proximo-frontal teeth, a pair of lateral, low, rounded protrusions and disto-mesally a pair of strong obtuse teeth.

Palp: trochanter with strong spur, femur slightly longer than wide, with small lateral apophysis; paracymbium (= "procursus") (fig. 9) simple, straight, bearing 5-7 setae, ending apically in a fringed membrane, provided subapically with a hinged, lanceolate sclerite without setae. Embolus (fig. 8) cylindrical, sclerotized, fringed apically; conductor branched at base, the internal branch ("appendix") reduced; external branch ("uncus") divided into three unequal tines.

#### Female

Carapace 0.75-0.85 mm long, 0.70-0.90 mm wide, abdomen 1.5-2.0 times carapace length (8 females).

Leg measurements: see table 2.

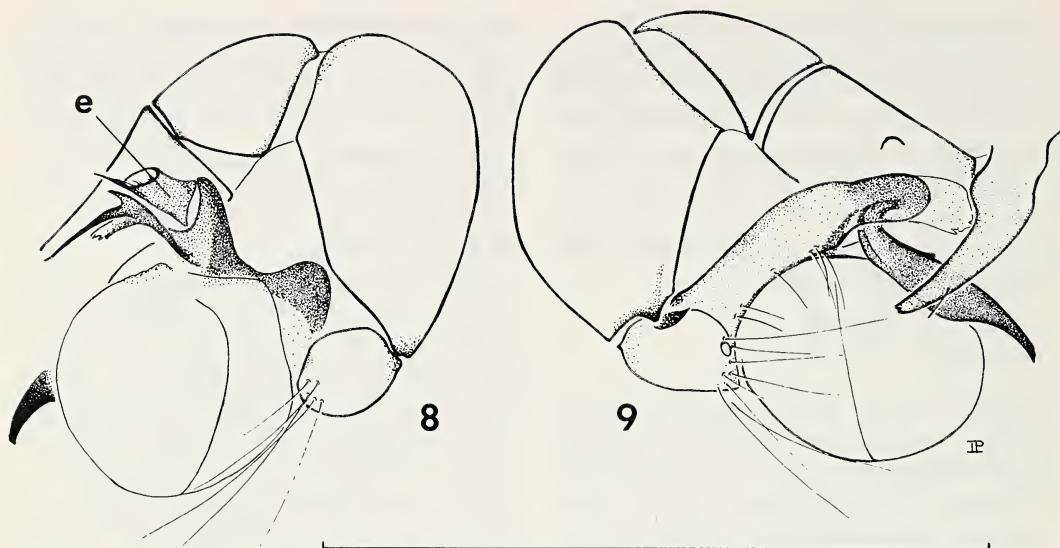
The position of the metatarsal trichobothrium varies from 0.04 to 0.10 (6 specimens).

Colour, carapace, and eyes as in the male, though the abdomen may be grey with paler blotches. Chelicerae without protrusions. Palpal tarsus with 4 apical claws, no hyaline cone.

Epigyne protruding, outer teguments membranous except for a central chitinous knob, teguments transversely wrinkled. Dorsal to the reverse V-shaped "Verschluß" (cf. Wiehle 1967) lies a large atrium which is lined anteriorly with a large saddle-shaped sclerite and posteriorly with a pair of oval plates (fig. 6, 7).

Table 1. Leg measurements of male in mm (São Jorge, 7.vii.1982).

	femur	patella	tibia	metatarsus	tarsus	total
I	6.00	0.40	6.00	10.55	0.95	23.90
II	4.15	0.35	3.85	6.60	0.80	15.75
III	3.35	0.35	2.50	4.30	0.35	10.85
IV	4.55	0.40	3.60	5.80	0.70	15.05



Figs. 8-9. *Micropholcus fauroti* (Simon), left palp of male. 8, prolaternal view; 9, retrolateral view. (Scale 1 mm; e = embolus).

### Variability

There is considerable variation in leg length. Cape Verde: males, max. length leg I 26.05 mm, min. 22.45 mm; females: max. length leg I 23.35 mm, min. 15.90 mm. The male from Java has leg I 31.25 mm long; in the male from Balikpapan, legs I are missing. The carapace length and width of the Indonesian specimens fall within the limits given under the species description. The male palp of the Indonesian and Kenyan specimens agrees very well with that of the males from Cape Verde. Millot (1946) indicates only two pairs of projections on the male chelicerae in *P. chavanei*. He may have overlooked the lateral protrusions, which are small.

### Biology

All available collecting data point to human

habitations. Van Harten (Cape Verde, personal communication) has never seen the species outdoors. He collected adult specimens in all seasons. Kooiman (personal communication) remembers seeing the species in Kenya both indoors and under the veranda roof.

### Distribution

Cosmotropical. According to Roewer (1942) the species has been recorded from Egypt, Ethiopia ("Abessinien"), the Arabian Peninsula, Vietnam ("Indochine") and Venezuela. Gertsch (1937) records *P. unicolor* from Mexico and Texas. Roth (1985) cites it from Texas to Florida and thinks it has been introduced. To this distribution can now be added Cape Verde Islands, Senegal, Kenya, Madagascar, Puerto Rico, Burma (?) and Indonesia.

Table 2. Leg measurements of female in mm (São Jorge, 15.v.1983).

	femur	patella	tibia	metatarsus	tarsus	total
I	5.10	0.40	4.80	8.60	0.85	18.95
II	3.70	0.40	3.30	5.30	0.55	13.25
III	3.00	0.35	2.40	4.10	0.50	10.35
IV	4.20	0.35	3.40	5.10	0.55	13.60

## Acknowledgements

The authors express their sincere thanks to Mr. A. van Harten, São Jorge, who collected most of the Cape Verdian material, and made observations on the habitat of the species; his hospitality enabled the second author to collect a large number of spiders of various species during her stay in São Jorge. They appreciate the observations of C. Kooiman and his gift of the Kenyan specimen and are indebted to Mrs G. Arbocco (Genoa), F. R. Wanless and P. D. Hillyard (London) and T. Kronestedt (Stockholm) for their efforts to find the type of *Pholcus infirmus* and finally to Prof. Dr. J. L. Cloudsey-Thompson (London) and Prof. Dr. A. M. Shelton (Geneva, New York) for correcting the English text.

## References

- GERTSCH, W. J., 1937. New American Spiders. – *Amer. Mus. Novit.* 936: 1-7.  
 MILLOT, M. J., 1940. Les Araignées de l'Afrique occi-

- dentale française. Sicarides et Pholcides. – *Mém. Ac. Sc. Inst. France* 64: 1-50.  
 MILLOT, M. J., 1946. Les Pholcides de Madagascar (Aranéides). – *Mém. Mus. natn. Hist. nat.* [2] 22(3): 127-157.  
 PETRUNKEVITCH, A., 1929. The spiders of Porto Rico, Part I. – *Trans. Connecticut Acad. Sci.* 30: 1-158.  
 ROEWER, C. F., 1942. *Katalog der Araneeae* i: 1-1040, Bremen.  
 ROTH, V. D., 1985. *Spider genera of North America*: 1-30, A1-1-A7-1, B-1-0-B48-1, published by the author, Portal.  
 SIMON, E., 1887. Arachnides recueillis à Obock en 1886 par M. le Dr. L. Faurot. – *Bull. Soc. zool. France* 12: 452-455.  
 THORELL, T., 1895. *Descriptive Catalogue of the Spiders of Burma*: 1-406. British Museum, London.  
 WIEHLE, H., 1967. Meta, – eine semientelegyne Gattung der Araneeae (Arach.). – *Senck. Biol.* 48(3): 183-196.

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