

A NEW SYMPHYLID, *SCUTIGERELLA KRISHNANI* sp. n.,  
FROM SOUTH INDIA

By

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(With 1 Text-figure)

The symphylid fauna of India is incompletely known. The only three named species of Symphyla known from India are *Scutigereella subunguiculata* (Imms, 1908) from Tehri-Garhwal (Himalaya), *S. unguiculata* (Gravely, 1910) from Bengal and *Polyxenella krishnani* (Sundara Rajulu, 1963) from Madras State. The collection of Myriapoda from Alagarkoil Hills, near Madurai (Madras State), included several symphylids which, though belonging to the genus *Scutigereella* Ryder, differs from the two known species *S. subunguiculata* and *S. unguiculata* in the possession of nonemarginate penultimate scutum.

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***Scutigereella krishnani* \*sp. n.**

(Text-fig. 1)

**MATERIAL.**—25 specimens, Alagarkoil Hills (Madras State, South India) ca., 9°55' N. lat. and 78°10' E. long.; coll. *G. Sundara Rajulu* 25.vii.1962; found in soft mud under stones.

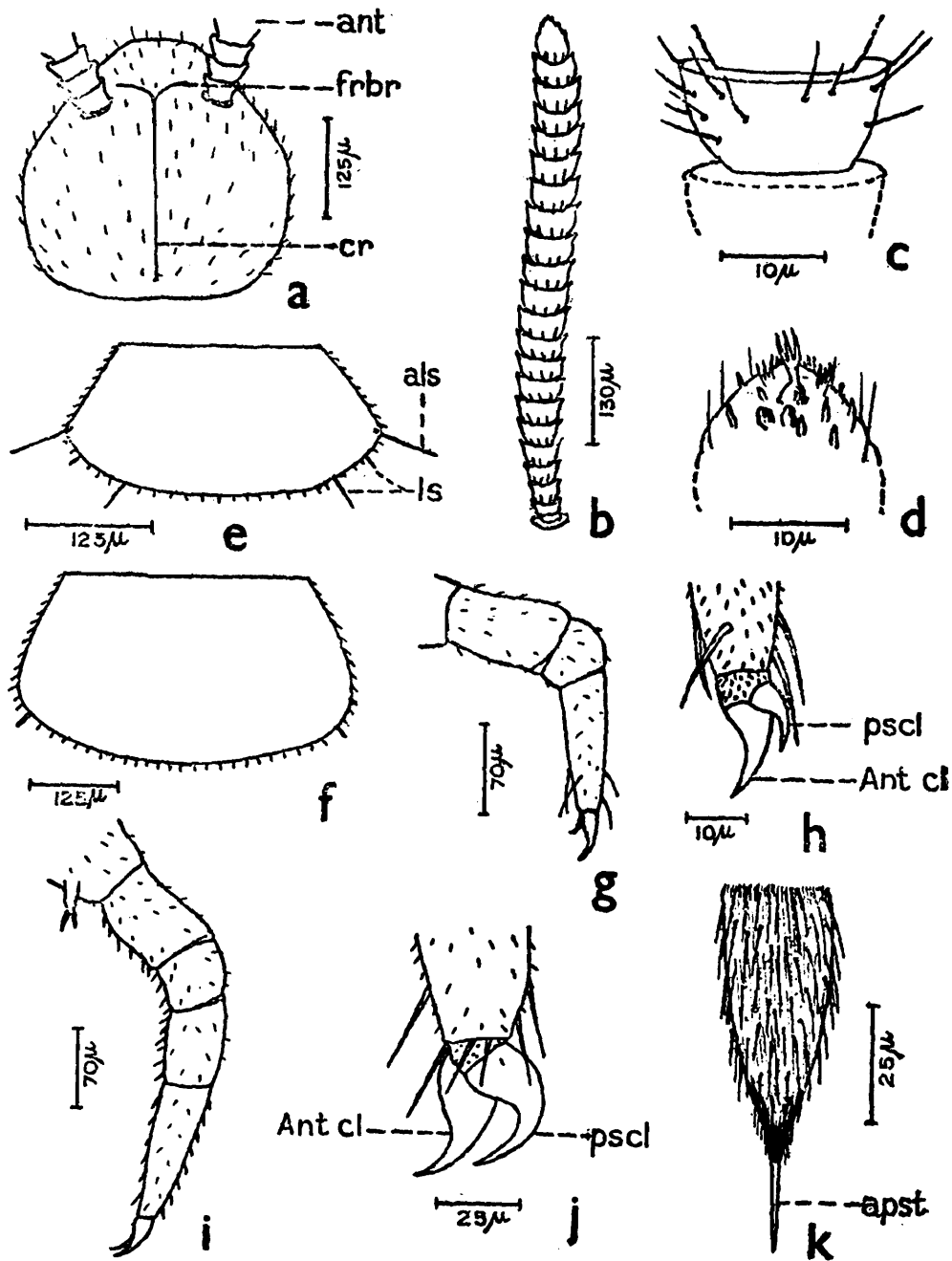
**DESCRIPTION.**—*General* : Body creamy white; anterior region narrow. Total body-length (without antennae) 2.5-3.0 mm. *Head* : Very narrow with a well-developed lateral angle; all setae on head uniform in length; central rod distinctly visible with frontal branches (Text-fig. 1a). *Eyes* and *ocelli* : Absent. *Antennae* : Very stout, short and roughly club-shaped, 0.5-0.7mm. long; number of joints 19-25 (Text-fig. 1b), varying with the length of specimens; setae on inner side of distal joints slightly longer than those on outer side. Second whorl begins from the 7th proximal segment. This whorl is completely developed only on outer side in the distal joints in larger specimens (Text-fig. 1c). Third whorl begins about middle of antenna on lower side, but with only one seta and towards

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end of antenna with 2-3 setae. Setae in central whorl long on upper and only a little shorter, on lower side. Terminal joint with a large stalked striped organ on a conspicuous protuberance, two small stalked striped organs, two globular organs without stalk and some styliform, small sensory setae (Text-fig. 1*d*). Segments of antennae saucer-shaped except the terminal one which is globular.



TEXT-FIG. 1.—*Scutigrella krishnani* sp. n.

(a) Head, in dorsal view. (b) Entire antenna. (c) Antennal setae of the 16th distal segment. (d) Terminal segment of antenna. (e) Second scutum. (f) Penultimate scutum. (g) First leg. (h) Claws of first leg. (i) Last leg. (j) Claws of last leg. (k) Cercus.

*als.*, antero-lateral seta; *ant.*, antenna; *Ant cl.*, anterior claw; *apst.*, apical seta; *cr.*, central rod; *frbr.*, frontal branch of central rod; *ls.*, lateral setae; *pscl.*, posterior claw.

*Scuta* : Second scutum (Text-fig. 1e) with posterior margin slightly convex in middle; antero-lateral setae directed sideways; of lateral setae, two pairs longer than the other; the postero-lateral pair longest, only half as long as antero-lateral pair and directed backwards. First, third, fifth, sixth and eighth scuta each with an anterolateral seta, about as long as that on second scutum and one or two pairs of lateral setae developed as on second scutum. Fourth, 7th and 9th-13th scuta without any anterolateral seta but with 1-2 pairs of lateral setae as long as those of second scutum and directed backward. The penultimate scutum (Text-fig. 1f.) similar in contour to second scutum. *Legs* : First pair with an anterior claw, long and freely curved; the posterior claw small, half as long as anterior one; no front seta (Text-fig. 1g or h.). Last pair of legs with tarsus 4-5 times longer than deep; metatarsus with 5-6, and tarsus with 7-8 setae in anterior dorsal row (Text-fig. 1i.); these setae and the distal dorsal setae similar; anterior and posterior claws (Text-fig. 1j.) similar, both short and thick. *Cerci* : Slightly over 4-5 times longer than deep; beset with a large number of long setae; terminal area looking backwards; apical seta slightly shorter than depth of cerci (Text-fig. 1k.).

TYPE-SPECIMENS.—*Holotype* : Z. S. I. Reg. No. 3008/18, in spirit in a vial, Alagarkoil Hills (Madras State), 25. vii. 1962, coll. G. Sundara Rajulu, deposited in National Zoological Collections, Zoological Survey of India, Calcutta.

*Paratypes* : The same data as for the holotype; deposited as follows : (i) Two examples Z.S.I. Reg. No. 3009/18, in spirit in a vial, with Zoological Survey of India. (ii) One example with Dr. G. Krishnan, Director, Zoological Research Laboratory, Madras University, Madras.

TYPE-LOCALITY AND GEOGRAPHICAL DISTRIBUTION.—India : Alagarkoil Hills, as above. Known only from the type-locality.

COMPARISON.—*Scutigerella krishnani* n. sp. is similar to *S. orientalis* Hansen, but is easily distinguishable by the following features : (i) Antennae very short, with 19 to 25 saucer-shaped segments. (ii) Central rod distinctly visible, with frontal branches. (iii) Anterolateral setae of second scutum directed sideways. (iv) Penultimate scutum not emarginate. (v) First pair of legs without front seta. (vi) Twelfth pair of legs with similar anterior and posterior claws. (vii) Apical seta of cerci about half as long as depth of cerci.

In *S. orientalis* Hansen, the antennae are very long with 22-41 bi-conical segments; no central rod; anterolateral setae of second scutum directed forwards; penultimate scutum emarginate; first pair of legs with a well-developed, stumpy frontal seta, twelfth pair of legs with dissimilar claws; apical seta of cerci as long as depth of cerci.

#### SUMMARY

1. A new species of Symphyla, *Scutigerella krishnani* is described from southern India (type-locality Alagarkoil Hills, Madras State).

2. It is closely allied to *S. orientalis* Hansen, in the nature and arrangement of the seta on the segments of the antennae, the contour of the

second scutum and the nature of the claws in the first pair of legs ; but differs in the nature and number of the antennal segments, the possession of a distinct central rod, non-emarginate penultimate scutum and the twelfth pair of legs with similar claws.

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