

DESCRIPTIONS OF THREE NEW SPECIES OF *SCHIZASPIDIA*
WESTWOOD (HYMENOPTERA: EUCHARITIDAE) WITH A KEY
AND A CHECK-LIST TO THE SPECIES OF INDIAN SUBCONTINENT¹

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(With eighteen text-figures)

Three new species of *Schizaspidia* Westwood, viz. *S. brevifuniculata*, *S. sitarami* and *S. malabarica* are described. Key to the species of Indian subcontinent is provided. A check-list of species of *Schizaspidia* of this subcontinent is also given.

The study of Eucharitidae of Indian subcontinent was perhaps started by Westwood (1835). Since then Walker (1860), Enderlein (1912), Aiyar (1925), Clausen (1928), Mani (1935, 1942), Gahan (1940), Fernandow (1957), Mani *et al.* (1974), Hedqvist (1978), Husain and Agarwal (1983) and Narendran (*in press*) contributed to our knowledge of Eucharitidae of this region. During the course of my studies on Indian chalcid wasps I came across three distinct species of the genus *Schizaspidia* from the Malabar region. These three species neither fit to the keys of Hedqvist (1978) nor fit to the descriptions of any of the species known from the Indo-Australian regions. Apart from the descriptions of these new species I have also provided below a revised key and a check-list of the *Schizaspidia* species of Indian subcontinent.

The types of the new species described in this paper are with the author for the time being but eventually will be deposited in an International Museum.

Schizaspidia brevifuniculata sp. nov.
(Figs. 1-6)

Female: Length: 2.79 mm. Head and body blackish metallic green; antennae dark brown

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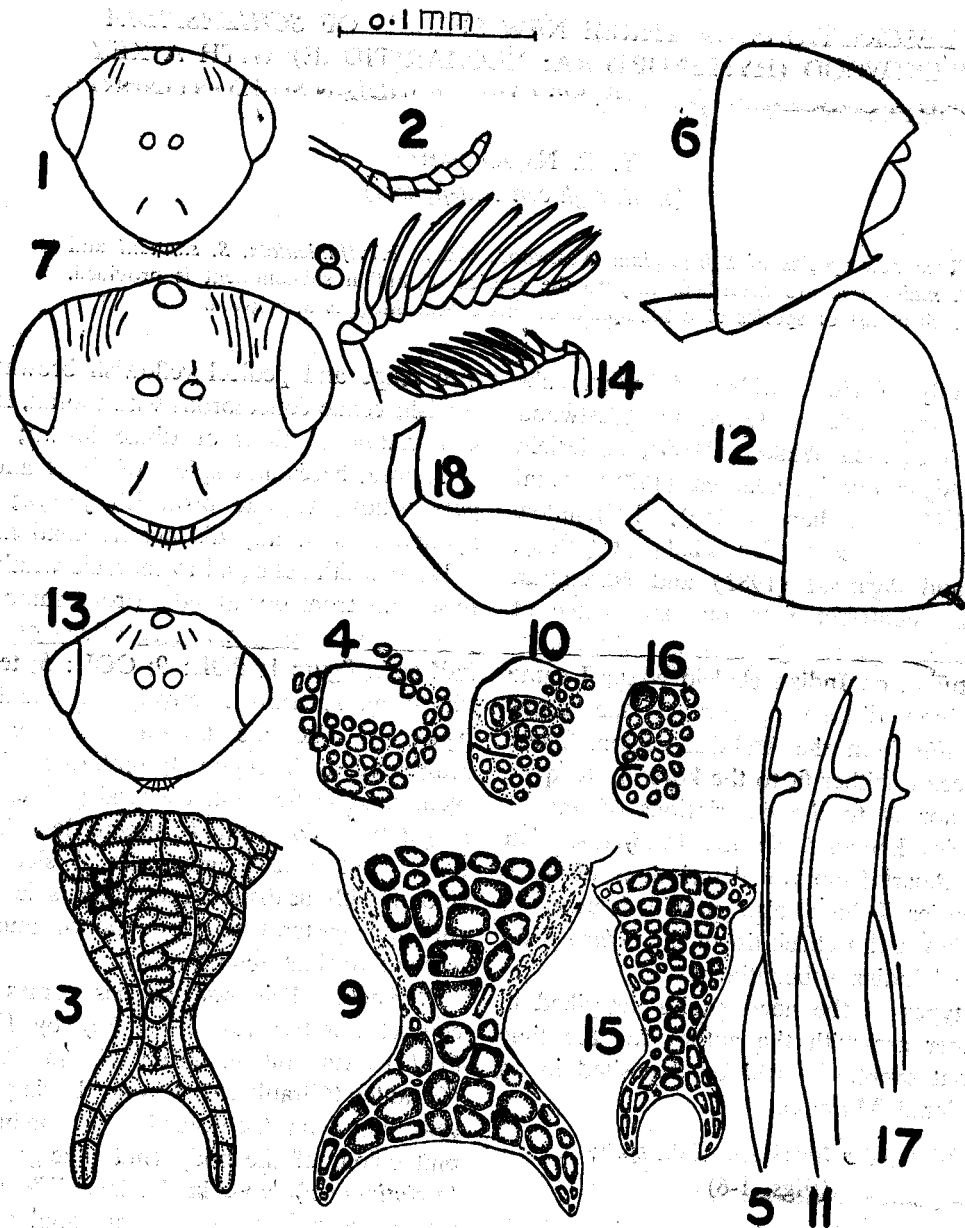
with scape and pedicel yellowish brown; eyes greyish; coxae concolorous with thorax, femora and middle portions of tibiae brown; apices of femora, bases and apices of tibiae and tarsi pale yellow; tegulae brownish yellow; wings hyaline without any distinct infumation.

Head width subequal to thoracic width when measured from dorsal side. Frons smooth and polished with very weak striations on dorsal half as in figure 1; POL: 9; OOL: 5; tentorial pits deep. Antenna relatively short and as in figure 2. Thoracic notum characteristically sculptured as in figure 3; sculpture of mesopleuron as in figure 4. Gasteral petiole a trifle longer than hind coxa (distinctly less than 1.5 times hind coxa length), dorsal side almost smooth without distinct sculptures, sides weakly carinate; gasteral tergites smooth and shiny without distinct sculptures.

Remarks: This new species comes to the couplet number 10 of the key by Hedqvist (1978) but differs from *S. fasciatipennis* (Girault) (Girault 1928) in not having a transverse band on the forewing, in having different colour of the body (not blue-green as in *fasciatipennis*) and in having differences in the shape and size of the antennal segments. It differs from the various species of Indian subcontinent as mentioned in the key below.

Holotype ♀. INDIA: Kerala, S. Malabar, Chettiyarmad, 15.i.1984, T. C. Narendran.

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Figs. 1-6. *Schizaspidia brevifuniculata* sp. nov. ♀

1. Head, front view; 2. Antenna; 3. Scutellum; 4. Mesopleuron; 5. Forewing; 6. Gaster.

Figs. 7-12. *Schizaspidia sitarami* sp. nov. ♂

7. Head, front view; 8. Antenna; 9. Scutellum; 10. Mesopleuron; 11. Forewing; 12. Gaster.

Figs. 13-18. *Schizaspidia malabarica* sp. nov. ♂

13. Head, front view; 14. Antenna; 15. Scutellum; 16. Mesopleuron; 17. Forewing; 18. Gaster.

Schizaspidia sitarami sp. nov.

(Figs. 7-12)

Male: Length: 3.69 mm. Head and thorax greenish black; antennae blackish brown; coxae and gasteral petiole concolorous with thorax, rest of legs and gaster brownish yellow. Wings hyaline without infuscation, veins brownish.

Head width a little less than the maximum thoracic width when measured from dorsal side. Frons smooth and polished with somewhat strong striations on upper part; POL: 10; OOL: 8; tentorial pits deep. Antennae as in figure 8; thoracic sculpture of scutellum as in figure 9; mesopleura as in figure 10. Gasteral petiole a little over two times the length of hind coxa, dorsal and lateral sides distinctly punctate, sides ecarinate, ventral surface with irregular weak carinae; gasteral tergites smooth and shiny.

Remarks: This new species comes near *S. batuensis* Hedqvist (Hedqvist 1978) but differs from it in having much broader scutellar forks, in having different scutellar sculptures, and in having a number of other minor characters. From the various species of Indian Subcontinent it can be easily separated by the characters mentioned in the key of this paper.

Holotype: ♂. INDIA: Kerala, Calicut University Campus, 1.iv.1985, Narendran *et al.*

Schizaspidia malabarica sp. nov.

(Figs. 13-18)

Male: Length 2.27 mm. Head and body generally blackish green; Antennae pale brown; eyes blackish yellow; coxae blackish brown, remaining parts of legs brownish yellow; petiole blackish green; gaster yellowish brown, wings hyaline without infuscation anywhere, veins pale brown.

Head from above width 35; thorax width 35 (measured from dorsal side at its maximum

width); frons smooth and polished on lower half, upper half rugulose and very sparsely striate; tentorial pits deep. Sculpture on the thoracic notum as in figure 15; mesopleuron as in figure 16; gasteral petiole a trifle longer than twice the length of hind coxa, dorsal side with distinct reticulate punctures, ventral side shallowly grooved longitudinally; gasteral tergites smooth and shiny.

Remarks: This new species comes to the couplet number 11 of the key of Hedqvist (1978) but differs from the Philippine species *S. batuensis* Hedqvist in having entirely different type of scutellum; in having different type of antennae, in having different coloration of head and body and in several other features. It differs from all the other species of Indian subcontinent by the characters mentioned in the key below.

Holotype ♂. INDIA: Kerala, S. Malabar, Ramanattukara, nr. Calicut, 1.v.1983, T. C. Narendran; *Paratype*: ♂, Kerala, S. Malabar, Calicut University, 1.iv.1985, T. C. Narendran *et al.*

KEY TO SPECIES OF *Schizaspidia* WESTWOOD OF INDIAN SUBCONTINENT

- (Males or Females of some species are unknown)
1. Antennae with very long branches (Fig. 14) .. 2 (Males)
 - = Antennae without long branches (Fig. 2) .. 9 (Females)
 2. First flagellar segment without a tooth or branch .. 3
 - = First flagellar segment with a tooth or branch .. 4
 3. Mesopleuron with distinct punctures and pits and without a distinct smooth area; scutellar arms short (similar to Fig. 15 or shorter) .. *S. convergens* (Walker)
 - = Mesopleuron smooth at extreme anterodorsal angle followed by obscure transverse striations; scutellar arms long and prominent (Fig. 24G of Mani *et al.* 1974) .. *S. sabariensis* (Mani & Dubey)

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4. Flagellar segments with cylindrical branches; head and body dark metallic green in colour *S. travancorensis* (Mani)
 = Flagellar segments with flattened branches 5
5. Mesopleuron rugoso-punctate without a smooth area 7
 = Mesopleuron anteriorly with a more or less smooth area as in figures 4 & 10 6
6. Scutellum with very large and broad forks (Fig. 9) *S. sitarami* sp. nov.
 = Scutellum with smaller and narrower forks *S. andamanensis* (Mani)
7. Scutellum with short & broad apical branches (as in Fig. 24 of Hedqvist, 1978) *S. frugifera* Westwood
 = Scutellum not as above 8
8. Gaster subglobose (Fig. 26G of Mani *et al.* 1974); Petiole smooth without any striae; forewing with a diffuse faint infumation *S. coromandelica* (Mani & Dubey)
 = Gaster elongate as in figure 18; petiole not smooth but distinctly rugoso-punctate; forewing without infumation *S. malabarica* sp. nov.
9. Scutellar arms very short (as in Fig. 12 of Hedqvist 1978) with longitudinal striations; forewing with a transverse band from stigmal vein, extending towards posterior wing margin *S. frugifera* Westwood
 = Scutellum not as above 10
10. Scutellum with longitudinal carinae connected by transverse carinae 11
 = Scutellum with large pits, umbilicately punctate (as in Fig. 25F of Mani *et al.* 1974); upper part of frons with strong striations; forewing with a distinct conspicuous infumation around the stigmal vein *S. sabariensis* (Mani & Dubey)
11. Scutellum with more or less longitudinal carinae with regular transverse wrinkles (as in Fig. 15 of Hedqvist 1978); gaster green; Head & body metallic yellowish green *S. convergens* (Walker)

= Scutellum with more or less irregular longitudinal carinae with irregular wrinkles (Fig. 3); gaster ferruginous brown; head & body blackish metallic green *S. brevifuniculata* sp. nov.

CHECK-LIST OF *Schizaspidia* SPECIES OF INDIAN SUBCONTINENT
 (Invalid names are in italics)

- ANDAMANENSIS (Mani, 1947) (*Kapaloides*) India: Andaman Islands.
 BREVIFUNICULATA sp. nov.; India: Kerala.
 CONVERGENS (Walker, 1860) (*Eucharis*) Sri Lanka (= Ceylon).
 = *ceylonica* (Enderlein, 1912) (*Psygmatochera*) Sri Lanka (= Ceylon)
 COROMANDELICA (Mani & Dubey, 1974) (*Kapaloides*) India: Coromandel Coast, (Tamil Nadu).
 FRUGIFERA Westwood, 1835, India: Bengal.
 MALABARICA sp. nov. India: Kerala.
 SABARIENSIS (Mani & Dubey, 1974) (*Kapaloides*) India: Kerala, cardamom hills.
 SITARAMI sp. nov. India: Kerala.
 TRAVANCORENSIS (Mani, 1947) (*Kapaloides*) India: Kerala, Travancore.

The species *atkinsoni* (Mani & Dubey, 1974), *indica* (Mani, 1935), *manipurensis* (Clausen, 1928), *mysorensis* (Mani & Dubey, 1974) and *tanjorensis* (Mani & Dubey, 1974) which are all described originally under *Schizaspidia* Westwood actually belong to another genus viz. *Stibula* Spinola.

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