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**NEW HOST AND DISTRIBUTIONAL RECORDS FOR
SOLENUMA ANIA (WALKER) FROM INDIA AND
REDESCRIPTION OF *SOLENUMA FERETRIUS* (WALKER)
(HYMENOPTERA : CHALCIDOIDEA : PTEROMALIDAE)**

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INTRODUCTION

Solenura Westwood is an old world pteromalid genus belonging to the tribe Lyciscini, of subfamily Cleonyminae. It is represented by five species distributed in the Afrotropical, Oriental and Palearctic regions of the world (Fig. 3). Among the other Lyciscini *Solenura* and *Grooca* Sureshan and Narendran form a monophyletic group (see Gibson, 2003, for the phylogeny of these genera). Host records are available only for the species *S. ania* (Walker), which was reared from *Chrysobothris succedanea* Sanders (Buprestidae) and *Trichoferus campestris* (Faldermann) (Cerambycidae) in China, though the other species of *Solenura* may also prove to be parasitoids of wood boring beetle larvae.

During the faunal exploration surveys conducted in the Lonar Crater Wild Life Sanctuary of Buldhana district, Maharashtra (19°59' N 76°34' E), the author could rear one specimen of *Solenura ania* (Walker) from a piece of dead wood of *Ficus* sp. heavily infested with wood boring beetles. Two specimens of the Cerambycid beetle *Olenocamptus bilobus* Fabricius were also reared from the same wood. Mani and Kaul (1973) reported *S. telescopica* Westwood (later synonymised with *S. ania* by Boucek *et al.*, 1979) from Dehradun (now in Uttaranchal) and Assam without mentioning the host, and it was the only record of this species from India. The present record of *S. ania* represents further extension of the distribution of the species to the deccan peninsula. Though the present specimen of *S. ania* is not having any direct host data, it is assumed that the species parasitise the larvae of the beetle *Olenocamptus bilobus*, which attacked the wood.

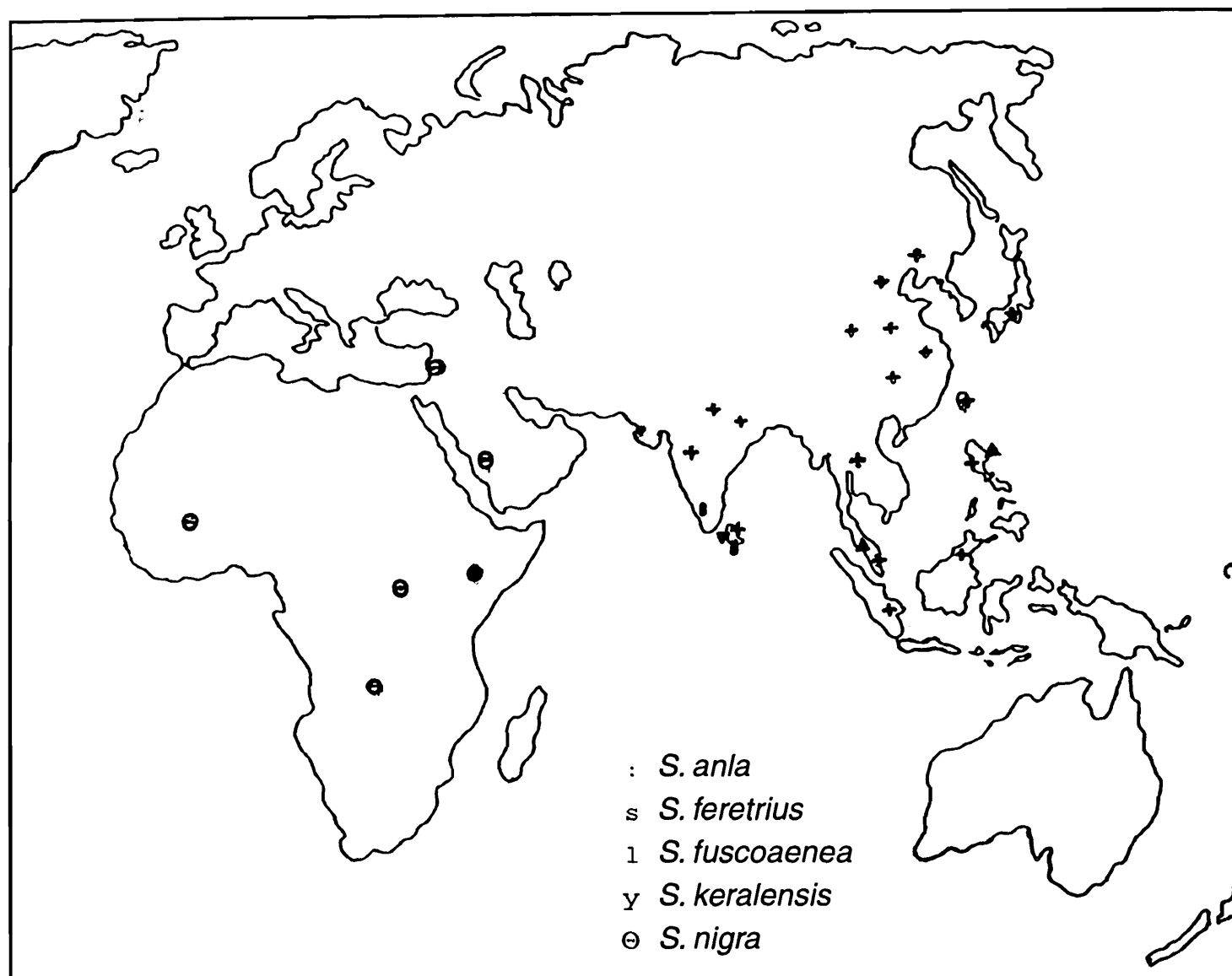


Fig. 3. : Map showing the world distribution of *Solenura* species.

The grubs of *Olenocamptus bilobus* normally infest decaying wood of *Ficus* sp. but also attack living branches of other trees and are known pest of cultivated fig. The beetles are found in Dehra Dun and southwards throughout the Gangetic plains (Stebbing, 1914). Thus collection of *S. ania* by Mani and Kaul (1973) also might have been from *Olenocamptus bilobus* as its host fig. is common there.

In connection with the studies on the *Solenura* species from India I borrowed and examined the lectotype of *S. feretrius* (Walker) from the BMNH. *S. feretrius* is a rare species occurring only in the Philippines, Malaysia and Sri Lanka. Since the description given by Walker (1846) is inadequate, a redescription of *S. feretrius* is provided here based on the lectotype specimen.

Following abbreviations are used in the text : BMNH – The Natural History Museum, London, U.K.; F1-F2 – Funicular segments 1 to 2, T1-T6 – Gastral tergites 1-6; OD-Ocellar diameter; OOL-Ocellocular distance; POL-Postocellar distance; SMV-Submarginal vein; MV-Marginal vein; PMV-Post marginal vein; STV-Stigmal vein.

Solenura ania (Walker)

(Fig. 1)

1846. *Epistenia ania* Walker, : 93-94, Female, Philippines (Lectotype Female, designated by Boucek in Boucek *et al.*, 1979; BMNH)
1961. *Solenura ania* (Walker), *Hedqvist.* : 98. (For further synonymy, see Boucek *et al.*, 1979 and Gibson, 2003).

Diagnosis : (based on the Indian specimen) Length 8.7 mm. Body (including antennae) black with greenish blue luster, punctate reticulate; scape of antenna reddish brown; tip of ovipositor sheath brownish yellow; interantennal ridge with distinct notch at base of dorsal process; antenna with pedicel 1.5x as long as F1 and a little shorter than club, which is as long as 2.5 preceding segments combined. Dorsomedian carina on pronotum distinct; dorsellum finely reticulate, setose. Propodeum (Fig. 1) with posterior margin almost straight; median carina distinct. Wings subhyaline, length 2.9x width; relative lengths of SMV 35, MV 18, PMV 10.5, STV 3.5. Gaster length 1.8x as long as head plus thorax (length up to tip of syntergum); petiole in the form of a fine thin strip with very short carinulae anteriorly; exposed part of T2 half as long as posterior smooth strip of T1; dorsomedian carina of T4 reaching 4/5 length from the posterior end; cerci small; length of gastral tail 6.42x width of syntergum at level of circus; exposed part of ovipositor sheath 0.4x postcercal length; precercal length 2.1x postcercal length; ovipositor not exerted.

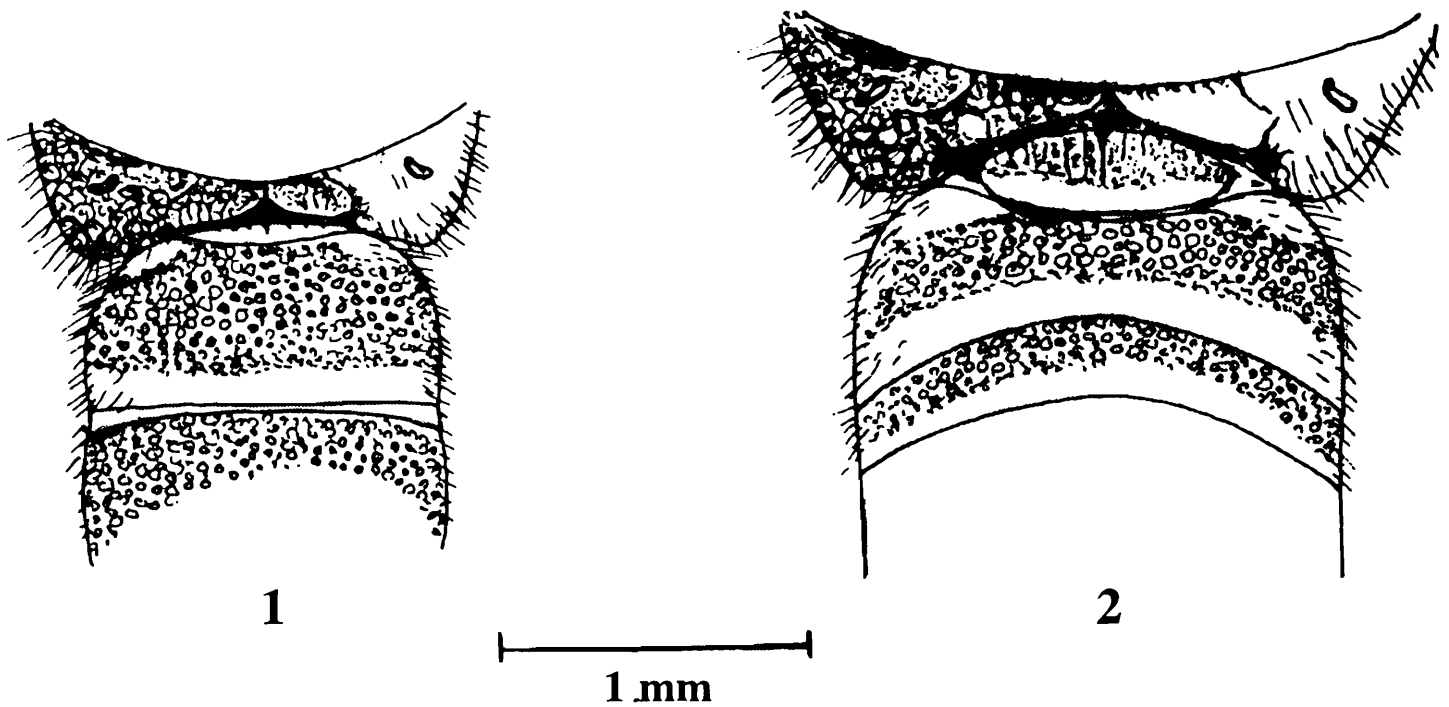
Material examined : 1 Female, INDIA : Maharashtra : Buldhana district, Lonar Crater Wildlife Sanctuary (southern part of crater basin) (19°59"N 76°34"E), coll. P. M. Sureshan, 20.xi.2003, ex. Dead wood of *Ficus* sp. infested with wood boring beetles (In ZSI, WRS, Pune).

Solenura feretrius (Walker)

(Fig. 2)

1846. *Epistenia feretrius* Walker, : 92-93, Female, Philippines (Lectotype Female, designated by Boucek in Boucek *et al.*, 1979; BMNH)
1961. *Solenura feretrius* (Walker), *Hedqvist.* : 98.

Lectotype : Female : Length 9.8 mm (up to tip of syntergum). Colour black with slight metallic luster, gastral tail brownish; antennae with scape yellowish brown on basal half, upper half and pedicel dark brown, F1 and F2 brownish black (right antenna except scape and pedicel and left antenna except scape, pedicel anelli F1 and F2 missing); eyes chocolate brown; mandibles brown with distal half black; tegulae dark brown, wings with slight brownish tinge, veins brown; coxae black, rest of legs reddish brown with tarsi paler, (one mid leg (right) except coxae and trochanter, hind leg (right) except coxae, trochanter, femur and tibia and hind leg (left) except coxae, trochanter missing).



Figs. 1-2. : Propodeum and basal part of gaster, dorsal view;
 1. *Solenura ania* (Walker), 2. *Solenura feretrius* (Walker).

Head : Distinctly punctate reticulate, meshes smaller on vertex and gena with dense white pubescence; clypeal area finely reticulate striate with few deep punctures in the lower half, anterior margin almost straight; both mandibles with three teeth; inter antennal area with median ridge, dorsally with acutely angled process; scrobal depression extending to less than 1 OD of anterior ocellus; POL 1.75x OOL; occiput without carina; malar space 0.4x eye length (in profile), malar grooves distinct; eyes densely microsetose, length 1.44x width; inner orbits distinctly divergent ventrally and not strongly divergent dorsally, in dorsal view orbits strongly divergent behind level of posterior ocelli. Head in dorsal view 2.3x as broad as long; in front view 1.4x as broad as height. Antennae inserted slightly below level of lower orbits, dorsal margin of toruli at level of margin of eyes, scape 0.7x as long as eye, expanded towards tip, with a triangular depression ventrally on the upper part reaching up to 1/3 length; pedicel little longer than F1; F1 and F2 with numerous small sensillae arranged in four rows; F1 as long as F2, anelli 1.8x longer than wide.

Thorax : 1.8x as long as broad, punctate reticulate with moderately dense pubescence. Pronotum more finely sculptured than mesoscutum and scutellum with neck abruptly inclined, median line on neck not very distinct, collar not carinate. Mesoscutum 2.3x as broad as long; notauli in the form of shallow furrows of aligned reticulations, reaching upto trans scutal articulation. Scutellum a little longer than wide; axillula finely sculptured. Dorsellum very finely reticulate, bare, with a very narrow crenulate margin dorsally. Prepectus triangular with posteroventral margin slightly incurved, moderately reticulate. Mesepimeron punctate except for the smooth and shiny

transepimeral line with upper mesepimeron extensively setose and lower mesepimeron setose posteriorly; mesepisternum distinctly punctate reticulate. Metapleuron largely punctate reticulate and setose. Propodeum (Fig. 2) with median area very narrow due to the highly inwardly projecting posterior margin; plical region crenulate punctate; callus coarsely punctate reticulate and densely setose, no distinct median carina but median area with an irregular median ridge; spiracles reniform. Forewing uniformly setose, 2.7x as long as broad. Relative lengths of SMV 40, MV 18, PMV 11.5, STV 4. Coxae reticulate with meshes small; hind coxae carinate dorsally with outer concave surface bare and densely setose ventrolaterally, 2x as long as broad; hind femora slightly enlarged, hind tibia with two unequal spurs; length of long hind tibial spur a little shorter than apical width of tibia.

Gaster : Broadly attached to thorax, petiole broad and transverse with anterior half finely granulate with a strong median carina reaching upto middle and with a few short carinulae on either side in the anterior half, posterior half smooth and shiny; T4 posteriorly and T5 and T6 entirely carinate mediolongitudinally; T1 reticulate punctate except on posterior half; exposed part of T2 a little shorter than median length of T1, punctate basally and smooth apically, T3 a little longer than T1 medially, extensively punctate except for a posterior narrow smooth band; T4 completely punctate except for a smooth line posteriorly, medially slightly longer than 2x T3; T5 medially a little shorter than T4, finely punctate reticulate; in lateral view length of gastral tail 5.33x height of syntergum at level of circus (measured from spiracle to posterior margin of syntergum) syntergum with precercal length 0.7 lx post cercal length (measured from hind margin of T6 to middle of circus) exposed part of ovipositor sheath half as long as postocercal length; ovipositor distinctly exerted out; hypopygium reaching up to half length of T4; T6 and syntergum finely reticulate and extensively setose; T5 extensively setose; T1-T4 extensively setose laterally; length of gaster (measured from base of petiole to tip of syntergum) 1.51x as long as head plus thorax.

Material examined : Lectotype Female (designated by Boucek), Philippine islands, B. M. type Hym. 5.901. (in BMNH).

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