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# New Species of Sycophila Walker from Iraq (Hymenoptera, Eurytomidae)

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Abstract— A study of the Eurytomid collection of Iraq, resulted in undescribed species of the genus. Sycophila WALKER (= Eudecatoma ASHMEAD, see BOUČEK 1974): S. emarginata sp. n. and S. gilva sp. n. With 2 figures.

This is the second part of my work on Iraqi Chalcidoidea which has been carried out in the Hungarian Natural History Museum, Budapest. I wish to thank the following who have helped me in various ways: The Hungarian Institute for Cultural Relations, for granting me a three-month visit to Hungary which enabled me to study the types of Chalcidoidea deposited in the Hungarian Natural History Museum, the Baghdad University for giving me the opportunity to accomplish this study in Hungary and Dr. Z. KASZAB (Budapest) for allowing me to carry out this research at the Hungarian Natural History Museum.

#### Sycophila emarginata sp. n. (Fig. 1)

Predominantly black species with variable ochreous markings. Head varying from black to almost entirely ochreous; antennae brownish scape yellow; thorax with yellow shoulders. Legs variably black marked, femora and tibiae apically and basally yellow; tarsi yellow; gaster black; submarginal band of fore wing well developed, lunulate, spreading on disc.

F e m a le — Length 1.7—4.0 mm. Head in front view transverse, about 1.3 times as wide as high and about as wide as mesoscutum, with umbilicate-punctate surface sculpture; less domed between eyes; height of vertex above eyes to height of eye as 1:8; head from above 1.8 times as wide as long; POL: OOL as 3:1; length of temple to length of eye as 1:4; cheeks rounded; face with strong striae radiating from clypeus; Eyes nearly rounded, prominent, twice as long as wide. Malar space to height of eye as 0.8:1. Antennal scrobes with lateral margins converging towards median ocellus; antennae inserted at level of ventral margins of compound eyes; clypeus striated, with ventral margin deeply incised and furrowed medially, sides produced into blunt teeth. Antennae with scape more than 5 times as long as maximum width, hardly reaching median ocellus, distinctly longer than three following segments combined; pedicel twice as long as wide; first funicle segment distinctly shorter than pedicel and 1.5 times as long as wide; fourth and fifth segment slightly longer than second; fourth and fifth segment slightly longer than second; fourth and fifth segment sequal, quadrate, slightly shorter than third; club twice as long as wide; narrowed apically.

Thorax (including propodeum) almost 1.6 times as long as wide; pronotum 1.5 times wider than long; strongly umbilicate-punctate. Propodeum slightly sloping, with rugulose surface sculpture, a distinct median furrow present, limited anteriorly by raised angulate carina, latter ending in a dentiform projection, pointing towards metascutum. Hind tibia on dorsal surface bearing a row of 10 or more short spines, scarcely differentiating from normal hairs. Fore wing (Fig. 1) with discal cilia pale; submarginal band well developed, lunulate spreading on disc; basal cell usually bare; marginal vein 3 times as long as wide, and 1.5 times as long as stigmal vein; postmarginal vein slightly longer than stigmal vein.

Gaster semicircular, strongly compressed laterally, distinctly longer than thorax and head combined; petiole nearly quadrate, shorter than hind coxa; third gastral tergite (in dorsal view) not less than 3 times as long as second tergite; fourth tergite usually longer than third, its dorso-posterior edge strongly emarginated; fifth tergite shorter than fourth, with one row of hairs on each side; sixth tergite short, convex; seventh tergiteelongated and directed obliquely upward; ovipositor sheaths, -cylindrical, directed obliquely upward in relation to longitudinal axis of gaster, longer than preceding segment (in dorsal view); second-seventh tergites finely alutaceous.

M a le — As female, but usually smaller, length: 2.6–3.3 mm.; antennae longer; first funicle segment as long as pedicel and twice as long as wide; remaining three segments elongated, subequal and about 1.5 times as long as wide; club 1.6 times as long as wide, narrowed apically. Gaster with petiole 1.6 times as long as wide and as long as hind coxa. For wing with discal cilia darker and longer.

H o s t : All the specimens have been reared by me from cynipid galls of an undescribed species belonging to the genus *Isocolus* FOERSTER in the flower bracts of safflower *Carthamus oxyacanthus* (Compositae) in Iraq.

Material examined: Iraq: Baghdad, Abu-Ghraib,  $1 \bigcirc$  (paratype) emerged on 7. VI. 1977;  $2 \bigcirc \bigcirc$ ,  $1_{\heartsuit}^{\checkmark}$  (paratype) em. 5. VI. 1978;  $4 \bigcirc \bigcirc$ ,  $7_{\heartsuit}^{\checkmark} \oslash^{\checkmark}$  (paratypes) em. 6. VI. 1978. Waziriya,  $9 \bigcirc \bigcirc$  (1  $\bigcirc$  holotype and  $8 \bigcirc$  paratypes),  $1_{\heartsuit}^{\checkmark}$  (allotype) em. April, 1978, M. S. A. ABDUL-RASSOUL.

The female holotype and the male allotype and 6 paratypes  $(4 \circ (3 + 2 \circ ))$  are deposited in the Hungarian Natural History Museum, Budapest. 3 Paratypes  $(2 \circ (2 \circ ) + 1 \circ ))$  are in the British Museum (Natural History), London and 14 paratypes  $(9 \circ (2 + 5 \circ ))$  in the Natural History Research Centre, Baghdad, Iraq.

Sycophila emarginata sp. n. is closely allied to S. submutica (THOMSON). Unfortunately, I was unable to see specimens of S. submutica from the Thomson's collection, but examined a series of specimens from the Erdős' and the Claridge's collections, which had been identified as S. submutica (THOMSON) and found that there are differences between the two collections. The S. submutica in the Erdős' collection are rather large; pronotum much transverse (twice wider than long); gaster in female strongly compressed laterally, fourth gastral tergite with dorso-posterior edge strongly emarginated; length of temple is shorter. I have compared S. emarginata sp. n. with these specimens of S. submutica and found that S. emarginata differs from the former by having a less transverse pronotum (1.5 times wider than long); length of temple longer; marginal vein shorter (3 times longer than wide); female wings with discal cilia hyaline; and from the latter by having marginal vein shorter (15:5) and 1.5 times as long as stigmal vein; female wings with discal cilia (except the submarginal band) hyaline; gaster in female strongly compressed laterally, fourth gastral tergite with dorso-posterior margin strongly emarginated; club of male antenna shorter (2.6 times as long as wide); gastral petiole in male shorter (1.6 times as long as wide). However, I have compared my new species with specimens of S. submutica sensu CLARIDGE (1959) which seems to fit the description given by THOMSON in 1876.



Figs. 1 — 2. Fore wing:  $1 = Sycophila \ emarginata \ sp. n., 2 = S. \ gilva \ sp. n.$ 

#### Sycophila gilva sp. n. (Fig. 2)

Predominantly yellow. Head pale yellow with small black markings on vertex; antenna with scape pale; pedicel yellow; flagellum dark yellow; pronotum, mesoscutum and scutellum pale yellow; mesosternum, propodeum, gaster and legs yellow with dark markings; submarginal band of fore wing very small and brown; venation pale.

F e m a l e — Length 2.0–2.2 mm. Head in front view, slightly transverse, about 1.2 times as wide as high, distinctly wider than mesoscutum; shallowly umblicate-punctate; head from above 1.7 times as wide as long; gibbous between eyes; POL:OOL approximately as 3:1; length of temple to length of eye as 1:5; cheeks slightly angulate; face weakly striated. Eyes oval, less prominent, 2.3 times as long as wide. Malar space to height of eye as 0.6:1. Antennal scrobes with lateral margins converging towards median ocellus; antennae inserted at level of ventral margins of compound eyes; clypeus smooth, with ventral margin deeply incised and furrowed medially, sides produced into blunt teeth. Antennae with scape slightly more than 5 times as long as maximum width, reaching median ocellus, distinctly longer than three following segments combined; pedicel twice as long as wide; funcile segments elongated; first funcile segment about twice as long as wide, slightly shorter than pedicel; remaining four segment slightly wider than third; club more than 2.5 times longer than basal width, narrowed apically, distinctly longer than two preceding funcile segments combined.

Thorax (including propodeum) 1.7 times as long as wide; pronotum 1.5 times as wide as long; shallowly umbilicate-punctate. Propodeum slightly sloping, with rugulose surface sculpture and distinct median furrow limited anteriorly by raised angulate carina, latter ending in a dentiform projection, pointing towards metascutellum. Hind tibia on dorsal surface bearing a row of 6 long, stout spines, as long as or very slightly shorter than maximum width of hind tibia. Fore wing (Fig. 2) with marginal vein short, less than three times as long as wide, longer than stigmal vein; postmarginal vein not thickened, as long as stigmal vein; discal cilia in both wings dark.

Gaster semicircular, strongly compressed laterally, slightly shorter than head and thorax combined; third gastral tergite (in dorsal view) approximately 3 times as long as second tergite and somewhat equal in length with fourth tergite; second-fifth tergites smooth, shining; sixth tergite finely alutaceous, with longitudinal keel-like ridge on dorsal surface; petiole distinctly shorter than hind coxa; ovipositor sheaths directed postero-dorsally.

M a le — As female, but usually smaller, length: 1.3–1.8mm.; more black markings on body; antennae longer; first funicle segment approximately as long as pedicel, and twice as long as wide; remaining three segments subequal and about 1.6 times as long as wide; club more than 3 times as long as wide, narrowed apically. Gaster with petiole about 3 times as long as wide.

H o s t : All the specimens have been reared by me from Cynipid galls (undetermined species) on leaves of a *Quercus* sp. in Iraq.

M a t e r i a 1 e x a m i n e d : Iraq: Dohuk Sir sank,  $2 \bigcirc \bigcirc$  (paratypes) emerged on 15. X 1978,  $1 \bigcirc$  (paratype) em. 18. X. 1978,  $(1 \bigcirc$  holotype and  $2 \bigcirc \bigcirc$  paratypes) $3 \bigcirc \bigcirc$  em. 22. X. 1978,  $2 \checkmark \circ \checkmark$  ( $1 \circ \checkmark$  allotype and  $1 \circ \checkmark$  paratype) em. 14. X. 1978,  $1 \circ \checkmark$  (paratype) em. 16. X. 1978,  $1 \circ \checkmark$  (paratype) em. 25. X. 1978,  $2 \circ \checkmark \circ \checkmark$  (paratypes) em. 26. X. 1978, and  $1 \circ \checkmark$  (paratype) em. 2. I. 1979, M. S. ABDUL-RASSOUL.

The female holotype, the male allotype and 2 paratypes  $(1 \bigcirc +1 \bigcirc ?)$  are deposited in the Hungarian Natural History Museum, Budapest. Two paratypes  $(1 \bigcirc +1 \bigcirc ?)$  are in the British Museum (Natural History), London, and the Natural History Research Centre, Baghdad, Iraq.

Sycophila gilva sp. n. is closely allied to S. mellea (WALKER) and S. fasciata (THOMSON) but differs from both by its not so thickened postmarginal vein, the length of which is as long as or slightly longer than stigmal vein; thorax shorter and stouter; female gaster strongly compressed laterally; gastral petiole distinctly shorter than hind coxa in female and 3 times as long as wide in male. Furthermore, it may be separated from S. mellea by its smaller submarginal band and from S. fasciata by its smaller body; different colour; much gibbous between eyes and the longer, stout spines on hind tibia.

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