A NEW SPHEGINA FROM NEPAL (DIPTERA: SYRPHIDAE)¹

By F. CHRISTIAN THOMPSON²

A unique new *Sphegina* is described from Nepal. This species is the first syrphid known to the author to have specialized postabdominal structures other than those of the genitalia on the tenth segment. The type is preserved in my collection.

Sphegina (Asiosphegina) hansoni, n. sp.

Head black, antennae orange. Thorax black, front four legs yellow, hind femora mostly black, hind tibiae brown with an apical yellow ring. Abdomen metallic bluish black except reddish basal third of third segment, second segment cylindrical and five times as long as wide. Male with fourth sternite and postabdomen highly specialized.

Male.—Head: completely black except orange frontal lunule and epistomal tip, sparsely white pollinose. Face deeply concave, epistoma projecting forward beyond the antennal base. Antennae completely orange with orange pile. Third antennal segment longer than the first and second segments together, flat on the dorsal surface and greatly convex on the ventral surface; thus the antenna fits neatly into the facial concavity. Arista orange, pubescent and about one and one-fourth times as long as the antenna.

Thorax: completely black except for yellow postalar calli and prosternum, grayish pollinose with very short and sparse white pile. Scutellum black, with short sparse white pile and with two thin crossed black bristles on the apex. Legs: Front four legs yellow except brown apical two tarsal segments. Hind legs with trochanter and basal one-fourth of femur yellow, with coxa and remainder of femur black, with tibia brown except for the base and a ring on the apical one-fourth yellow and with tarsus brown. Hind femur armed with two ventral rows of short black spines and a dorsal subapical black bristle. Wings: hyaline except all crossveins and tip of marginal cell clouded with brown. Halters and Squamae: orange.

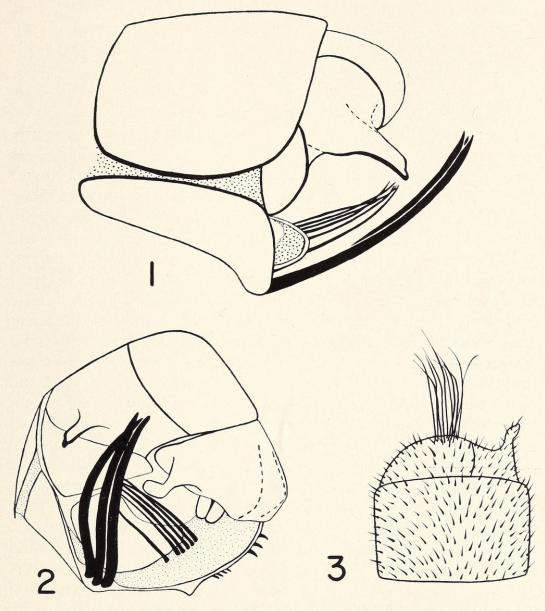
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Abdomen: Dorsum metallic bluish black except reddish orange basal third of the third segment, with long golden pile on the first and second segments and shorter golden pile on the remaining seg-

THOMPSON

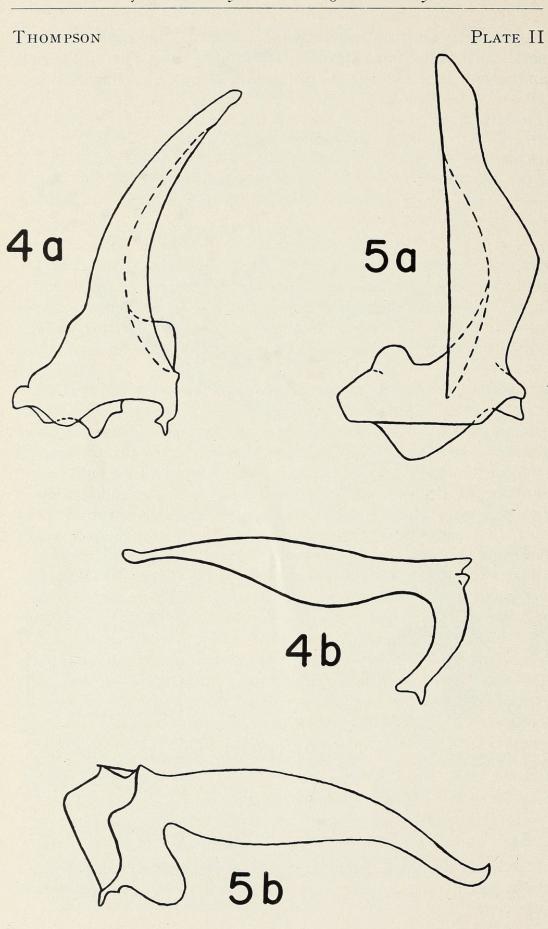
PLATE I



Tip of the male abdomen of *Sphegina hansoni*, n. sp. Fig. 1, Lateral view, left side with the tenth segment removed. Fig. 2, Caudal view. Fig. 3, Dorsal view.

EXPLANATION OF PLATE II

Styles of the male genitalia of *Sphegina hansoni*, n. sp. Fig. 4, Right style. Fig. 5, Left style. a, Dorsal view. b. Lateral outside view.



44 Bulletin of the Brooklyn Entomological Society Vols. LIX & LX

First segment with three black bristles on each side and ments. with the lateral margins produced into large basal spurs. Venter black except orange third sternite, with golden pile. Third sternite reduced to a small oval plate about the size of the third antennal segment. Fourth sternite greatly produced ventrally and heavily The armature consists of : three macrobristles whose bases armed. are inserted medially on the posterior edge at the ventral-most point of the sternite; a small anteriorly directed tooth to the right of the macrobristles on the posterior edge; two sets of minute spines to the right of the tooth and also on the posterior edge; a row of six bristles dorsal to the tooth and inserted on the membranous area at the end of the sternite; and a sclerotized bursiform structure dorsal to the macrobristles. Postabdomen: black with golden pile. Eighth urite with a large pencil-like posteriorly projecting process. Ninth urite with a tuft of long golden pile posteriorly directed. Tenth urite with a large L-shaped process lateral to the cerci. Genitalia asymentric.

Holotype male.—NEPAL, Parewavir, 570 meters. 26 March 1957 (E. I. Coher and G. P. Joshi).

Discussion: This species because of the unusual structures on the postabdomen does not appear to be closely related to any known species. In appearance it approaches bispinosa Brunetti but differs on a number of points such as coloration of antennae and abdomen and the armature of the fourth sternite. Hansoni will run to nitidifrons Shtackelberg in Shtackelberg's (1956) key to the palearctic species of sphegina, and thus hansoni: appears to be of palearctic origin. It can be separated from the latter species on the basis of its unique structures on the postabdomen, fourth sternite armature and pollinose front. The nomenclature used in describing the postabdomen is that of Metcalf (1921).

I take great pleasure in naming this unique syrphid after a rather unique person, Dr. John F. Hanson, who not only has been of invaluable aid to me in my studies but also has been a constant source of intellectual enlightenment.

I would like to thank Drs. R. L. Coe and J. R. Vockeroth for their valuable comments on this insect.

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