# A NEW SPECIES OF *SIMILIPEPSIS* AND TAXONOMIC PLACEMENT OF THE GENUS (SESIIDAE)

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**ABSTRACT.** A new species of the wasp-like sesiid of the genus *Similipepsis* is described, and the taxonomic placement of this genus into the subfamily Tinthiinae is proposed.

The Section of Entomology of the Carnegie Museum of Natural History (CMNH) maintains a large collection of insects that has been vastly underutilized by systematists. The collection is rich in all insect groups but butterflies and moths are particularly abundant. The diversity of taxa is particularly evident among the collection of unsorted moths in which I found a sesiid specimen with remarkable ichneumonoid resemblance.

Further study of this wasp-like moth revealed that it belongs in the genus *Similipepsis*, a genus described by LeCerf (1911) and heretofore taxonomically unaligned in the Sesiidae hierarchy. Heppner and Duckworth (1981:44) in their recent work made no study of this genus. They listed *Similipepsis* among other "unassigned" sesiid genera, leaving this problem for further research.

My studies of the genus revealed that *Similipepsis* species are characterized by having the abdomen constricted to a slender pedicel at the base, the proboscis normal, labial palpus oblique with the second joint of long hairs, forewing veins  $R_4$  and  $R_5$  stalked and  $M_1$  missing, hindwing with vein  $Cu_1$  from just before angle of cell and widely separated from  $Cu_2$ , hind leg wasp-like. The genus is further recognizable by the absence of the scale tuft on the tip of the antennae. According to recent classification (Naumann, 1971; Duckworth & Eichlin, 1977), these two characteristics suggest that *Similipepsis* has affinities and should be placed with genera of the subfamily Tinthiinae.

To date, there are only four known species of *Similipepsis*, *S. aurea* Gaede, *S. lasiocera* Hampson, *S. typica* Strand and *S. violaceus* Le-Cerf. The genus is paleotropical in origin and is confined geographically to the Ethiopian and Oriental regions. After reviewing specimens and literature of known species (Strand, 1913; Hampson, 1919; Gaede, 1929), I determined that the aforementioned specimen in the Carnegie

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FIG. 1. Adult male (holotype) of Similipepsis ekisi Wang, new species.

collection collected from the Cameroons was quite distinctly different and not conspecific with the known species.

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#### Similipepsis ekisi, new species

Holotype: Male Metet (Adamaoua), Cameroon (Republic of Cameroon), 15 August 1919. A. I. Good. Carn. Mus. Acc. 6552 (deposited in CMNH, Holotype number 775).

The holotype is associated with the following items: sex label (white, machine print); locality label (white, machine print); collection date label (white, machine and hand print); accession label (white, machine and hand print); CMNH repository label (yellow, machine print); holotype label (red, machine and hand print).

Male. Head: vertex black; frons brown; occipital fringe grevish white; vertex laterally with fringe grevish white mixed with black; labial palpi upturned, first and second segments brown and covered with extended long bushy scales, second segment less expanded than first, with brown scales on both sides and white erect scales on inside border. third segment white and sharply upturned above vertex; antenna brown and bipectinate. devoid of apical scale tuft: proboscis present. Thorax dark brown, tegula brown: metathorax with minute, slender brown and white hairy scales extended from base of hindwing Abdomen dark brown first segment expanded slightly second extremely narrowed and extended into a long stalk, third slightly expanded, fourth and fifth greatly expanded. sixth and seventh narrowed; anal tuft covered with setaceous, V-shaped brown scales; underside of third abdominal segment with ring of V-shaped white scales. Forewing transparent, except on costal margin; stem of R vein covered with dark brown scales. dark brown scales scattered in region of cell; cilia brown. Hindwing hvaline, with few scattered scales; veins and margins brown; cilia brown. Foreleg: front of femur, with long row of compressed brown scales: tibia brown with metallic sheen; tarsus with metallic blue setaceous scales on tarsomere; other tarsal segments white. Mesothoracic leg dark brown, scales metallic blue, green or red. Tarsus brown, with spiny scales on tarsomere, other tarsal segments with mixture of white and brown scales. Hindleg dark brown, with two pairs of long white spurs. Forewing expanse, 26 mm, Adult as shown in Fig. 1.

Distribution: Known only from holotype from Metet (7°05'N, 13°17'E), Adamaoua, Cameroon, in Western Africa.

**Remarks:** This species is superficially similar to S. violaceus. It differs from S. violaceus by the narrower costal margin. Also, the ventral side of the abdomen of the S. ekisi specimen with V-shaped white band which is distinctly absent in S. violaceus.

This species is named in honor of Dr. Ginter Ekis, Curator of Section of Entomology, Carnegie Museum of Natural History at this writing.

### LITERATURE CITED

- DUCKWORTH, W. D. & T. D. EICHLIN. 1977. A classification of the Sesiidae of America North of Mexico (Lepidoptera: Sesioidea). Occas. Papers Entomol., Calif. Dept. Food & Agric. 26:1–54.
- GAEDE, M. 1929. Familie: Aegeriidae (Sesiidae) in A. Seitz, Die Gross-Schmetterlinge der Erde, II. Abteilung: Exotische Fauna, 14 (Die afrikanischen Spinner und Schwärmer):517–538. Plate 77. Stuttgart: A. Kernen.
- HAMPSON, G. F. 1919. A classification of the Aegeriidae of the Oriental and Ethiopian Regions. Novitates Zoologicae 26:46-119.
- HEPPNER, J. B. & W. D. DUCKWORTH. 1981. Classification of the superfamily Sesioidae (Lepidoptera: Ditrysia). Smithsonian Contrib. Zool., No. 314:1-144.
- LECERF, F. 1911. Descriptions d'Aegeriidae nouvelles. Bulletin du Museum National d'Histoire Naturelle (Paris) 17:297-307.
- NAUMANN, C. M. 1971. Untersuchungen zur Systematik und Phylogenese der holarktischen Sesiiden (Insecta, Lepidoptera). Bonner Zoologische Monographien (Bonn) 1: 1-190. (English translation: 1977, Studies on the Systematics and Phylogeny of Holarctic Sesiidae (Insecta, Lepidoptera). 208 pp. Washington: Smithsonian Institution.)
- STRAND, E. 1913. Zoologische Ergebnisse der Expedition des Herrn G. Tessmann nach Süd-Kamerun und Spanisch-Guinea: Lepidoptera. IV. Archiv für Naturgeschichte (Berlin) 78A(12):30-84. 2 plates.