

# ***Afrocampsis*, a new genus belonging to the Sigalphinae (Hymenoptera: Braconidae) from the Afrotropical region**

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The tribe Acampsini (Braconidae: Sigalphinae) is reported for the first time from the Afrotropical region. The genus *Afrocampsis* gen. nov., and its type-species: *A. griseosetosus* spec. nov., are described and fully illustrated. An illustrated key to the Palaearctic and Afrotropical genera of the subfamily Sigalphinae is given.

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## **Introduction**

The tribe Acampsini van Achterberg, 1984 of the subfamily Sigalphinae Blanchard, 1845 (Hymenoptera: Braconidae) has been known by the Palaearctic genus *Acampsis* Wesmael, 1835 only. Surprisingly a series of specimens from the Cameroons was discovered in the additions of the Hymenoptera collection of the Natural History Museum, London (formerly British Museum (Natural History)), and less surprisingly it proved to belong to a new genus, which is described below. The biology of the new genus is unknown, but members of the genus *Acampsis* are endoparasites of caterpillars of Geometridae (Čapek, 1972, Čapek et al., 1982), and Noctuidae (unpublished data).

For the terminology used in this paper and a key to the subfamilies of Braconidae, see van Achterberg, 1988: 5-11 and 1990: 1-19, respectively. BMNH= The Natural History Museum (formerly British Museum (Natural History)), London; RMNH= Nationaal Natuurhistorisch Museum (formerly Rijksmuseum van Natuurlijke Historie), Leiden.

## **Key to genera of the Palaearctic and Afrotropical Sigalphinae**

1. First metasomal tergite immovably joined to the second tergite (fig. 14); stemmaticum with spines or tubercles (fig. 17); pair of carinae of first and second tergites distinctly converging posteriorly (fig. 13); (subtribe Minangina De Saeger of the Sigalphini; Afrotropical) ..... *Minanga* Cameron
- First tergite movably joined to second tergite (figs. 4, 7); stemmaticum without spines or tubercles (fig. 5); pair of carinae of first and second tergites absent, parallel or slightly converging posteriorly (figs. 7, 22) ..... 2
2. Third metasomal tergite closed apically and longer than second tergite (fig. 25); third tergite with teeth or lobes apico-ventrally (fig. 24), exceptionally obsoles-

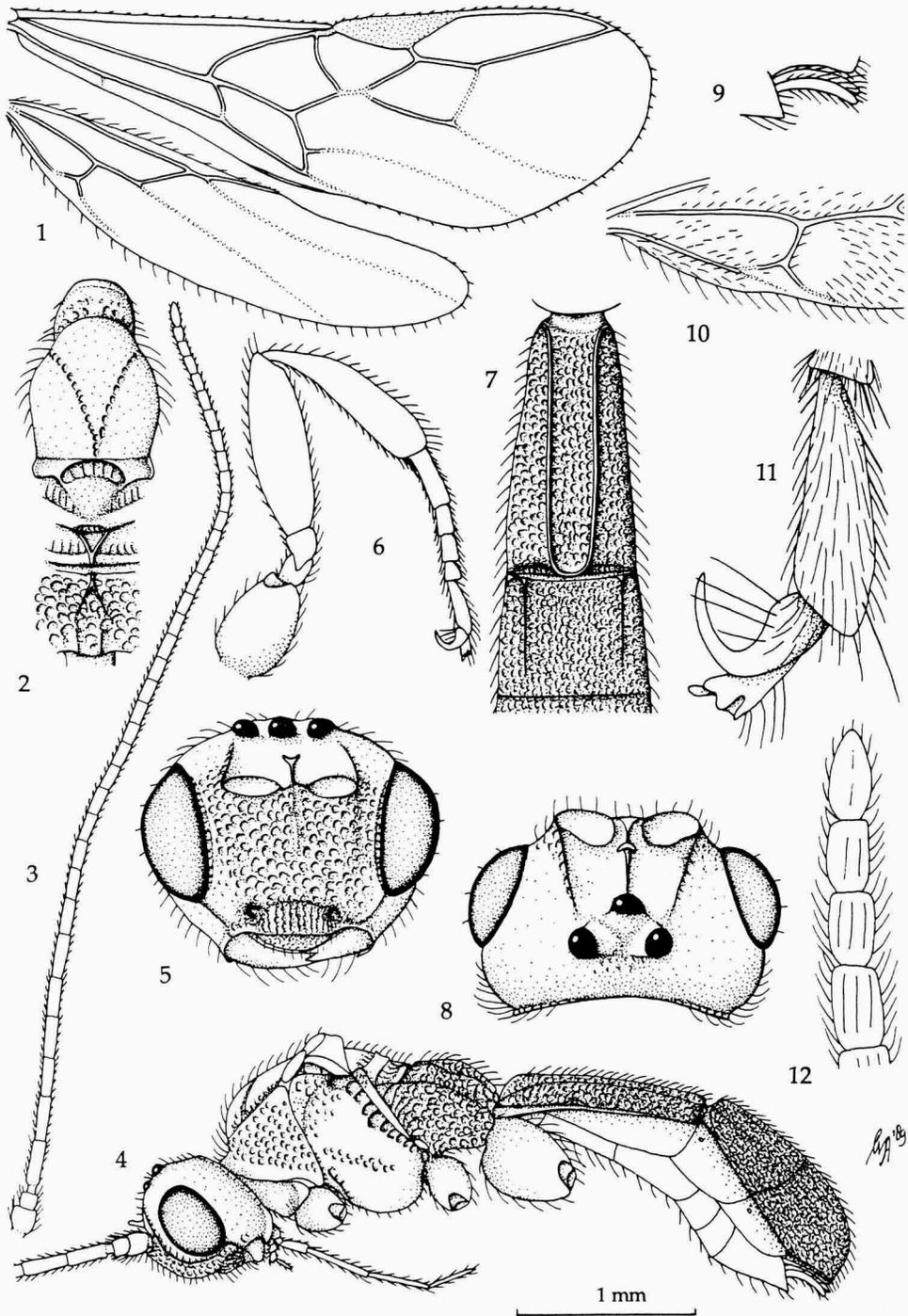
- cent; base of second tergite with pair of large and deep depressions antero-laterally (fig. 22); metapleuron very coarsely vermiculate (fig. 25); (tribe Sigalphini Blanchard; Holarctic) ..... *Sigalphus* Latreille
- First tergite open apically, and medially about (1.1 times or less) as long as second tergite (fig. 4); third tergite without teeth or lobes apico-ventrally; base of second tergite at most with a pair of shallow depressions, and are usually absent (fig. 7); metapleuron coarsely punctate or reticulate (fig. 4); (tribe Acampsini van Achterberg) ..... 3
3. Frons with dorsally bifurcated median lamella (figs. 5, 8), medially concave and smooth (fig. 8); scapus as long as pedicellus (fig. 3); ovipositor sheath slender (fig. 9); hind tarsal claws enlarged (longer than fourth tarsal segment; fig. 6), and without lobe (fig. 11); vein r of hind wing absent (fig. 1); malar suture distinct (fig. 5); pronope absent or nearly so (fig. 2); hind tibia enlarged (fig. 6); first discal cell of fore wing sessile anteriorly, comparatively high and less transverse (fig. 1); parastigma of fore wing slender (fig. 1); vein 2-SR of fore wing about as long as vein 3-SR; (Afrotropical) ..... *Afrocampsis* gen. nov.
- Frons without median lamella (fig. 19), flat and rugose medially (fig. 21); scapus much longer than pedicellus (fig. 23); ovipositor sheath wide (fig. 18); hind claws about as long as fourth tarsal segment and with acute lobe (fig. 15); vein r of hind wing present, but faintly developed; malar suture absent or nearly so (fig. 19); pronope distinct (fig. 16); hind tibia normal (fig. 20); first discal cell of fore wing petiolate anteriorly and distinctly transverse; parastigma of fore wing robust; vein 2-SR of fore wing distinctly shorter than vein 3-SR; (Palaeartic) .....  
..... *Acampsis* Wesmael

#### *Afrocampsis* gen. nov.

Type-species: *Afrocampsis griseosetosus* spec. nov.

Etymology: from the genus name "*Acampsis*" and "Afrotropical" because it is the first representative of the Acampsini from the Afrotropical region. Gender: masculine.

Diagnosis.— Body densely setose (fig. 4); scapus as long as pedicellus, and truncate apically (fig. 3); segments of labial palp (except apical segment) robust (fig. 4); frons with a strongly protruding median lamella, which is bifurcate dorsally (fig. 5); frons with pair of crests running from antennal sockets nearly to stemmaticum, concave and smooth medially (fig. 8); occipital carina interrupted medio-dorsally; eyes with few setae only; malar suture present (fig. 5); mandible slightly twisted apically, its dorsal tooth about as long as the acute ventral tooth; pronope and subpronope absent or nearly so (fig. 2); postpectal carina absent; precoxal sulcus shallow (fig. 4); pleural sulcus widely crenulate; epistomal scrobe absent; mesosternal sulcus crenulate; metanotum with a pair of anteriorly diverging carinae; first discal cell of fore wing sessile anteriorly (fig. 1); vein 2-SR about as long as vein 3-SR of fore wing; parastigma of fore wing small and slender (fig. 1); vein 2A of fore wing present as unsclerotized vein; plical lobe of hind wing narrow (fig. 1); vein r of hind wing absent; vein 2-CU of hind wing distinct, but short (fig. 1); hind tarsal claws enlarged compared to normal fore and middle legs, longer than fourth tarsal segment and without lobe (figs. 6, 11); hind tibia enlarged compared to normal slender fore and



Figs. 1-12, *Afrocampsis griseosetosus* gen. nov. & spec. nov., ♀, holotype. 1, wings; 2, mesosoma, dorsal aspect; 3, antenna; 4, habitus, lateral aspect; 5, head, frontal aspect; 6, hind leg; 7, first and second metasomal tergites, dorsal aspect; 8, head, dorsal aspect; 9, detail of ovipositor sheath, lateral aspect; 10, detail of veins cu-a and 2-CU of hind wing; 11, inner hind claw; 12, apex of antenna. 1, 3, 4, 6: 1 × scale-line; 2, 7: 1.3 ×; 5, 8-10: 2 ×; 11, 12: 5 ×.

middle tibiae (fig. 6); first metasomal tergite subparallel-sided and movably joined to second tergite, and its dorsal carinae complete (figs. 4, 7); laterope absent; second tergite with pair of sublateral parallel carinae (fig. 7), antero-laterally of it shallowly depressed; ovipositor sheath slender (fig. 9).

Distribution.— Afrotropical: one species.

***Afrocampsis griseosetosus* spec. nov.**

(figs. 1-12)

Material.— Holotype, ♀ (BMNH), "Cameroun: Nkoemvon, xii.1979-i.1980, D. Jackson". Paratypes: 2 ♀♀ + 1 ♂ (BMNH, RMNH), topotypic and same date; 1 ♂ (BMNH), topotypic, but 2.xi-13.xii.1980; 1 ♀ + 7 ♂♂ (BMNH, RMNH, Quicke Collection), "Cameroun, Korup, 1981, D. Jackson".

Holotype, ♀, length of body 4.1 mm, of fore wing 3.5 mm.

Head.— Antennal segments 37, third segment as long as fourth segment, length of third, fourth, and penultimate segments 3.4, 3.4, and 1.7 times their width, respectively; length of maxillary palp 1.6 times height of head; length of eye in dorsal view 1.5 times temple (fig. 8); OOL:diameter of ocellus:POL= 2:1:2; face convex and coarsely punctate; clypeus longitudinally rugose (fig. 5); length of malar space 0.9 times basal width of mandible.

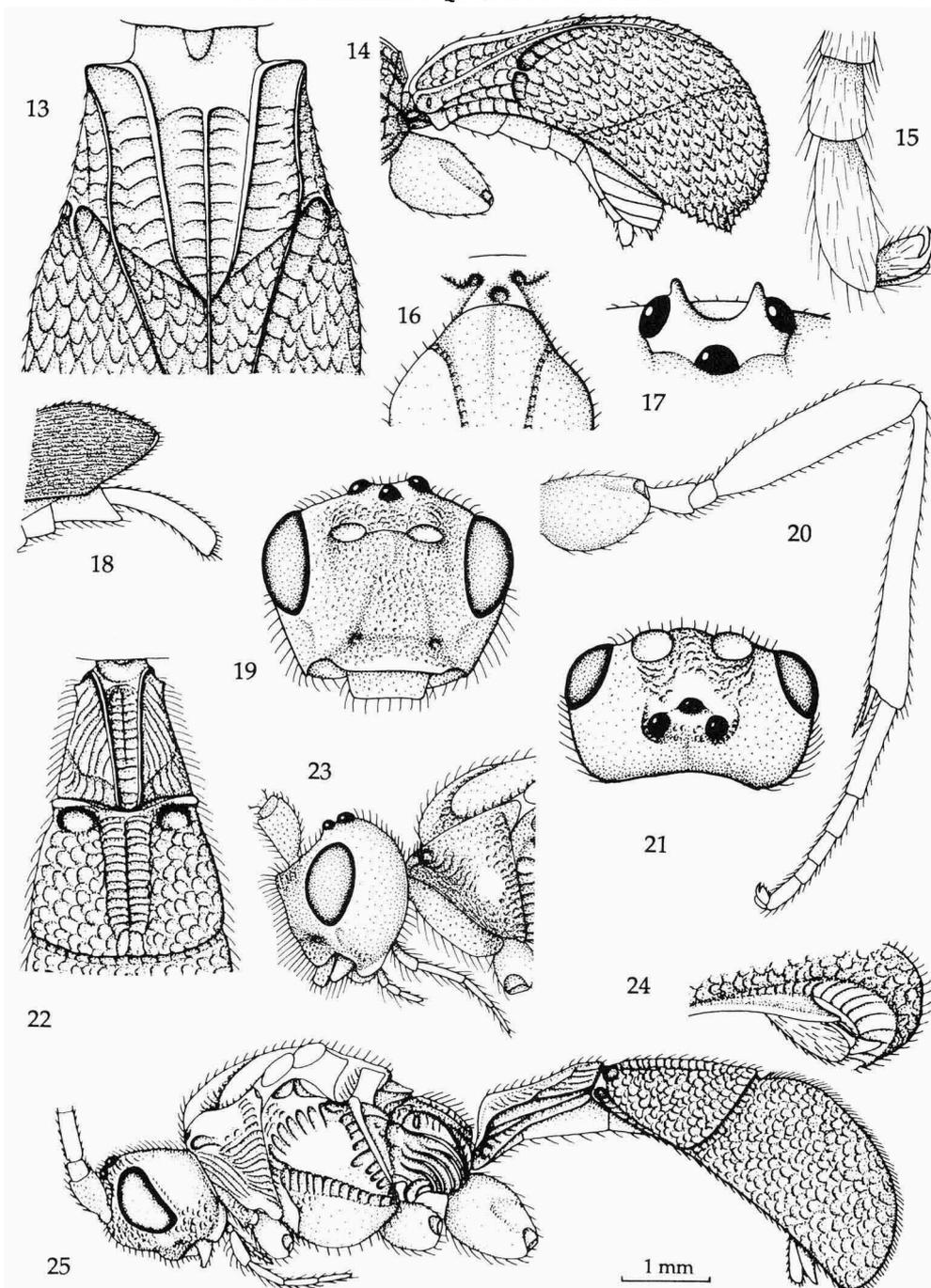
Mesosoma.— Length of mesosoma 1.6 times its height; side of pronotum coarsely punctate, but smooth ventrally (fig. 4); prepectal carina distinct, not reaching anterior margin of mesopleuron (fig. 4); epicnemial area punct(ul)ate dorsally; precoxal sulcus consists of a row of punctures, but posteriorly absent (fig. 4); remainder of mesopleuron smooth; metapleuron very coarsely and densely punctate; metapleural flange small; notauli completely impressed, narrow and punctate-crenulate; scutellar sulcus deep, with five carinae (fig. 2); scutellum punctulate; medially metanotum with median carina posteriorly only (fig. 2); surface of propodeum coarsely rugose-reticulate, its median carina absent, except for a short anterior part, and no distinct areola (fig. 2).

Wings.— Fore wing: 1-M curved posteriorly and comparatively long (fig. 1); r:3-SR:SR1= 5:22:52; 1-SR+M slightly curved; cu-a postfurcal and strongly inclivous; 1-CU1:2-CU1= 1:14; CU1b present; 2-SR:3-SR:r-m= 1:1:1; m-cu subparallel to 1-M. Hind wing: marginal cell parallel-sided apically (fig. 1); wing membrane partly glabrous basally (fig. 1).

Legs.— Hind coxa smooth; length of femur, tibia and basitarsus of hind leg 3.3, 4.6, and 3.0 times their width, respectively; length of hind tibial spurs 0.3 and 0.4 times hind basitarsus.

Metasoma.— Length of first tergite 2.0 times its apical width, its surface coarsely (reticulate-)punctate, and with crenulate depression apico-laterally (fig. 7); dorsope minute; second and third tergites coarsely reticulate-punctate; second suture distinctly crenulate and narrow; third tergite slightly concave posteriorly; length of ovipositor sheath 0.07 times fore wing; ovipositor widened basally, strongly narrowed apically and apical fifth curved ventrad, thin (needle-like); hypopygium rather large, and apically truncate.

Colour.— Black; tegulae, legs, palpi and metasoma ventrally, pale yellowish, but



Figs. 13, 14, 17, *Minanga serrata* Cameron,  $\sigma$ , lectotype; figs. 15, 16, 18-21, 23, *Acampsis* spec.,  $\text{f}$ , Japan, Futagoyama; figs. 22, 24, 25, *Sigalphus irrorator* (Fabricius),  $\text{f}$ , The Netherlands, Naaldwijk. 13, 22, first metasomal tergites, dorsal aspect; 14, metasoma, lateral aspect; 15, inner hind claw; 16, pronotum, dorsal aspect; 17, stemmaticum, antero-dorsal aspect; 18, ovipositor sheath; 19, head, frontal aspect; 20, hind leg; 21, head, dorsal aspect; 23, head, lateral aspect; 24, apex of third tergite, ventro-posterior aspect; 25, habitus, lateral aspect. 13: 2.5  $\times$  scale-line; 14: 1.4  $\times$ ; 15: 4.2  $\times$ ; 16, 19, 21: 1.3  $\times$ ; 17: 4.8  $\times$ ; 18, 20, 23: 1.2  $\times$ ; 22, 25: 1  $\times$ ; 24: 2  $\times$ .

apex of hind coxa, apex of hind femur, apical half of hind tibia, hind tarsus, and apical third of metasoma ventrally, infuscated; antenna dark brown, but scapus and pedicellus yellowish-brown; pterostigma, parastigma and veins dark brown; wing membrane somewhat infuscated.

Variation.— Length of fore wing 3.4-3.5 (♀) or 3.5-3.7 (♂) mm; length of body 4.1-4.2 (♀) or 4.8-4.9 (♂) mm; antennal segments of ♀ 37(1), and 38(1), of ♂ 33(1), 36(3), 38(1), and 39(1); length of hind femur of ♀ 3.3-3.4 times, of ♂ 3.5-3.7 times; length of first tergite 1.8-2.0 times its apical width; length of ovipositor sheath 0.07-0.09 times fore wing; 3-SR:r= 3.0-5.5; hind femur and tibia may be nearly completely yellowish; base of hind tibia pale yellowish; vein r of fore wing may be widened; male has hind femur and tibia (except basally) dark brown, similar to hind tarsus; third metasomal tergite of male distinctly convex apically (as of female (fig. 4), but slightly less); scapus and pedicellus yellowish or brown, always paler than dark brown third and fourth antennal segments; widened part of lamella of frons may be absent or nearly so.

Note.— In addition to the type series we have examined 2 ♀♀ + 3 ♂♂ (BMNH) from S. Africa: Katberg, 4000 ft. (E. Cape Prov.) and Port St. John (Pondoland). The specimens differ in colour (female has basal half of antenna yellow and hind femur largely dark brown) and shape of third tergite (less convex) and hind femur. Provisionally we consider this series to be conspecific being part of a clinal. These specimens vary as follows: 3-SR:r= 2.0-4.2; length of hind femur of both sexes 2.8-3.0 times its width; ovipositor sheath more setose, and 0.08-0.11 times fore wing; length of first tergite up to 2.2 times its apical width.

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