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Cratocnema juxtacasum sp. n. from Malgasy (Hymenoptera: Braconidae, Braconinae)

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Cratocnema juxtacasum sp. n. from Malgasy (Hymenoptera: Braconidae, Braconinae) — Description of *Cratocnema juxtacasum* sp. n. is presented. The new species is nearest to *C. leve* Granger. The type series of *C. juxtacasum* (18 females) originally belonged to the type series of *C. leve* and is separated from it by a few distinct specific features summarized in the key following the description of the new species. Lecto- and paralectotypes are designated for the three *Cratocnema* species by Granger (1949): *C. leve*, *C. tricolor* and *C. variicolor*. Up to now 16 *Cratocnema* species are known and they are distributed in the Ethiopian Region, their checklist is added. With 13 original figures.

Key words: *Cratocnema*, new species, description, type designations, checklist.

INTRODUCTION

The first two *Cratocnema* species (*C. albopilosum* and *C. luteum*) have been described by Szépligeti in 1913 in the genera *Bracon* Fabricius and *Myosoma* Brullé, respectively. The genus *Cratocnema* was set up by Szépligeti in 1914 with the descriptions of further eight species. Currently fifteen *Cratocnema* species are registered which are distributed in tropical Africa, the sixteenth species is described from Malgasy in the present paper; see also the checklist of the *Cratocnema* species.

The genus *Cratocnema* is nearest to *Bracon*, *Cratocnema* differs from *Bracon* by its broadly compressed hind tibia bearing a longitudinal groove of variable length and depth (cf. Fig. 4, see arrow).

* * *

In 1949 Granger described three *Cratocnema* species (*C. leve*, *C. tricolor*, *C. variicolor*) their type series are deposited in the Museum National d'Histoire Naturelle, Paris. In the descriptions the types were not designated in fact, however, having examined the type series of the three species there are one female specimen of each species which bear the separate label "Type" printed red. These specimens have been labelled certainly by Ganger himself and are recognized here as lectotypes.

Abbreviations applied in the description: Eyes — *OOL* = shortest distance between hind ocellus and compound eye. *POL* = shortest distance between hind two ocelli.

Alar venation — Fore wing: *r* = transverse radial vein; *1–M* = basal vein; *2–SR* = first transverse cubital vein; *3–SR* and *4–SR* = second and third sections of the radial vein; *1–SR–M* = first section of the cubital vein. — Hind wing: *cu–a* = transverse cubito-anal vein.

Cratocnema juxtacasum sp. n. ♀
(Figs 1–10)

Material examined (18 females). — Female holotype + one female paratype: Madagascar (=Malgasy), Rogez, Foret Côte Est, December 1930, leg. A. Seyrig. — Eleven female paratypes: Same locality, 4 females (one female in Budapest): September 1930, three females: January 1931, one female (in Budapest): February 1931, two females (one female in Budapest): February 1936, one female: May 1936, all leg. A. Seyrig. — One female paratype: Madagascar (=Malgasy), Maroantsera, November 1934, leg. Vadon (in Coll. Seyrig). — One female paratype: Madagascar (=Malgasy), Sainte-Marie (Coll. J. de Gaulle 1919). — One female paratype: Madagascar (=Malgasy), Baie d'Antongil, 1898, leg. A. Mocquerys. — One female paratype: Madagascar (=Malgasy), Tananarive, December 1931, leg. A. Seyrig. — One female paratype (in London): Madagascar (=Malgasy), Rogez, March 1931, leg. A. Seyrig.

Remark. — The above type series (except one female from Malgasy: Rogez housed in London) originally belonged to that of *C. leve*, see further comments of it in the paragraph "Representing double type series" too.

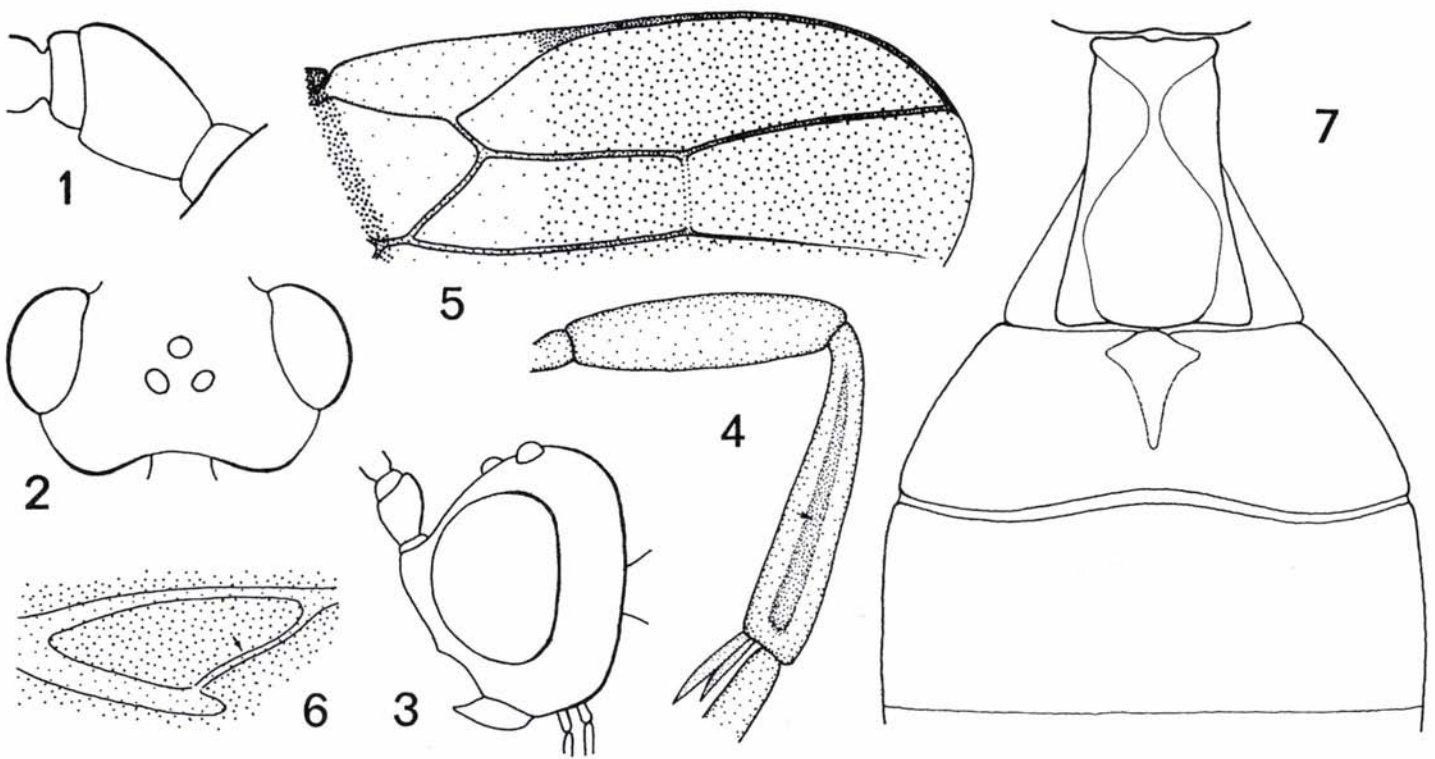
Depositories. — Female holotype and thirteen female paratypes are deposited in the Museum National d'Histoire Naturelle, Paris; three female paratypes in the Hungarian Natural History Museum, Budapest, Hym Typ. Nos 7898–7900; and one female paratype in The Natural History Museum, London.

Etymology. — The species name "juxtacasum" indicates that the new species runs nearest to *C. leve*.

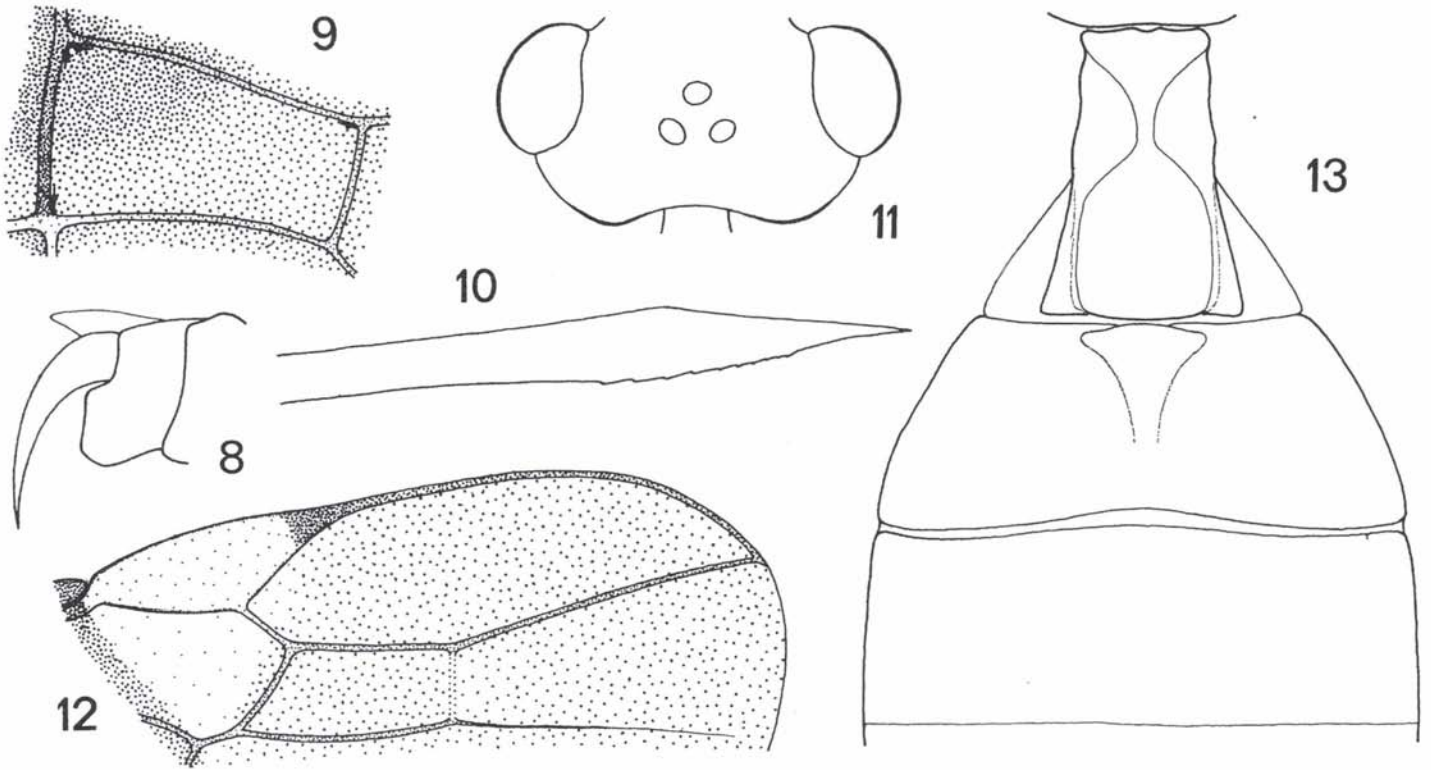
Representing double type series. — The new species, *Cratocnema juxtacasum*, is described on the basis of seventeen (+ one) female specimens. These females originally served also for the description of *C. leve* by Granger in 1949, i.e. first they belonged to the type series of this species. The thorough examination of the full type series (42 females + 1 male) of *C. leve* resulted the recognition and discernment of the new species *C. juxtacasum* with the separation of seventeen female specimens as its type series. Consequently, *C. leve* becomes a restricted species since its seventeen females are representing double type series: first as part of *C. leve* and secondly as for *C. juxtacasum*. The detailed designation of the types see under these two species.

Description of the female holotype. — Body 7 mm long. Antenna filiform and somewhat shorter than body, about 6–6.5 mm long and with 42 antennomeres. In lateral view scape rather globose, dorsally longer than ventrally (Fig. 1). Flagellum indistinctly attenuating, first flagellomere a bit longer than broad, further flagellomeres cubic and penultimate flagellomere 1.2 times as long as broad. — Head in dorsal view (Fig. 2) transverse, 1.8 times as broad as long, eye somewhat protruding and twice as long as temple, temple less receded, occiput excavated. Ocelli elliptic, near to each other, distance between two ocelli shorter than their longest diameter, OOL four times as long as POL. In lateral view eye 1.36 times as high as wide and twice as wide as temple, latter evenly broad beyond eye (Fig. 3). Malar space short, about one-fifth shorter than basal width of mandible. Horizontal diameter of oral opening twice as long as shortest distance between opening and eye. Face transverse, 1.4 times as wide as high. Head polished.

Mesosoma in lateral view 1.4 times as long as high. Notaulix weakly distinct. Prescutellar furrow narrow, shallow, finely crenulate. Mesosoma entirely polished. — Hind femur 3.8 times as long as broad medially, hind tibia somewhat flattened and medio-longitudinally with a groove (Fig. 4, see arrow). Claw as in Fig. 8.



Figs 1–7. *Cratocnema juxtacasum* sp. n. — 1: scape in lateral view, 2: head in dorsal view, 3: head in lateral view, 4: hind femur and tibia with groove (see arrow) in lateral view, 5: distal part of right fore wing, 6: subbasal cell of hind wing with *cu–a* (see arrow), 7: tergites 1–3



Figs 8–13. — 8–10. *Cratocnema juxtacasum* sp. n. — 8: claw in lateral view, 9: first discal cell of fore wing, 10: distal end of ovipositor. — 11–13. *Cratocnema leve* Granger — 11: head in dorsal view, 12: distal part of right fore wing, 13: tergites 1–3

Fore wing about as long as body. Pterostigma (Fig. 5) three times as long as wide and issuing *r* from its middle, *r* distinctly, i.e. 0.6 times, shorter than width of pterostigma. Second submarginal cell long, *3–SR* 1.9 times as long as *2–SR*, *4–SR* 1.35 times as long as *3–SR* and reaching tip of wing. First discal cell long, *1–SR–M* 1.75 times as long as *1–M* (Fig. 9, see arrows). — Hind wing: subbasal cell as in Fig. 6, *cu–a* strongly inward (see arrow in figure).

First tergite (Fig. 7) 1.4 times as long as broad behind, nearly evenly broadening posteriorly, scutum somewhat protuberant upwards. Second tergite transverse, 3.2 times as broad behind as long medially; suture between tergites 2–3 bisinuate, third tergite just one-fourth longer than second tergite. Tergites polished. Ovipositor sheath long, as long as metasoma or half femur + tibia + tarsus of hind leg combined. Apical end of ovipositopr as in Fig. 10.

Body reddish yellow, palpi also reddish yellow, antenna blackish, ovipositor sheath brownish black. Hind tarsus: basitarsus and second tarsomere reddish yellow to light brownish, tarsomeres 3–4 brown to dark brown, 5th tarsomere black. Wings brownish fumous, pterostigma yellow; distal end of carpal vein, parastigma and wing close below parastigma black.

Description of the paratypes (17 females). — Similar to the female holotype. Body 5.5–8 mm long (5.5: two females, 6: three females, 6.5: two females, 7: six females, 7.5: two females, 8: two females). Antenna with 36–45 antennomeres (36: one female, 40: two females, 41: two females, 42: two females, 44: one female, 45: one female; antenna of further eight females damaged); flagellomeres of the female with 36 antennomeres somewhat longer than broad, otherwise flagellomeres at most as long as broad. Head in dorsal view 1.75–1.85 times as broad as long (1.75: two females, 1.8: twelve females, 1.85: three females). Eye in dorsal view twice to a bit more than twice as long as temple. In lateral view eye 1.35–1.38 times as high as wide and twice as wide as temple, temple beyond eye evenly wide. Hind femur 3.6–3.8 times as long as broad medially. Pterostigma 2.7–3.3 times, usually three times, as long as wide (2.7: one female, 2.8: five females, 3: ten females, 3.3: one female). *3–SR* (1.8–)1.9–2.1 times, usually 1.9 times, as long as *2–SR*, *4–SR* 1.3–1.35 times as long as *3–SR*. First tergite 1.2–1.4 times, usually 1.4 times, as long as broad behind.

Male and host unknown.

The new species, *Cratocnema juxtacasum*, is closely related to *C. leve* Granger considering their transverse head, first tergite distinctly longer than broad behind and fully yellow body; the two species are distinguished by the features keyed:

1 (2) Temple in dorsal view (Fig. 11) receded, head twice as broad as long. Second submarginal cell short, *4–SR* almost twice to fully twice as long as *3–SR*, *3–SR* clearly less than twice as long as *2–SR* (Fig. 12). Second tergite less transverse, 2.5–2.6 times as broad as long medially (Fig. 13). Scape and pedicel yellow, only on their latero-outer side with a black(ish) streak. **C. leve** Granger

2 (1) Temple in dorsal view (Fig. 2) somewhat less receded, head 1.8 times as broad as long. Second submarginal cell long, *4–SR* only one-fourth longer than *3–SR*, *3–SR* almost twice to twice as long as *2–SR* (Fig. 5). Second tergite transverse, 3–3.3 times as broad behind as long medially (Fig. 7). Scape and pedicel fully black. **C. juxtacasum** sp. n.

Cratocnema leve Granger, 1949

Cratocnema levis Granger, 1949: Mém. Inst. Sci. Madagascar ser. A Biol. Anim. 2: 84 EG, type locality: Madagascar, Rogez, female lectotype (and 22 female + 1 male paralectotypes, present designations) in Museum National d'Histoire Naturelle, Paris; examined. — Shenefelt 1978: 1675 (literature up to 1949).

Type designation — 1.) In his description Granger (l.c.) did not designate the holotype and paratypes of his species. In the type series (25 females + 1 male) of his species I found a female which bears the label "Type" attached to it certainly by Granger himself. This specimen was recognized as representing the lectotype, the rest of the series received paralectotype status.

2.) Originally *Cratocnema leve* was described on the basis of 43 specimens (42 females + 1 male) of which 26 specimens (25 females + 1 male) proved actually to represent this species, the rest of the specimens (17 females) received new species (sp. n.) status under the name *C. juxtacasum*. In the subsequent paragraph numbered 4.) the specimens renamed as *C. juxtacasum* are placed in brackets [...].

3.) Designation of the female lectotype of *C. leve*. — (first label) "Madagascar Rogez Foret Côte Est"; (second blue label) "Muséum Paris II. 36 A. Seyrig" (II. 36 = February 1936); third and fourth labels) Cratocnema leve sp. n. det. Szépligeti in litt.; (fifth label) "Type" (printed red); sixth label is my lectotype card.

4.) Designations of the paralectotypes of *C. leve* (24 females + 1 male). — 19 female + 1 male: Madagascar, Rogez, Foret Côte Est, December 1930: 1 female [+2 females], January 1931: 8 females [+3 females] (two females in Museum Budapest), February 1931: 5 females [+1 female], December 1931: 1 female, 1935: 1 female, February 1936: 3 females, all leg. A. Seyrig. — 1 female: Madagascar, Ivondro, January 1939, leg. A. Seyrig. — 4 females [+1 female]: Madagascar, Tananarive, December 1931, leg. A. Seyrig.

All further paralectotypic specimens, i.e. 17 females, are trasferred to the new species *C. juxtacasum* with the status holotype and paratypes, details see at this species under the paragraph "Material examined".

Cratocnema tricolor Granger, 1949

Cratocnema tricolor Granger, 1949: Mém. Inst. Sci. Madagascar ser. A Biol. Anim. 2: 86 E, type locality: Madagascar, Rogez, female lectotype (and 2 female paralectotypes, present designations) in Museum National d'Histoire Naturelle, Paris; examined. — Shenefelt 1978: 1676 (literature up to 1949).

Designation of the female lectotype of *C. tricolor*. — (first label) "Madagascar Rogez Foret Côte Est"; (second blue label) "Muséum Paris II. 36 A. Seyrig" (II. 36 = February 1936); (third label) "Type" (printed red); fourth label is my lectotype card.

Designation of the paralectotypes of *C. tricolor* (2 females). — 1 female (first label): Madagascar, Rogez, Foret Côte Est, February 1931, leg. A. Seyrig; second label is my paralectotype card. — 1 female (first label): Madagascar, Ivondro, December 1938, leg. A. Seyrig; second label is my paralectotype card.

Cratocnema variicolor Granger, 1949

Cratocnema variicolor Granger, 1949: Mém. Inst. Sci. Madagascar ser. A Biol. Anim. 2: 85 E, type locality: Madagascar, Subebieville, female lectotype (and 2 female paralectotypes, present designations) in Museum National d'Histoire Naturelle, Paris; examined. — Shenefelt 1978: 1676 (literature up to 1949).

Designation of the female lectotype of *C. variicolor*. — (first label) "Madag.r Suber.lle H. Perrier"; (second greyish label) "Museum Paris Madagascar L. Fairmaire 1899"; (third and fourth labels) *Cratocnema variicolor* sp. n. det. Szépligeti in litt.; (fifth label) "Type" (printed red); sixth label is my lectotype card.

Designation of the paralectotypes of *C. variicolor*. — 2 females (first label): Madagascar, Bekily, January 1931; second label is my paralectotype card.

CHECKLIST OF THE *CRATOCNEMA* SZÉPLIGETI SPECIES

Cratocnema Szépligeti, 1914: Mitt. Zool. Mus. Berlin 7: 184, type species: *Cratocnema bicolor* Szépligeti, 1914 (designated by Brues 1926). Shenefelt 1978: 1675 (taxonomic etc. data of the species: p. 1675–1676).

albopilosum (Szépligeti, 1913) (*Bracon*) — Tanzania
bicolor Szépligeti, 1914 — Tanzania
cephalotum Szépligeti, 1914 — Cameroons
juxtacasum sp. n. — Malgasy
leve Granger, 1949 — Malgasy
luteum (Szépligeti, 1913) (*Myosoma*) — Mozambique
maculipes Szépligeti, 1914 — Equatorial Guinea, Togo
maculiventre Szépligeti, 1914 — Cameroons
nigriventre Szépligeti, 1914 — Equatorial Guinea
pallidipes Szépligeti, 1914 — Tanzania
politum Szépligeti, 1914 — Zaire
postfurcale (Brues, 1924) (*Microbracon*) — Republic of South Africa
simile Szépligeti, 1914 — Cameroons, Guinea
testaceum Szépligeti, 1914 — Cameroons, Equatorial Guinea
tricolor Granger, 1949 — Malgasy
variicolor Granger, 1949 — Malgasy

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