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SUPPLEMENT TO THE REVISION OF THE GENUS CEROPALES LATREILLE. III. (HYMENOPTERA, CEROPALIDAE)

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Abstract

New female of *Ceropales (Priesnerius) dubaica* MÓCZÁR is described and new distributional data are presented for this species and for two another insufficiently know, as well as, further species in Africa. New key for the variable *deserticola*-species group is given.

Part of the result on Ceropalids collected by Dr. A. MOCHI was published in former revisions (MÓCZÁR, 1986-1991). Present paper gives more comprehensive results on African Ceropalids based on Dr. A. MOCHI's collection. Most interesting ones of the species located are: *Ceropales dubica* MÓCZÁR, 1988 ♂, new ♀, *C. grahamstowni* MÓCZÁR, 1988 ♂,which have been known on the basis of a single male. Dr. A. MOCHI's collection makes possible to publish new distributional data on some insufficiently known interesting species, as well as to compile a new key for the largely variable *deserticola* species-group.

Subgenus *Priesnerius* MÓCZÁR, 1978

1 and - remain unchanged (MÓCZÁR, 1988: 122)

2 Pronotum tubercle normal, at most slightly thickened and not (♀) or hardly (♂) elongated below tegula; width of thorax herewidth as broad as, or distinctly narrower than the same at tegulae (meanwhile fore wings directed towards below). Tergite 7 not emarginate (♂). Tergite 9 without a row of dense erect hairs; ventral surface raised basally in a longitudinal, sharp keel and after a nearly rectangular declivity gradually flattened towards apex, tip pointed and scarcely turn up towards inside (♂). Posterior margin of pronotum yellowish white with ferruginous margin in front, often black laterally in the middle (♀ ♂) and also ferruginous along the lateral border (♂). Mesonotum black, with narrower, lateral and yellowish margins (♂). Tergites 1-3 with continuous, 4 with interrupted white bands, sometimes segments partly yellowish, partly dark ferruginous translucent. Legs largely brownish

ferruginous, only fore coxa partly black. The row of tomentose hairs on hind metatarsus not developed (♂). 4.5-6 mm.

polychloros GUSSAKOVSKIJ, 1931

- Pronotal tubercle conspicuously thickened i.e. seemingly swelled and elongated below tegula; the diameter of thorax here broader than across tegulae, viewed from above. Tergite 9 with a row of dense erect hairs (♂). Last abdominal tergite emarginate or impressed (♂). Light colour largely ivory, partly yellowish. Mesonotum with longitudinal spot medially and with streaks laterally. Legs nearly entirely ferruginous with yellowish white marking. The row of tomentose hairs on hind metatarsus not developed (♂). 3

3 Head and thorax largely black, with white colouring. Abdomen mostly brownish black, segment or tergites 1-2 (3-5) ferruginous with broad and continuous ivory white bands. Usually moderately light coloured species. Tergite 7 conspicuously broadly and deeply emarginated (♂). Fore coxa with black, ivory and ferruginous streaks. Sternite 9 pointed apically, ventral surface moderately raised basally, with a relative shorter row of dense erect hairs (♂, Fig. 8, Móczár, 1988: 153). Frons black, on larger specimen the two spots of ocular sinus sometimes connected in the middle (♀). ♀ 3.8-5.9, ♂ 4.6-5.3 mm.

dubaica MÓCZÁR, 1988

- Head, thorax with less black, more white and ferruginous colouring. Abdomen often entirely ivory-white, ferruginous basally, usually richely light coloured species. Tergite 7 normal, at most scarcely impressed (♂) medially. Fore coxa largely ivory with ferruginous spot 4

4 Head around ocelli and mesonotum smooth, shining with a few coarse punctures. Space semicircularly rounded interiorly. Propodeum largely black, lateral and often posterior margins broadly white or sometimes yellowish and ferruginous nearly entirely. Mesonotum with coarser punctures. Mesepisternum finely scattered punctured. Lower margin of last sternite straight in apical part (♀). Frons black, often with small yellowish spot, which rarely connected with dark brownish smaller line with the large spots of ocular sinus (♀) or with broad yellowish band (♂). Pronotum, segment 1 white nearly entirely, and laterally, as well as in front ferruginous; further segment ferruginous, only medially darker rufous, with broad ivory bands (♀). Hind tibia lined with yellow exteriorly. Sternite 9 hardly excised apically, slightly and shortly raised basally, with longer three row of dense and erect hairs medially and laterally, the hairs curved apically (♂, Fig. 6, MÓCZÁR, 1988: 153). ♀ 3.9-6.8, ♂ 4.6-5.3 mm

deserticola PRIESNER, 1955.

- Head, mesonotum dull, alutaceous, with few shallow and larger punctures especially in vertex. Space moderately convex interiorly, straight at the exterior margin. Propodeum dark ferruginous nearly entirely, posterio-lateral margins and a large spots laterally ivory-yellow. Mesonotum with shallow larger punctures. Mesepisternum rather deeply and sparsely punctured (Fig. 6 Móczár, 1979: 344). Lower margin of last sternite slightly curved in lateral view (Fig. 1, l.c.: 344). Frons with a broad yellow band between eyes. Pronotum with a broad yellowish white posterior margin. Tergites ferruginous, more or less broadly margined behind ivory white. Only middle tibia lined with yellow exteriorly, hind tibiae at most with yellow basal spot. Body with fine silky pubescence. 5-6 mm

opacior PRIESNER, 1955 ♂

Ceropales dubaica MÓCZÁR, ♀ *new*

Ceropales dubaica MÓCZÁR, 1988: Linzer biol. Beitr. 20: 132 ♂

Addition to the description:

♂. - Length 3.8-5.3 mm. Posterior bands of tergites 1-4 continuous, on 5 interrupted medially, tergites 1-2 of two males brownish ferruginous translucent proximally and tergites 1-3 light ferruginous, 4-5 dark brownish black. Frons of all males black medially.

♀ . - Length 3.9-5.9 mm. Similar to male, it differs by some details. E.g. posterior white bands on tergites 1-5 continuous, on 5 not interrupted, tergits 6 nearly entirely white. 2nd antennal joint hardly yellowish, more ferruginous below, labrum pale brownish, not white. lower side of antennal joints largely brownish, mandible brownish ferruginous except the black base. Abdomen especially fore and last sternites, as well as legs, brownish ferruginous.

Head distinctly broader than long (59:54). POL:OOL=9:12. Antenna longer, reaching nearly the end of thorax, all joints longer than breadth, except the 2nd. Pronotal tubercle swelled and elongated below tegula, diameter of thorax here broadler than across tegulae viewed from above. Mesepisternum not so deep punctured as mesonotum. Last segment compressed laterally with a hardly concave or straght margin on its apical half after the declivity, in lateral view.

There are two smaller and two larger female. Three of them collected in the same place and date (Ismailia), one in Wadi Haghoul (in the Eastern desert running more or less parallel to the Red Sea, about 50 km inland, scarce vegetation on the dry river bed, according to A. MOCHI). The colouring of the two smaller specimens (Ismailia) partly darker, e.g. tergites 1-2 more or less dark brownish ferruginous translucent, 3-5 brownish black with continuous white bands, and frons black medially. The colour of the third longer female (Ismailia), as well as on the one of Haghoul: tergites 1-5 light ferruginous; the larger spots in ocular sinus connected in the middle and mandible largely yellow, without black basal spot on the third longer female (Ismailia).

Specimens examined: 4♂, 4♀ Egypt: Ismailia 6.V.1992, A. MOCHI, 1♀ (allotype), 1♂ (Coll. A. MOCHI, Rome), 2♀ , 2♂ (Mus. Budapest), 1♂ (Coll. R. WAHIS, Chaudfontaine); Wadi Haghoul 18.V.1992 A. MOCHI, 1♀ (Coll. A. MOCHI).

Distribution: United Arabian Emirates (holotype Coll. WASBAUER, Calif. Sacramento). First record for Egypt.

Ceropales deserticola PRIESNER, 1955: 1988, MÓCZÁR, Linzer biol. Beitr. 20: 123, 131 ♀ ♂ Figs 5-6. Specimens examined: 11♀ , 12♂. Egypt: Wadi Rayan Fayum 25.V.1991 on Tamariscus A. MOCHI, 5♀ , 6♂ (Coll. A. MOCHI), 5♀ , 4♂ (Mus. Budapest), 1♀ , 1♂ (Coll. R. WAHIS), - Senegal: Ndangane 20.II.1988 A. MOCHI, 1♂ (Mus. Budapest).

Distribution. Egypt. First record for Senegal.

Ceropales grahamstowni MÓCZÁR, 1988: Linzer biol. Beitr. 20: 127, 135 ♀ ♂ Figs 23-24, 28-30. - Specimen examined: Congo = Brazaville, Djoue 23.V.1964 A. MOCHI, 1♂ (Mus. Budapest). - Rep. of South Africa = Transvaal, Klaserie 28-31.XII.1986 leg. MASON, 1♂ (Mus. Alberta). These males partly differ from the diagnosis by the relation of the length of the row of tomentose hairs and the breadth of hind metatarsus. It is rather probable being 2.5:5 (in Congo and Transvaal) than "nearly equals" (in allotype, Coll. TOWNES).

Distribution: Republic of South Africa, Zimbabwe. First record for Congo.

Subgenus **Ceropales** s. str.

THE *VARIEGATA*-GROUP

Ceropales latifasciata ARNOLD, 1937: 1986, MÓCZÁR, Acta Biol. Szeged. 32:126, 135. - Specimen examined: Ethiopia = Harar 4.V.1937 A. MOCHI, 1♀ (Mus. Budapest).

Distribution: Ethiopia, Zaire.

THE *HELVETICA*-GROUP

Ceropales africana MÓCZÁR, 1989: Beitr. Ent. Berlin, 39: 14, 16 ♀ ♂ Figs 1, 11, 19-20, 31-36. - Specimens examined: Congo = Brazaville, Djoue 6.VI.1966 A. MOCHI, 1♂ (Coll. A. MOCHI). - Ivory Coast = Toumodi 21.I.1991 A. MOCHI, 1♂ (Coll. A. MOCHI).

Distribution: West-, Middle- and Sud Africa. First record for Congo.

Ceropales gamblae MÓCZÁR, 1989: Beitr Ent. Berlin, 39: 12, 24 ♀ ♂ Figs 13-14, 44-45. - Specimens examined: Senegal = Thice 18.VII.1991 A. MOCHI, 1♂; Sambadia 10.VII.1991 A. MOCHI, 1♀ , 1♂ and Ndangane 26.VII.1991 A. MOCHI, 1♀ , 1♂ (2♀ , 1♂ Coll. MOCHI and 1♂ Mus. Budapest). - Sudan = Wad Medani 2.VIII.1957 A. MOCHI, 1♂ (Coll. A. MOCHI).

Distribution: West- and Middle Africa. First record for Sudan.

Ceropales kriechbaumeri MAGRETTI, 1984: 1989, MÓCZÁR, Beitr. Ent. Berlin, 39: 15, 34 Figs 2, 5, 12, 26, 56-58. - Specimens examined: Egypt = Keramis 5.V.1970 A. MOCHI, 1♂ (Coll. A. MOCHI); Keranis Fayum 28.IV.1992 A. MOCHI, 1♂ (Mus. Budapest).

Distribution: Upper Volta, Nigéria, Egypt, Israel, Saudi Arabia, Oman, United Arab Emirates, Qatar.

Ceropales variolosa ARNOLD, 1937: 1989, MÓCZÁR, Beitr. Ent. Berlin, 39: 12, 41 Figs 6, 69-71. - Specimens examined: Senegal = Kayar 12.II.1988 A. MOCHI, 2♂; Ndangane 20.II.1988 A. MOCHI, 1♂ and Sambadia 11.VII.1991 A. MOCHI, 2♀ , 1♂ (1♀ , 3♂ Coll. A. MOCHI and 1♀ , 1♂ Mus. Budapest).

Distribution: West- and Middle Africa, Tunisia, Israel, Jordan, Jemen.

Subgenus **Hemiceropales** PRIESNER, 1969

Ceropales cribrata cribrata A. COSTA, 1881: 1986, MÓCZÁR, Acta Zool. Hung. 32: 321, 331 Figs 16-20. - Specimens examined: Italy = La Biodola, Elba Island, Tuscany 20.VIII.1962 A. MOCHI, 1♂ and Capena, Latium 6.IX.1990 A. MOCHI, 1♂ (Coll. A. MOCHI). - Ethiopia = Harar 20.V.1937 A. MOCHI, 1♂ (Mus. Budapest); Asella, Arssi 6.III.1984 A. MOCHI, 1♂ (Coll. A. MOCHI). - Senegal = Tonba - Kouta 12.II.1988 A. MOCHI, 2♀ (Coll. A. MOCHI and Mus. Budapest).

Distribution: South Europe to South Africa and to Kazakh SR in South Asia.

Ceropales maroccana BEAUMONT, 1947: 1986, MÓCZÁR, Acta Zool. Hung. 32: 321, 329 Figs 8-15. - Specimen examined: Tanzania = Zanzibar airport 3.II.1985 A. MOCHI, 1♂ (Coll. A. MOCHI).

Distribution: North- and West Africa, and from Zimbabwe to Caucasus and Turkmen SR.

Ceropales punctulata bulawayoensis BISCHOFF, 1913: 1986, MÓCZÁR, Acta Zool. Hung. 32: 320, 328 Figs 5, 6-7. - Specimens examined: Tanzania = Manyara 24.XI.1972 A. MOCHI, 1♂ (Mus. Budapest); Zanzibar airport 8.VI.1988 A. MOCHI, 1♂ (Coll. A. MOCHI). - Ivory Coast = 40 km S Toumodi 21.I.1991 A. MOCHI, 1♂ (Coll. A. MOCHI).

Distribution: West-, Middle- and South Africa.

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