

ON CHALCEDECTUS SINAITICUS (MASI) FROM THE NEAR EAST,
AND CH. GUARANITICUS (STRAND), FROM PARAGUAY,
AND NEW SYNONYMY (HYM. CHALCIDOIDEA)

ZDENĚK BOUČEK

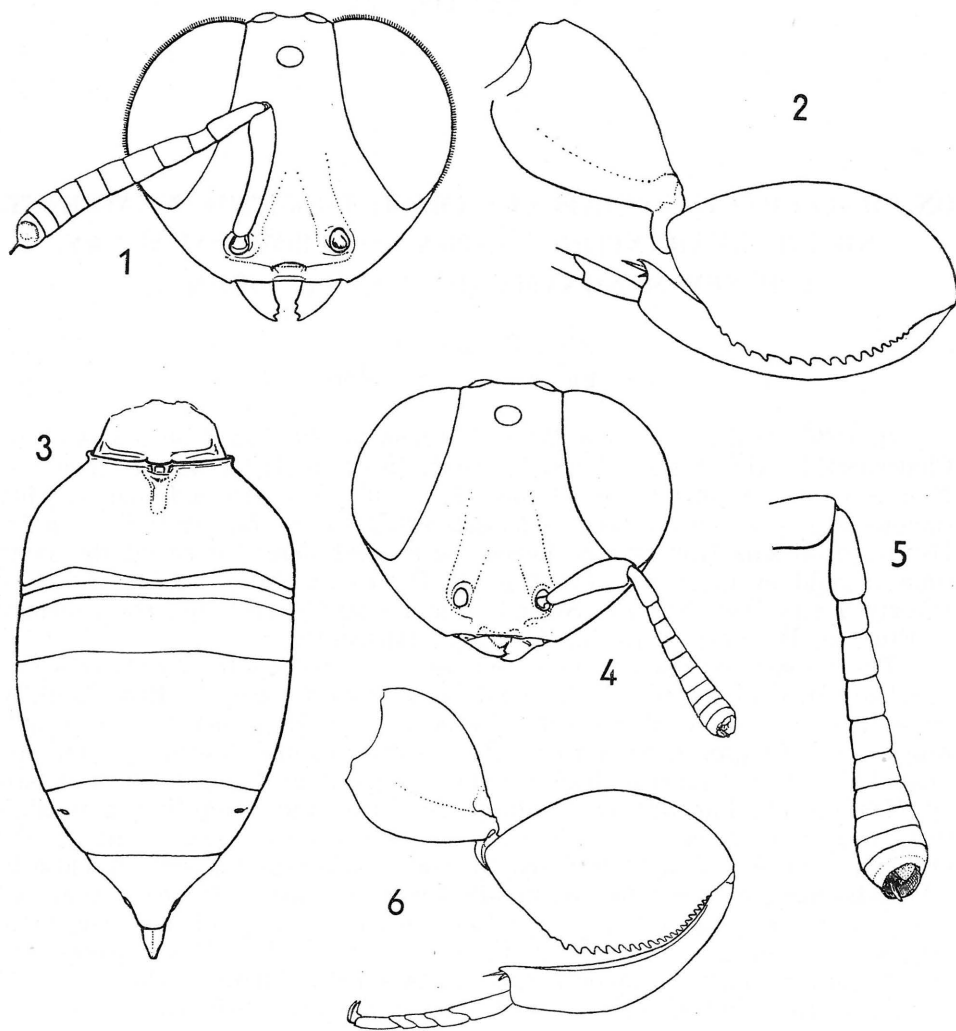
(Department of Entomology, National Museum, Praha)

In 1936 Masi erected the genus *Neochalcodectus* based on a species of Chalcedectidae (cf. Burks, 1958, in First Suppl. to Hym. Amer. north of Mex. Syn. Cat., p. 83) found in Sinai Peninsula. Recently a female of this curious group of Chalcid flies was submitted to me for identification by Mr. Bytínski-Salz from Israel, hence the present note. Nearly at the same time I could examine also the type of *Polychromatium sedecimdentatum* (Westw.) var. *guaraniticum* Strand from Paraguay (through the courtesy of Prof. H. Bischoff of Berlin Zoological Museum).

The female specimen from Israel proves to belong to *Neochalcodectus sinaiticus* Masi (1936, p. 68), although some features seem to differ slightly from those of the Sinai specimens, especially in some details concerning propodeal sculpture, at least as written in the original description. On the propodeum there are two deep furrows (instead of "coste" as expressed by Masi, p. 69, line 34) converging backward, and delimiting a median trapezoidal area. Each furrow is divided by several cross carinae into a row of round pits. A similar crenulated furrow runs across the sclerite close to its caudal margin except for the middle where the furrow is rather removed from the margin, called "una zona ad arco suddivisa in areole da brevi coste longitudinali, ed una zona marginale, a collare, liscia" in Masi's paper, the latter feature being the smooth space between the furrow arched forward here, and the hind margin of propodeum. Spiracles are oval instead of round, and separated from the metanotal margin by a space nearly equal to the greater diameter of the spiracular hole. Relative propodeal length along median line, 12, breadth at hind corners, 62. Length of body, 4 mm.

Having compared this specimen with the type of *Polychromatium sedecimdentatum* var. *guaraniticum* Strand from Paraguay, I found them very similar one to the other. The accompanying figures 1—6 might illustrate this fact, to some extent at least.

Perhaps I cannot say anything definite concerning the validity of Strand's variety *guaraniticum*, as the type of *P. sedecimdentatum* (= *Chalcedectus sedecimdentatus*) is not known to me except from Westwood's original description in the *Thesaurus Entomologicus Oxoniensis*, p. 141, 1874. However, I deem that *guaraniticum* Strand is either a synonym of a described



Figs. 1—2, *Chalcedectus guaraniticus* (Strand), ♀, head and hind leg. — Figs. 3—6, *Chalcedectus sinuaticus* (Masi), ♀, gaster, head, antenna (fig. 5 twice as large as fig. 4), hind leg externally.

species or a valid species itself, but no lower taxonomic unit worth naming, and, consequently, it would be probably best to call this form *Chalcedectus guaraniticus* (Strand), n. comb., unless a synonymy of it is confirmed. *Chalcedectus sedecimdentatus* (Westw.) was described from Para, Northern Brazil, *Ch. guaraniticus* (Strand) comes from Paraguay.

I am afraid that Strand did not take notice of the short second gastral tergite when describing his variety *guaraniticum*. His statements (1911,

p. 95), "...erst das vierte und fünfte Abdominalsegment sind an der Basis deutlich quergestrichelt, nicht das sechste, sondern das fünfte Segment ist beiderseits mit einer großen Punktgrube versehen, ..." should be altered in "erst das fünfte und sechste Abdominalsegment sind an der Basis deutlich quergestrichelt, das sechste Segment ist beiderseits mit einem Luftloch versehen ...".

The comparison of the two species available directed my interest to the generic name problem. Masi compared his genus *Neochalcodectus* with *Chalcodectus* Walker basing his comparison on Ashmead's key of 1904 (p. 281) and Walker's original description. As early as 1899 Ashmead synonymized also *Polychromatium* D. T. (= *Polychroma* Westw.) with *Chalcodectes* (sic!) Walk., and this synonymy seems to be very reasonable, though, naturally, I cannot add anything new to the synonymy proposed, not having the type species of all the genera available for study. So far as it concerns the Near East species, there is also nothing that could justify any generic discrimination against the South American species, though the singular occurrence in the Old World probably made Masi erect a new genus for it. Having found no reason of the opposite view I feel it necessary to synonymize *Neochalcodectus* Masi with *Chalcodectus* Walker, and to propose a new combination for the Near East species, viz. *Chalcodectus sinaiticus* (Masi).

Also *Episystole* Girault, 1927, judging from a "type" specimen of *E. poeta* Grlt. (the type species) deposited in the Deutsches Entomologisches Institut must be regarded a synonym of *Chalcodectus* Westw. The differences are only of specific value. The mentioned specimen was presented by Girault himself to the named institute. The two species described by Girault are then *Chalcodectus poeta* (Grlt.) and *Ch. meteorus* (Grlt.), n. comb.

Ch. sinaiticus (Masi) was reared by Mr. Neumark (under No. 99) from an unidentified (? Buprestid) larva boring in *Acacia raddeana*, in Ejn Hosb, Israel, end of August, 1950.

A synoptic catalogue of the species of *Chalcodectus* would be perhaps useful to brush up our knowledge.

Genus *Chalcodectus* Walker

Chalcodectus Walker 1852, *Ann. Mag. Nat. Hist.* (s. 2), 10: 47.

Type: *Chalcodectus maculicornis* Walker. By monotypy.

Polychroma Westwood 1874, *Thesaurus Entomologicus Oxoniensis*, p. 140. Preocc.

Type: *Polychroma histrionica* Westwood. Design. by Gahan and Fagan, 1923.

Polychromatium Dalla Torre 1897, *Wien. Ent. Ztg.*, 16: 88. New name.

Chalcodectus Dalla Torre 1898, *Cat. Hym.*, 5: 186. Emend.

Chalcodectes Ashmead 1899, *Proc. Ent. Soc. Wash.*, 4: 201. Emend.

Episystole Girault 1927, *Rec. S. Austral. Mus.*, 3: 317. New syn.

Type: *Episystole poeta* Girault. Orig. design.

Neochalcodectus Masi 1936, *Boll. Soc. ent. Ital.*, 68: 68. New syn.

Type: *Neochalcodectus sinaiticus* Masi. By monotypy.

annulipes (Ashmead). — Brazil (Matto Grosso). —

Chalcodectes annulipes Ashmead 1904, *Mem. Carnegie Mus.*, 1: 483; pl. XXXVI, Fig. 2.

cuprescens (Westwood). — Australia. —

Polychroma cuprescens Westwood 1874, *Thesaurus Entomologicus Oxoniensis*, p. 142.

Polychromatium cuprescens, Dalla Torre 1898, *Cat. Hym.*, 5: 186.

Chalcodectus cuprescens, Girault 1915, *Mem. Queenst. Mus.*, 4: 216.

- guaraniticus** (Strand). — Paraguay. —
Polychromatium 16-dentatum var. *guaraniticum* Strand 1911, *Wien. Ent. Ztg.*, 30: 95.
- histrionicus** (Westwood). — Brazil (Para). —
Polychroma histrionica Westwood 1874, *Thesaurus Entomologicus Oxoniensis*, p. 141; pl. 26, fig. 6.
Polychromatium histrionicum, Dalla Torre 1898, *Cat. Hym.*, 5: 186.
Chalcedectes histrionica, Ashmead 1904, *Mem. Carnegie Mus.*, 1: 483.
- maculicornis** Walker. — Brazil (Para). —
Chalcedectus maculicornis Walker 1852, *Ann. Mag. Nat. Hist.* (s. 2), 10: 47.
Chalcedectus maculicornis, Dalla Torre 1898, *Cat. Hym.*, 5: 186.
Chalcedectes maculicornis, Ashmead 1904, *Mem. Carnegie Mus.*, 1: 281, 483.
- meteorus** (Girault). — Queensland. —
Episystole meteora Girault 1927, *Rec. S. Austral. Mus.*, 3: 317.
- poeta** (Girault). — Queensland. —
Episystole poeta Girault 1927, *Rec. S. Austral. Mus.*, 3: 317.
- regalis** (Westwood). — Brazil (Amazonas). —
Polychroma regalis Westwood 1874, *Thesaurus Entomologicus Oxoniensis*, p. 141, pl. 26, fig. 7.
Polychromatium regale, Dalla Torre 1898, *Cat. Hym.*, 5: 186.
Chalcedectes regalis, Ashmead 1904, *Mem. Carnegie Mus.*, 1: 483.
- sedecimdentatus** (Westwood). — Brazil (Para). —
Polychroma 16-dentata Westwood 1874, *Thesaurus Entomologicus Oxoniensis*, p. 141.
Polychromatium sedecimdentatum, Dalla Torre 1898, *Cat. Hym.*, 5: 186.
Chalcedectes sedecimdentatus, Ashmead 1904, *Mem. Carnegie Mus.*, 1: 483.
- septemdentatus** (Westwood). — Brazil (Amazonas). — Host: Woodboring (?beetle) larvæ.
Polychroma 7-dentata Westwood 1874, *Thesaurus Entomologicus Oxoniensis*, p. 142.
Polychromatium septemdentatum, Dalla Torre 1898, *Cat. Hym.*, 5: 186.
Chalcedectes septemdentatus, Ashmead 1904, *Mem. Carnegie Mus.*, 1: 483.
Chalcedectus 7-dentatus, Roman 1920, *Arkiv f. Zool.*, 12, № 19: 11.
?Chalcedectus 7-dentatus var. *pallidipes* Roman 1920, *Arkiv f. Zool.*, 12, № 19: 12; fig. 3.
- sinaiticus** (Masi). — Near East (Sinai Peninsula, Israel). — Host: Beetle larva boring in *Acacia raddeana*.
Neochalcedectus sinaiticus Masi 1936, *Boll. Soc. ent. Ital.*, 68: 68.
- texanus** (Brues). — Texas. —
Chalcedectes texanus Brues 1907, *Bull. Wisconsin Nat. Hist. Soc.*, 5: 106.
Chalcedectus texanus, Peck 1951 in Muesebeck, Krombein, Townes; *U. S. Dept. Agr. Monogr.* 2: 584.

REFERENCES CITED IN THE TEXT

- Ashmead W. H., 1899: On the genera of the Cleonymidæ. — *Proc. Ent. Soc. Wash.*, 4: 200—206.
 —, 1904: Classification of the Chalcid flies... — *Mem. Carnegie Mus.*, 1: I—XI, 225—551, pls. XXXI—XXXIX.
- Burks B. D., 1958: Chalcidoidea, in Hymenoptera of America north of Mexico Synoptic Catalog. — *U. S. Dept. Agr., Agr. Monogr.*, 2, First Suppl., pp. 62—84.
- Girault A. A., 1927: Notes on and descriptions of Chalcid wasps (Chalcididæ) in the South Australian Museum. — *Rec. S. Austral. Mus.*, 3: 309—338.
- Masi L., 1936: Nuovo genere di Chalcedectini raccolto nei Sinai (Hymen. Chalcididæ). — *Boll. Soc. ent. Ital.*, 68: 67—71.
- Strand E., 1911: Neue und wenig bekannte exotische Arten der Chalcididengattungen *Megastigmus* Dalm., *Mesodiomorus* Strand (nov. gen.), *Polychromatium* D. T. and *Leucospis* F. — *Wien. Ent. Ztg.*, 30: 93—99.
- Westwood L. O., 1874: *Thesaurus Entomologicus Oxoniensis*. — Oxford, 205 pp., 40 pls.