

- FRANCISCOLO M.E., 1964 - Ricerche sulla fauna appenninica, LXXIX. *Halipidae, Dytiscidae, Gyrinidae* della Sila e dei M.ti Siculi (Note sugli Idrocanтарidi italiani VII), *Mem. Mus. Civ. St. Nat. Verona*, 12, pp. 173-219.
- GALEWSKI K., 1971 - Klucze do oznaczania owadów Polski, XIX, *Coleoptera: Dytiscidae - Pol. Tow. Ent.*, Warszawa, pp. 112, 470 figg.
- GUIGNOT F., 1931-33 - Les Hydrocanthares de France - Ed. Miscellanea Ent. Toulouse.
- GUIGNOT F., 1947 - Coléoptères Hydrocanthares - in « Faune de France », 48, Ed. P. Lechevalier, Paris.
- GUIGNOT F., 1959-61 - Révision des Hydrocanthares d'Afrique (Coleoptera dytiscoidea), *Ann. Mus. Roy. Congo Belge (Tervuren)*, 70-78-90.
- PEDERZANI F., 1967 - Nuovi reperti di *Dytiscidae* italiani. *Boll. Soc. Ent. It.*, Genova, 97, N. 9-10, pp. 153-157.
- PORTA A., 1923 - *Fauna Coleopterorum Italica*, vol. 1, pp. 236-271, Piacenza.
- PORTA A., 1935 - *Supplementum I*, pp. 100-109, Piacenza.
- PORTA A., 1949 - *Supplementum II*, pp. 83-124, San Remo.
- PORTA A., 1959 - *Supplementum III*, pp. 39-42, San Remo.
- SANFILIPPO N., 1955 - Ricerche zoologiche sul Massiccio del Pollino (Lucania-Calabria), XVII, *Coleoptera VII: Dytiscidae, Gyrinidae*. *Ann. Ist. Mus. Zool. Univ. Napoli*, 7, N. 14, pp. 1-4.
- SANFILIPPO N., 1962 - Materiali per lo studio degli *Halipidae, Dytiscidae* e *Gyrinidae* della fauna italiana (I Contributo), *Boll. Soc. Ent. It.*, Genova, 92, pp. 17-25.
- SANFILIPPO N., 1963 - Descrizione di una nuova specie del genere *Hyphydrus* rinvenuta in Italia (*Coleoptera Dytiscidae*). *Boll. Soc. Ent. It.*, Genova, 93, N. 5-6, pp. 76-80.
- SANFILIPPO N., 1967 - Contributo alla conoscenza degli Idrocanтарidi del Lago Trasimeno (*Coleoptera: Halipidae, Dytiscidae*). *Riv. Idrob. Univ. Perugia*, 6, Fasc. 2/3, pp. 139-142.
- Indirizzo dell'Autore* : Fernando Angelini, Via Quinto Ennio 18, 72021 Francavilla Fontana (Brindisi).

M.S.K. GHAURI

Commonwealth Institute of Entomology, London.

A NEW SPECIES OF *ORTHOTYLUS* FIEBER FROM IRAQ

(*Heteroptera Miridae Orthotylinae*)

The following description of a new species of *Orthotylus* is based on a small collection of mirids submitted for identification by Dr. H. Robersts, F.A.O. Forest Entomology Expert working in Iraq. The data-sheet accompanying the collection indicates that the host of the new species is *Quercus aegilops*, one of three species of oaks that seems to attract more insects than the other two, *Q. libani* and *Q. infectoria* (vide GHAURI, 'A new genus & species of Coelidiinae (Homoptera: Cicadelloidea) in press).

Genus *Orthotylus* Fieber

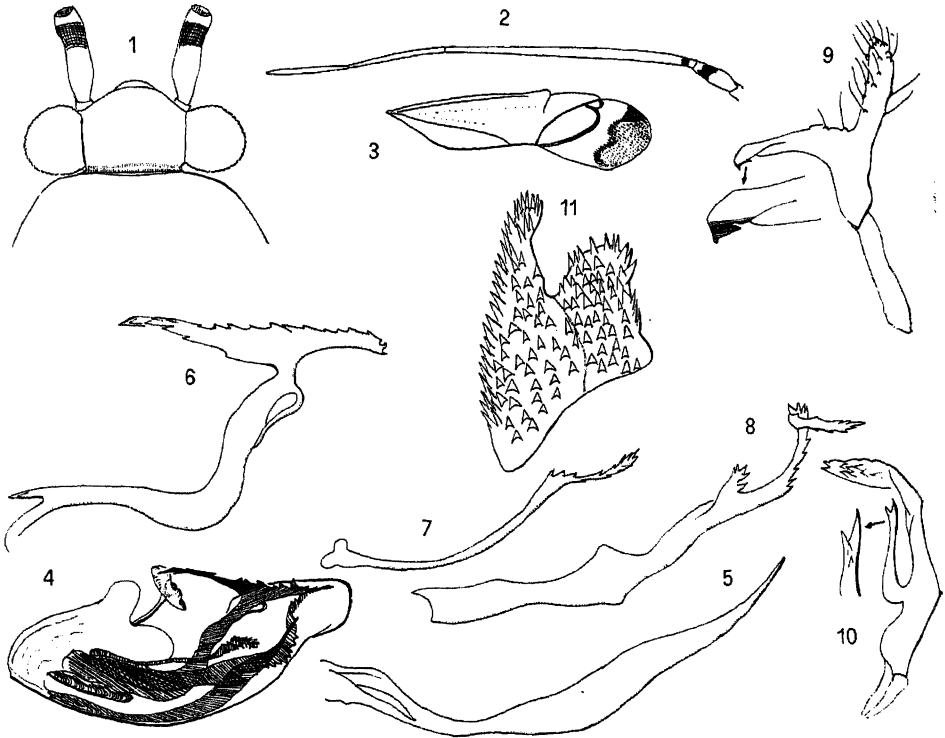
FIEBER, 1858, 315. Type species, *Cimex nassatus* Fabricius, 1787, 304, fixed by Kirkaldy, 1906, 127.

Orthotylus cornupunctus sp. n. (figs. 1-11)

Colour. Pale green, pubescens unicolour, pale erect hairs only, eyes red, 1st antennal segment with a black patch subapically on ventral surface, a similar

black narrow ring near base of 2nd antennal segment; tegminal membrane with fuscus and wavy fascia delimiting apical lighter smoky areas as shown in figure 3; rostrum brown, last segment slightly darker than rest.

Measurements (mm) of ♂ (♀). Width of head across eyes 0.76 (0.71), width of vertex between eyes 0.38 (0.28); length of 1st, 2nd, 3rd and 4th antennal seg-



Orthotylus cornupunctus sp. n., figs. 1-11. - 1, head, dorsal view; 2, antenna, ventral view; 3, tegmen; 4, aedeagus, lateral view; 5, long right vesical appendage; 6, smaller right vesical appendage; 7, small left vesical appendage; 8, large left vesical appendage; 9, left paramere; 10, right paramere; 11, K-structure of ♀.

ments 0.38 (0.33), 1.82 (1.39), 0.67 (0.67) and 0.57 (0.57), respectively; width of pronotum at anterior margin 0.67 (0.57) and at base 1.15 (0.95), length of pronotum 0.62 (0.57); length of tegmen 3.95 (3.16) and of total body 4.47 (3.95).

Structure. Rostrum reaching in between hind coxae; vertex as wide as length of 1st antennal segment and twice width of an eye; pygophore opening with a row of long setae along left margin, theca longer than every one of vesical appendages, ejaculatory duct short, right pair of vesical appendages (figs. 5 and 6) of almost equal length, one member with simple pointed apex, other with broad apex with denticulate margins, and a subapical loope-like branch, left pair of vesical appendages (figs. 7 and 8) unequal in length, longer member slightly twisted, both with denticulate apices; left paramere (fig. 9) with a branch

arising at right angle near middle of apex, right paramere (fig. 10) also branched, apices of both, main stem and of branch deeply notched; ♀ K structure as shown in figure 11.

Holotype ♂ Iraq, Sulaimanyia, 13.X.71, (*Forest Insect Survey, Iraq*), on *Quercus aegilops*, IR 274 (C.I.E. A 5201); paratypes, 2♂ and 2♀, same data as holotype; deposited in the British Museum (Natural History), London.

Remarks. The new species runs to *Orthotylus caprai* Wagner (1955, 92) in the key to species by STICHEL (1957, 511), to which it resembles in the shape of right paramere; however, the new species can be distinguished from the former by the colour of 1st and 2nd antennal segments and by the shape of left paramere, vesical appendages and the K-structure of the ♀. *Orthotylus cornupunctus* sp. n. belongs to the *marginalis* group of the subgenus *Orthotylus sensu stricto* (vide SOUTHWOOD, 1953, 444).

Acknowledgements. The writer's warmest thanks are due to Dr. P. Freeman, Keeper, and Dr. W.J. Knight, Head Hemiptera Section, of the Department of Entomology, British Museum (Natural History), London, for permission to study material of Miridae under their care and for other facilities provided. Dr. H. Roberts of the F.A.O. kindly supplied the material for the description of the new species.

SUMMARY

A new species of the genus *Orthotylus* (Heteroptera Miridae), *Orthotylus cornupunctus* sp. n. on *Quercus aegilops*, from Iraq is described. The new species is near *Orthotylus caprai* Wagner.

RIASSUNTO

Una nuova specie di Orthotylus Fieber dell'Iraq (Heteroptera Miridae Orthotylidae).

Viene descritto *Orthotylus cornupunctus* n. sp., da *Quercus aegilops* dell'Iraq. La nuova specie é affine all'*O. caprai* Wagner.

REFERENCES

- FABRICIUS, J.C., 1787 - Mantissa Insectorum. 2: 304 (251).
 FIEBER, F.X., 1858 - Neuere Entdeckungen in europäischen Hemipteren. *Wien. ent. Mschr.* 8: 321-336.
 GHAURI, M.S.K., 1972 - A new genus and species of Coelidiinae (Homoptera; Cicadelloidea) from Iraq. (in press).
 KIRKALDY, G.W., 1906 - List of the genera of the Pogliopodous Hemiptera-Heteroptera, with their type species, from 1758 to 1904 (and also of the aquatic and semi-aquatic Trochilopoda). *Trans. Amer. ent. Soc.* 32: 117-156.
 SOUTHWOOD, T.R.E., 1953 - The morphology and taxonomy of the genus *Orthotylus* Fieber (Hem., Miridae), with special reference to the British species. *Trans. R. ent. Soc. Lond.* (11), 104: 415-449.
 STICHEL, W., 1957 - Illustrierte Bestimmungstabellen der Wanzen. II Europa, (Hemiptera-Heteroptera Europae), (16): 511.
 WAGNER E., 1955 - Eine neue *Orthotylus*-art von der Insel Sardinien (Hem. Het. Miridae). *Boll. Soc. ent. ital.* (5-6), 85: 92-93.