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CARNUS HEMAPTERUS NITZSCH, 1818 (DIPTERA: CARNIDAE) PARASITE ON *MEROPS APIASTER* L. (AVES: MEROPIDAE) IN SOUTHERN ROMANIA*

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Abstract. The first mention of the species *Carnus hemapterus* (Diptera: Carnidae) from Romania was made by Collin (1911) on a specimen collected from a juvenile of *Falco cherrug*, from Malcoci (Tulcea), on 25th of May 1907, by A. Rettig. After 90 years, we found again this species on four chickens of *Merops apiaster* from Southern Romania.

Résumé. La première mentione de l'espèce *Carnus hemapterus* (Diptera: Carnidae) pour Roumanie a été faite par Collin (1911) avec un exemplaire collecté sur un juvénile de *Falco cherrug* à Malcoci (Tulcea), le 25 mai 1907, par A. Rettig. Après 90 années nous retrouvons cette espèce sur 4 oisillons de *Merops apiaster* dans le sud de Roumanie.

Keywords: Bee-eater, *Merops apiaster*, adults, chickens, fly, *Carnus hemapterus*.

Inherent difficulties occurred on the spot during the studies on the Bee-eater, *Merops apiaster*, as their catching or nest digging (extremely tiresome action and dangerous for the birds taking into account the risk of the earth fall on nesting chickens or of disturbing the nest) made the ectoparasites and arthropods, in general, to be less known for a very long period of time. Kristofik & coll. (1996) concluded such a study on the Bee-eater nests from Slovakia (the only one of this kind in Europe) and found a large number of organisms of different taxonomical groups: mallophaga, flies, spiders, pseudoscorpions, sheep lice, coleopterans, etc.

Carnus hemapterus was collected for the first time in Europe from *Merops apiaster*, in 1970, from Hungary by L. Papp (Grimaldi, 1997) and mentioned by Kristofik and coll. (1996) in the Bee-eater colonies from Slovakia, where he found 286 specimens on 46 chickens. In Europe were found around 34 host bird species of 18 families (Grimaldi, op.cit.) from 13 countries (Bequaert, 1942): Netherlands, Finland, Yugoslavia, Germany, Austria, Switzerland (Buttiker & coll., 1974), Romania, Italy, Lithuania, France, England, Hungary, Slovakia.

In specialized literature from Romania there are a few data on the ectoparasites on *Merops apiaster*. Papers which refer to the parasite arthropods on the Bee-eater are those published by Negru (1958, 1959), with mentions on mallophaga, and by Kiss and Hohn (1980) where it is mentioned *Ornithomya avicularia* (Fam. Hippoboscidae), in fact the first mention on a parasite flie on the Bee-eater from Romania.

In July 1997 I remarked on the four chickens from a Bee-eater nest from Frăteşti (Fig. 2), southern Romania (Fig.1), several small insects which were moving fast on featherless skin parts. I collected 10 specimens which I put in alcohol. The study, using a binocular, revealed a fly, *Carnus hemapterus* (Diptera:

* English translation by Mihaela Barcan Achim.

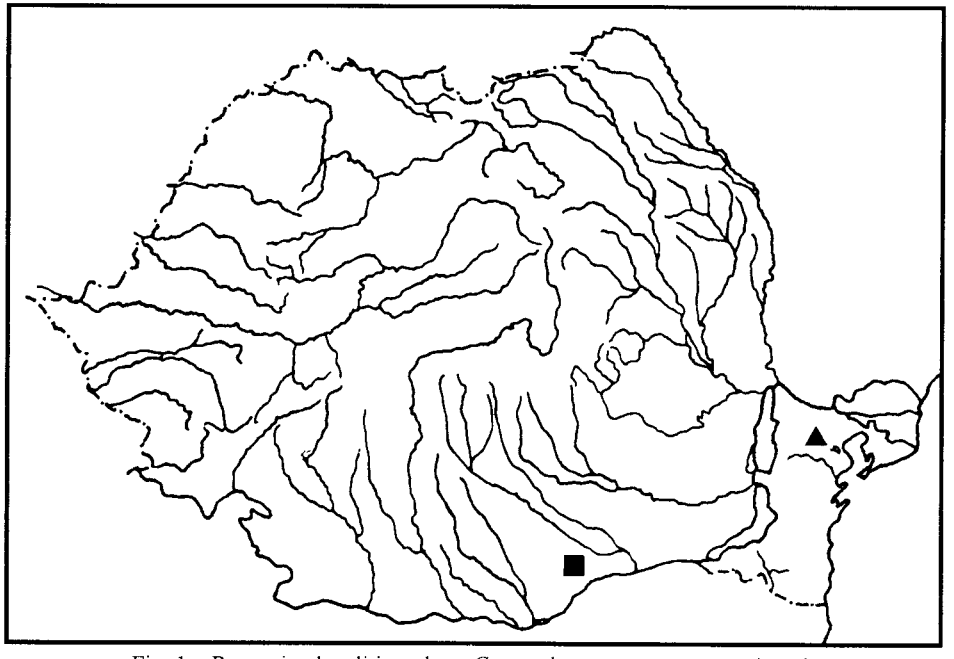

Fig. 1 – Romanian localities where *Carnus hemapterus* was mentioned:
■ - Frăteşti (1997); ▲ - Malcoci (Tulcea)

Fam. Carnidae). The identification was confirmed to us by Dr. L. Papp (Museum of Natural History, Budapest) and by Dr. M. Weinberg (Museum of Natural History, Bucharest).

Carnus hemapterus is a small fly, of 2–3 mm, hematophagous, ectoparasite, ornithophilous. Females fixed on their host lose the wings, and the abdomen develops very much.

The first mention for Romania of a specimen of *Carnus hemapterus* was made by Collin (1911) from a juvenile of *Falco cherrug* Gray, 1834 (*Falco sacer*) from Malcoci (Tulcea) (Fig.1), on 25th of May 1907, collected by A. Rettig.

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CARNUS HEMAPTERUS NITZSCH, 1818 (DIPTERA: CARNIDAE) PARAZIT PE *MEROPS APIASTER* L. (AVES: MEROPIDAE) ÎN SUDUL ROMÂNIEI

REZUMAT

În iulie 1997 am colectat dintr-un cuib de albinărel, cu patru pui, de la Frăteşti, sudul României, 10 exemplare de *Carnus hemapterus* (Diptera: fam. Carnidae), muscă mică de 2-3 mm, hematofagă, ectoparazită şi ornitofilă. Femelele fixate pe gazdă îşi pierd aripile, iar abdomenul lor se dezvoltă foarte

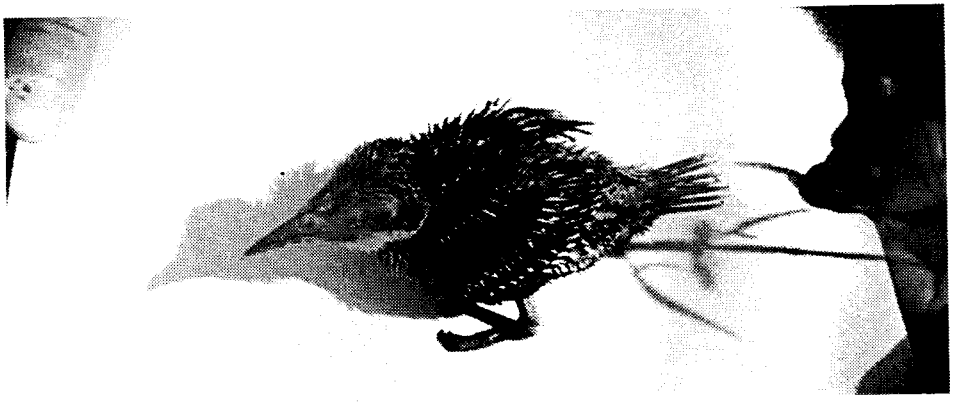

Fig. 2 – Nests from the colony of *Merops apiaster* from Frăteşti (up); chicken of *Merops apiaster* with parasites (down) (Photo: I. Petrescu)

mult. Prima semnalare pentru România este făcută de Collin (1911) pentru un exemplar de *Carnus hemapterus* colectat de pe un juvenil de *Falco sacer (Falco cherrug)* de la Malcoci (Tulcea) în 25 mai 1907, de A. Rettig. După 90 de ani regăsim această specie pe pui de *Merops apiaster* în sudul României.

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