



Taxonomic notes on *Entedonomphale* (Hymenoptera: Eulophidae)

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The recent discovery of a brachypterous female of *Entedonomphale carbonaria* (Erdös) (Hymenoptera: Eulophidae: Entedoninae) in Bulgaria is being reported. It made possible to make a positive conclusion about its conspecificity with the North American species *E. kaulbarsi* (Yoshimoto), which has a brachypterous female identical to the brachypterous female from Bulgaria, and also a fully winged male identical to the male of *E. carbonaria* from Europe (Triapitsyn 2005). Also included in this communication are taxonomic notes on another, little known species of the genus *Entedonomphale* Girault, *E. postmarginalis* (Shafee, Rizvi & Khan), comb. n. from *Entedonastichus* Girault. This species was originally described from India as *Euderomphale postmarginalis* Shafee, Rizvi & Khan (Shafee *et al.* 1988) and later transferred to *Entedonastichus* by Hayat *et al.* (2005).

The specimens of *E. carbonaria* from Bulgaria were initially preserved in 70% ethanol; later they were dried using a critical point dryer, point-mounted, and then slide-mounted in Canada balsam. They are deposited in the insect collection of Department of Zoology, University of Plovdiv “Paisii Hilendarski”, Plovdiv, Bulgaria (PUPB).

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Entedonomphale carbonaria (Erdös, 1954)

(Figs 1–4)

Thripoctenoides carbonarius Erdös 1954: 345 + fig. 12c (p. 346). Type locality: Tompa, Hungary.

Entedonomphale carbonaria (Erdös): Triapitsyn 2005: 285–286 (taxonomic history, synonymy, references, diagnosis, illustrations, distribution); Boyadzhiev & Triapitsyn 2007: 736 (key to the European species of *Entedonomphale*), 740–741 (record of the fully winged female from Oregon, USA).

Thripoctenoides kaulbarsi Yoshimoto 1981: 723–725. Type locality: Riceville, Ontario, Canada. **Syn. n.**

Entedonomphale kaulbarsi (Yoshimoto): Triapitsyn 2005: 277–278 (taxonomic history, references, diagnosis, illustrations, description of the male, distribution).

Thripoctenoides albicoxis Szelényi 1982: 387–388. Type locality: Nagyiván, Hungary. Synonymized under *E. carbonaria* by Triapitsyn 2005: 285.

New material examined. BULGARIA. Montana Region, Reservoir Ogosta (near Montana), 43°23'09"N 23°12'53"E, 175 m, 9.iv.2005, A.K. Antonov (sweeping grasslands) [1 brachypterous female and 1 fully winged female, PUPB].

Distribution. Bulgaria, Canada, Germany, Hungary, Russia, Slovakia, Slovenia, Sweden, and USA (Triapitsyn 2005, Boyadzhiev & Triapitsyn 2007).

Comments. As previously suspected by Triapitsyn (2005) and Boyadzhiev & Triapitsyn (2007), the female of *E. kaulbarsi* indeed turned out to be just a brachypterous form of *E. carbonaria*. The antennae and other morphological features are identical among *E. kaulbarsi* from Canada and the specimens of *E. carbonaria* from Bulgaria and Hungary, hence the synonymy. Coloration of the legs seems to be quite variable in this species: the legs of the brachypterous female from near Montana, Bulgaria, are pale brown while the legs of the fully winged female from the same location are mostly brown to dark brown. To assist with recognition of *E. carbonaria*, which has never been properly illustrated, we