

# Notes on Encyrtidae (Hymenoptera, Chalcidoidea) described or recorded from Denmark.

PETER BONDE JENSEN

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The present paper is based on material of Encyrtidae from Denmark described or recorded by Kryger (1943, 1951) and Bakkendorf (1965). A revised list of 30 species is presented and 3 species new to the Danish fauna are added. Four cases of new synonymy are proposed.

Peter Bonde Jensen, Institut for Zoologi og Zoofysiologi, Zoologisk Laboratorium, Aarhus Universitet, Ole Worms Allé, Bygning 135, DK - 8000 Aarhus C.

Notes on Danish Encyrtidae were published by Kryger (1943, 1951) and Bakkendorf (1965). Recently I have had the opportunity to examine the collections of Encyrtidae at the Zoological Museum, University of Copenhagen. These collections include materiale mainly collected by R. W. T. Schlick, J. P. Kryger and O. Bakkendorf, and the types described by Bakkendorf. In this paper most of the records of Danish Encyrtidae published by Kryger and Bakkendorf are revised. I have also studied the classification of the Encyrtidae proposed by Hoffer (1955) and Trjapitzin (1968a, 1968b, 1973a, 1973b) and agree with the basic division of the family into two subfamilies, namely the Tetracneminae and the Encyrtinae.

## ABBREVIATIONS

BMNH: British Museum (Natural History), London, England.  
ZLUA: Zoological Laboratory, University of Aarhus, Denmark.  
ZMUC: Zoological Museum, University of Copenhagen, Denmark.  
ZMUL: Zoological Museum, University of Lund, Sweden.  
ZMUO: Zoological Museum, (Hope Department of Entomology), University of Oxford, England.

## CONFIRMED RECORDS

Mainly based on examination of primary types the records of the following species were confirmed:

## TETRACNEMINAE:

*Moraviella inexpectata* Hoffer, 1954 (the mandibles of the specimen described by Bakkendorf (1965: 152) are tri-dentate, the middle tooth being the longer).

*Charitopus fulviventris* Förster, 1860

*Ericydnus ventralis* (Dalman, 1820)

*Dinocarsis hemiptera* (Dalman, 1820)

*Aglyptus rufus* (Dalman, 1820)

*Anagyrus schoenherri* (Westwood, 1837)

*Leptomastix epona* (Walker, 1844)

As *Leptomastix histrio* Mayr, 1876, by Kryger (1951: 107) and Bakkendorf (1965: 134), lectotype of *Encyrtus epona* Walker (ZMUO) examined).

## ENCYRTINAE:

*Aphycoides clavellatus* (Dalman, 1820)

*Microterys aeneiventris* (Walker, 1837)

As *Microterys micropterus* (Mercet, 1921) by Bakkendorf (1965: 1947).

*Microterys tessellatus* (Dalman, 1820)

*Aschitus madyes* (Walker, 1837)

As *Paraphaenodiscus incertus* (Mercet, 1921) by Bakkendorf (1965: 159)

*Trichomasthus cyaneus* (Dalman, 1820)

*Aphidencyrtus aphidivorus* (Mayr, 1876)

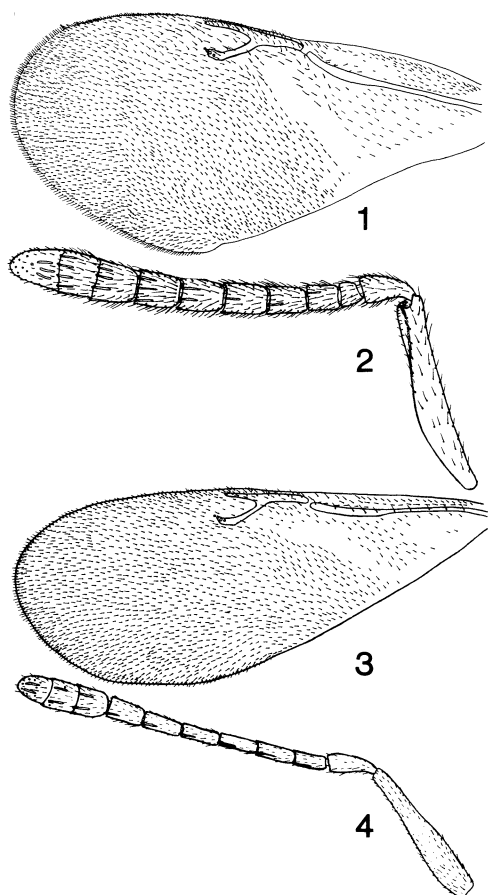
*Pseudencyrtus misellus* (Dalman, 1820)

*Cerchysius subplanus* (Dalman, 1820)

*Blastothrix sericea* (Dalman, 1820)

*Psyllaephagus lusitanicus* (Mercet, 1921)

*Cercobelus jugaeus* (Walker, 1837)  
*Discodes aeneus* (Dalman, 1820)  
*Choreia inepta* (Dalman, 1820)  
*Ectroma reinhardi* (Mayr, 1876)  
*Anabrolepis zetterstedtii* (Westwood, 1837)  
*Cerapterocerus mirabilis* Westwood, 1833  
*Parechthrodryinus comara* (Walker, 1837)  
 As *Protyndarichus metallicus* (Mercet, 1921), by Bakkendorf (1965: 159).  
*Copidosoma dium* (Walker, 1837)  
 = *Copidosoma igneum* Bakkendorf, 1965.  
*Litomastix chalconota* (Dalman, 1820)  
*Litomastix truncatella* (Dalman, 1820)  
*Ageniaspis fuscicollis* (Dalman, 1820)  
*Encyrtus albitarsis* Zetterstedt, 1838  
*Encyrtus infidus* (Rossi, 1790)



Figs. 1-4. 1-2 *Moraviella inexpectata* Hoffer, 1954. 1. Forewing. 2. Antenna. 3-4. *Charitopus fulviventris* Förster, 1860. 3. Forewing. 4. Antenna.

## NEW SYNONYMIES

*Blastothrix truncatipennis* (Ferriere, 1955)  
 = *Microterys minutus* Bakkendorf, 1965: 147. SYN. N.

I have not seen the holotype of *Microterys truncatipennis* Ferriere, but I consider the determination of *Microterys truncatipennis* Ferriere, by Bakkendorf (1965: 152) to be correct.

*Ectroma arenarium* (Erdős, 1955)  
 = *Concentrolinea heterocornis* Bakkendorf, 1965: 120. SYN. N.

I have not seen the holotype of *Metallon arenarum* Erdős, but from the descriptions and keys given by Erdős (1955) and Hoffer (1957), I feel quite sure that *Concentrolinea heterocornis* Bakkendorf is a junior synonym of *Ectroma arenarium* (Erdős).

*Litomastix cervius* (Walker, 1846)  
 = *Litomastix tvediensis* Bakkendorf, 1965: 137. SYN. N.

Lectotype of *Encyrtus cervius* Walker (BMNH) examined.

*Litomastix aretas* (Walker, 1838)  
 = *Litomastix suspectus* Bakkendorf, 1965: 134. SYN. N.

My interpretation of this species is based on the description of *Copidosoma tortricis* Waterston, 1920: 2 (= *Litomastix aretas* (Walker)), and the study of English specimens, which have been compared with the lectotype of *Encyrtus aretas* Walker (BMNH).

## NEW RECORDS

Based on material recorded under other names.

*Syrphophagus idmon* (Walker, 1848). Lectotype (Type Hym. 5. 1093, BMNH) of *Encyrtus idmon* Walker examined. NEW RECORD - 1♀, Thy, Nors, 26.vii.1956 (O. Bakkendorf), recorded as *Syrphophagus fuscipes* (Dalman, 1820), by Bakkendorf (1965: 163).

*Blastothrix britannica* Girault, 1918, NEW RECORD - 2♀♀, Copenhagen, garden of Hauschild, 21.x.1872 (R. W. T. Schlick); 1♀, N. Zealand, Charlottenlund, 15.x.1882 (R. W. T. Schlick); 1♀, N. Zealand, Hillerød, Præstevang, 4.vi.1906 (bred from Coccoidea on *Alnus*; J. P. Kryger); 1♀, N. Zealand, Tisvilde, 7.x.1923 (J. P. Kryger).

Specimens recorded as *Blastothrix sericea* (Dalman, 1820) by Bakkendorf (1965: 117). *Zeteticontus planiscutellum* Mercet, 1921. NEW RECORD - 1♀, Thy, Nors, 14.vii.1955 (O. Bakkendorf), recorded as *Zeteticontus laeviscutum* (Thomson, 1876), by Bakkendorf (1965: 166). Holotype of *Microterys laeviscuta* Thomson (ZMUL) examined.

## MISIDENTIFICATIONS

Though recorded by Bakkendorf (1965) the following species have not been found in Denmark: *Ericydnus longicornis* (Dalman, 1820); *Syrphophagus (Aphidencyrtus) fuscipes* (Dalman, 1820); *Zeteticontus laeviscutum* (Thomson, 1876) and *Copidosoma montanum* Mercet, 1921.

## DISCUSSION

It has not been possible to find any type-material of *Pholidoceras jarli* Kryger, 1943 in the collections at ZMUC. The only material in the collections of *Rhopus* Förster, 1856 from N. Zealand, Strødam, 8-14.viii.1927 is a male (N. Zealand, Strødam, 8.viii.1927, leg. J. P. Kryger). This male differs slightly from the description of *Pholidoceras jarli* Kryger in the length of gaster, the position of cerci and the number of scale-like sense organs of the sixth funicle segment. Personally I consider this male to be conspecific with a female with three-segmented clava. Since it seems like the species of *Rhopus* Förster have not been satisfactorily defined, and because of the slight differences from the discription, I hesitate in designating the above-mentioned male as a lectotype of *Pholidoceras jarli* Kryger.

It has not been possible to find the specimens and thereby confirm the record of *Metaphycus zebratus* (Mercet, 1917), by Bakkendorf (1965: 142).

Species described or recorded in the genera *Ericydnus* Walker, *Anagyryus* Howard, *Microterys* Thomson, *Ooencyrtus* Ashmead, *Psyllaephagus* Ashmead, *Copidosoma* Ratzeburg and *Homalotylus* Mayr will be treated in a coming paper together with the unrecorded species present in ZMUC.

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## Sammendrag

Bemærkninger om Encyrtidae (Hymenoptera, Chalcidoidea) beskrevet eller registreret fra Danmark.

I forbindelse med studier over europæiske Encyrtidae undersøgtes det meste af det materiale, der lå til grund for artikler om danske Encyrtidae publiceret af Kryger (1943, 1951) og Bakkendorf (1965). Baseret på studium af et omfattende type-materiale kunne fundene af 30 arter (7. Tetracneminae og 23 Encyrtinae) bekræftes.

Jeg foreslår følgende synonymiseringer: *Blastothrix truncatipennis* (Ferriere, 1955) = *Microterys minutus* Bakkendorf, 1965. *Ectroma arenarium* (Erdös, 1955) = *Concentrolinea heterocornis* Bakkendorf, 1965. *Litomastix cervius* (Walker, 1846) = *Litomastix tvediensis* Bakkendorf, 1965. *Litomastix aretas* (Walker, 1838) = *Litomastix suspectus* Bakkendorf, 1965.

På basis af materiale publiceret af Bakkendorf (1965) gives 3 nye arter for Danmark: *Syrphophagus idmon* (Walker, 1848), *Blastothrix britannica* Girault, 1918 og *Zeteticontus planiscutellum* Mercet, 1921.

Følgende 4 arter er endnu ikke fundet i Danmark (fejlbestemmelser af Bakkendorf, 1965): *Ericydnus longicornis* (Dalman, 1820), *Syrphophagus (Aphidencyrtus) fuscipes* (Dalman, 1820), *Zeteticontus laeviscutum* (Thomson, 1876) og *Copidosoma montanum* Mercet, 1921.

Afsluttende kan oplyses at det ikke har været muligt, at finde typemateriale af *Pholidoceras jarli* Kryger, 1943 i samlingerne på ZMUC, ej heller har det været muligt at finde de individer, der af Bakkendorf (1965) blev bestemt til at være *Metaphycus zebratus* (Mercet, 1917).

Arter beskrevet i eller fund henført til slægterne *Ericydnus* Walker, *Anagyryus* Howard, *Microterys* Thomson, *Ooencyrtus* Ashmead, *Psyllaephagus* Ashmead, *Copidosoma* Ratzeburg og *Homalotylus* Mayr vil blive behandlet i en senere artikel, ligesom de mange arter i de danske samlinger endnu ikke angivet som fundne i Danmark.

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