

Braconidae (Hymenoptera) of Norway, Part II

MATTHIAS RIEDEL & LARS OVE HANSEN

Riedel, M. & Hansen, L.O. 2014. Braconidae (Hymenoptera) of Norway, Part II. *Norwegian Journal of Entomology* 61, 147–159.

The present faunistic survey gives distributional records for 125 species of the family Braconidae (Hymenoptera) from several subfamilies (Agathidinae, Alysiinae, Aphidiinae, Brachistinae, Braconinae, Cheloninae, Doryctinae, Helconinae, Macrocentrinae, Microgasterinae, Opiinae, Orgilinae, Rhyssalinae). 79 taxa have previously not been reported from Norway. Nine of them are new to Scandinavia, namely *Phaenocarpa fidelis* Fischer, 1970, *Phaenocarpa trisulcata* Stelfox, 1950, *Eubazus planifacies* van Achterberg, 2003, *Eubazus shishiniovae* van Achterberg, 2000, *Chelonus lissogaster* Tobias, 1972, *Syntretus conterminus* (Nees, 1834), *Macrocentrus cingulum* Brischke, 1882, *Microgaster subcompleta* Nees, 1834, and *Orgilus ischnus* Marshall, 1898. A further 46 species previously recorded as Norwegian in Fauna Europaea (van Achterberg 2014), but with no further locality information, are also included in the list.

Key words: Norway, Scandinavia, new records, Braconidae, Agathidinae, Alysiinae, Aphidiinae, Brachistinae, Braconinae, Cheloninae, Doryctinae, Helconinae, Macrocentrinae, Microgastrinae, Orgilinae, Opiinae, Rhyssalinae.

Matthias Riedel, Amselweg 9 A, D-29683 Bad Fallingb., Germany.
E-mail: mamaflo.riedel@t-online.de

Lars Ove Hansen, Natural history Museum, University of Oslo, P.O.Box 1172 Blindern, NO-0318 Oslo, Norway. E-mail: l.o.hansen@nhm.uio.no

Introduction

With more than 20 000 species worldwide, Braconidae represents a major family of parasitoid Hymenoptera (Yu *et al.* 2012). Despite their abundance and economic importance, braconid wasps have only been studied by a few entomologists leaving their taxonomy and geographical distribution in a fragmentary state, even in better studied areas such as Europe.

Previous studies on Norwegian Braconidae have reported 271 different species from this country (Van Achterberg 2014). Only one larger publication on Braconidae has been published in the last two decades, and that is Riedel *et al.* (2002) which reported 81 braconid taxa for the first time from Norway.

To establish a better knowledge of the diversity and distribution of Norwegian Braconidae, we determined additional material and collected from different localities around Norway. The present publication covers several braconid subfamilies which just recently could be studied sufficiently due to the availability of newer taxonomic revisions and identification keys.

Material and methods

The present paper deals with material of Braconidae mostly collected in the southern and southeastern parts of the country, mainly by the use of Malaise traps or hand-nets. To avoid misinterpretations, we excluded the species

from our list which have not been identified with accuracy. All determinations were done by the first author (M.R.) using the keys published in Medvedev (1986a, 1986b) for most groups. For the genus *Dinotrema* the key from Fischer (1976) was applied. Reference material of all taxa is kept in the personal collection of the first author and in the collections at the Natural History museum, University of Oslo.

For arrangement of subfamilies, tribes, and genera we used the suprageneric classification published by Yu *et al.* (2012). The faunistic divisions within Norway follow Økland (1981), and are given in **bold** in the text, and the «European Invertebrate System» (EIS) follows Endrestøl (2005). The distribution of each species is extracted from Yu *et al.* (2012). Taxa new for the Norwegian fauna are marked with an asterisk.

List of species

AGATHIDINAE

Agathis fuscipennis (Zetterstedt, 1838)

Material: TEY, Porsgrunn: Sandøya, Solvang (EIS 11), 1♀ 13 July 1998, leg. Ø. Berg.

Distribution: Palearctic; Sweden and Finland; Norway (van Achterberg 2014).

* *Cremnops desertor* (Linnaeus, 1758)

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 3♀♀ 4 July 2006, 15 July 2006, 5 August 2007, 1♂ 20 June 2007, 1♂ 15 July 2012, leg. T.J. Olsen.

Distribution: Holarctic and Oriental; Sweden and Finland.

ALYSIINAE, ALYSIINI

* *Adeluroloa florimela* (Haliday, 1838)

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 18 August 1993, 2♀♀ 2 June 1999, 1♀ 12 June 1999, 1♀ 11 August 1999, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden.

* *Alysia (Anarcha) rufidens* Nees, 1834

Material: Ø, Rygge: Ekeby, Gunnarsbybekken (EIS 19), 1♀ 19 May–17 June 1992, Malaise trap,

leg. L.O. Hansen & G. Walberg.

Distribution: Holarctic; Sweden.

Aphaereta major (Thomson, 1895)

Material: Ø, Sarpsborg: Sandbakken (EIS20), 1♀ 26 May 1996, leg. T.J. Olsen; Sarpsborg: Tune, Råkil (EIS 20), 1♂ 24.VII.1993, 2♀♀ 25 May and 12 June 1999, leg. T.J. Olsen; VE, Re (Våle): Langøya (EIS 19), 1♀ 16 May 1990, leg. L.O. Hansen.

Distribution: Palearctic; Sweden; Norway (van Achterberg 2014).

* *Aphaereta minuta* (Nees, 1811)

Material: Ø, Sarpsborg: Isesjø (EIS20), 1♀ 17 August 2005, leg. T.J. Olsen.

Distribution: Holarctic; Iceland, Finland, and Sweden; Norway (van Achterberg 2014).

* *Chasmodon apterus* (Nees, 1812)

Material: STI, Oppdal: Oppdal (EIS 79), 1♂ 9 August 1995, leg. I. Wall.

Distribution: W. Palearctic; Denmark, Finland, and Sweden.

Dapsilarthra (Heterolexis) balteata (Thomson, 1895)

Material: Ø, Rygge: Ekeby, Gunnarsbybekken (EIS 19), 4♀♀ and 1♂ 19 May–17 June 1992, Telemarkslunden (EIS 19), 1♀ 19 May–17 June 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Palearctic; Norway (van Achterberg 2014).

* *Dinotrema (Dinotrema) erythropum* Förster, 1862

Material: BØ, Hurum: Mølen (EIS 19), 1♀ 2–4 July 1990, leg. L.O. Hansen.

Distribution: West Palearctic; Sweden.

* *Dinotrema (Dinotrema) nervosum* (Haliday, 1833)

Material: Ø, Halden: Remmendalen (EIS 19), pitfall-trap, 1♀ 3–30 July 1995, leg. O. Hanssen & G. Hardeng.

Distribution: Palearctic; Denmark.

* *Dinotrema (Prosapha) speculum* (Haliday, 1833)

Material: VE, Re (Våle): Langøya (EIS 19), 1♂ May 1991, Malaise trap, leg. L.O. Hansen.

Distribution: Palearctic; Sweden.

Idiasta subanellata (Thomson, 1895)

Material: Ø, Rygge: Ekeby, Gunnarsbybekken (EIS 19) 1♀ 19 May–17 June 1992, Malaise trap, leg. L.O. Hansen & G. Walberg; Ø, Fredrikstad: Borge Varde, 1♂ 10 July 1994, leg. T.J. Olsen.

Distribution: West Palearctic and Oriental; Finland and Sweden; Norway (van Achterberg 2014).

* *Phaenocarpa (Discphaenocarpa) angustiptera* Papp, 1968

Material: OS, Ringebu: Venastul (EIS 63), 1♀ 22 July 2008, leg. T.J. Olsen.

Distribution: Palearctic; Finland.

* *Phaenocarpa (Phaenocarpa) fidelis* Fischer, 1970

Material: AK, Oslo: Kværner, 2♀♀ 12–26 June 1990, leg. M. Falck.

Distribution: Palearctic; new to Scandinavia.

* *Phaenocarpa (Phaenocarpa) pratellae* (Curtis, 1826)

Material: Ø, Sarpsborg: Sandbakken (EIS 20), 1♀ 2 September 1996, leg. T.J. Olsen; Sarpsborg: Visterområdet (EIS 20), 1♀ 27 August 1992, leg. T.J. Olsen; TEI, Notodden: Lisleherad (EIS 27), 1♀ 6 August–19 October 1993, Malaise trap, leg. A. Bakke.

Distribution: Palearctic and Oriental; Finland and Sweden.

* *Phaenocarpa (Homophylla) pullata* (Haliday, 1838)

Material: Ø, Sarpsborg: Sandbakken (EIS 20), 1♀ 2 June 1996, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden.

* *Phaenocarpa (Phaenocarpa) trisulcata* Stelfox, 1950

Material: OS, Sør-Aurdal: Bagn (EIS 44), 1♂ 8–12 July 1996, leg. T. Munk.

Distribution: W. Palearctic; new to Scandinavia.

Tanycarpa gracilicornis (Nees, 1812)

Material: BØ, Drammen: Åssiden, Underlia (EIS 28), 1♀ 7 June 1990, leg. L.O. Hansen; Ø, Hvaler: Spjørøy, Tredalen (EIS 20), 1♀ 21 October 1995, leg. T.J. Olsen; Ø, Hobøl: Tomter N (EIS 29), 1♀ 17 June 2009, leg. A.L. Aase & T.J. Olsen.

Distribution: Palearctic and Oriental; Finland; Norway (van Achterberg 2014).

Trachyusa aurora (Haliday, 1838)

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 10 June 1994, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden; Norway (van Achterberg 2014).

ALYSIINAE, DACNUSINI

Chorebus posticus (Haliday, 1839)

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 3♀♀ 22 June 1994, 23 June 1994, 14 July 1993, leg. T.J. Olsen; Ø, Sarpsborg: Grimsøy (EIS 20), 2♀♀ 23 August 2001, leg. T.J. Olsen; Ø, Trøgstad: Hemnessjøen (EIS 20), 1♀ 25 June 1995, leg. T.J. Olsen.

Distribution: Holarctic; Finland and Sweden; Norway (van Achterberg 2014).

Chorebus (Phaenolexis) petiolatus (Nees, 1834)

Material: Ø, Rygge: Ekeby, Telemarkslunden (EIS 19), 1♀ 19 May–17 June 1992, 2♀♀ 17 June–21 July 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Palearctic and Oriental; Finland and Sweden; Norway (van Achterberg 2014).

Coelinidea elegans (Curtis, 1829)

Material: Ø, Sarpsborg: Murtjern (EIS 20), 1♀ 14 July 1996, leg. A.L. Aase & T.J. Olsen.

Distribution: Palearctic; Norway (van Achterberg 2014).

Coelinidea gracilis (Curtis, 1829)

Material: Ø, Fredrikstad: Gansrød/Øra (EIS 20), 1♂ 24 July 1993, leg. T.J. Olsen.

Distribution: Palearctic; Norway (van Achterberg 2014).

***Protodacnusa tristis* (Nees, 1834)**

Material: OS, Sør-Aurdal: Bagn (EIS 44), 1♀ 8–12 July 1996, leg. T. Munk; Ø, Halden: Ennigdalen, Gribsrud Gård (EIS 12), 1♀ 21 June 2009, leg. T.J. Olsen.

Distribution: Palearctic; Sweden; Norway (van Achterberg 2014).

***Synelix (Synelix) semirugosa* (Haliday, 1839)**

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 6 June 1999, leg. T.J. Olsen.

Distribution: Palearctic; Sweden; Norway (van Achterberg 2014).

***Tates heterocera* (Thomson, 1895)**

Material: Ø, Fredrikstad: Gansrød/Øra (EIS 20), 1♀ 4 June 1996, leg. T.J. Olsen.

Distribution: Palearctic; Sweden; Norway (van Achterberg 2014).

***Trachionus (Planiricus) hians* (Nees, 1813)**

Material: Ø, Sarpsborg (Borge): Borge Varde (EIS 20), 1♀ 11 June 1993, leg. T.J. Olsen.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

***Trachionus (Planiricus) ringens* (Haliday, 1839)**

Material: BV, Rollag: Veggli, 1♀ 9 July 1995, leg. B. Sagvolden.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

APHIDIINAE

*** *Adyalitus salicaphis* (Fitch, 1855)**

Material: BØ, Røyken: Hyggen, Kinnartangen (EIS 28), 1♀ 4 August–8 September 1991, leg. L.O. Hansen.

Distribution: Almost worldwide; Finland and Sweden.

*** *Aphidius cingulatus* Ruthe, 1859**

Material: Ø, Rygge: Ekeby, Telemarkslunden (EIS 19), 2♀♀ 17 June–21 July 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Almost worldwide, Finland and Iceland.

*** *Aphidius urticae* Haliday, 1834**

Material: Ø, Rygge: Ekeby, Telemarkslunden (EIS 19), 1♀ 17 June–21 July 1992, 4♀♀ 21 July–24 August 1992, 1♀ 24 August–16 September 1992, Malaise trap, leg. L.O. Hansen & G. Walberg; MRI, Norddal: Tafjord, Fjæra (EIS 77), Malaise trap, 1♀ 18 July–11 September 1993, leg. O. Hanssen.

Distribution: Almost worldwide; Finland and Sweden.

***Ephedrus (Lysephedrus) validus* (Haliday, 1833)**

Material: VE, Re (Våle): Langøya N (EIS 19), 1♀ 2 August–1 September 1991, Malaise trap, leg. L.O. Hansen.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

*** *Monoctonus crepidis* (Haliday, 1834)**

Material: BØ, Hurum: Ramvikholmen (EIS 19), sweep-net, 1♀ August 1990, leg. L.O. Hansen.

Distribution: Holarctic and Oriental; Finland, Sweden.

*** *Praon dorsale* (Haliday, 1833)**

Material: AK, Oslo: Kværner (EIS 28), 1♀ 12–26 June 1990, leg. Falck; Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 23 June 1994, leg. T.J. Olsen.

Distribution: Palearctic and Oriental, Finland and Sweden.

BRACHISTINAE

*** *Eubazus (Aliolus) planifacialis* van Achterberg, 2003**

Material: VE, Horten: [Knutsrød], Naturhuset (EIS 19), 1♀ 21 June 2008, leg. T.J. Olsen.

Distribution: Belgium and Netherlands, new to Scandinavia.

*** *Eubazus (Calyptus) rugosus* (Ratzeburg, 1848)**

Material: VE, Stokke: Melsom (EIS 19), 1♀ 29 June 2000, leg. Ø. Berg.

Distribution: West Palearctic; Finland and Sweden.

* *Eubazus (Allodorius) shishiniovae* van Achterberg, 2000

Material: Ø, Rygge: Ekeby, Telemarkslunden (EIS 19), 2♀♀ 19 May–17 June 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: West Palearctic; new to Scandinavia.

BRACONINAE

* *Bracon (Lucobracon) brachycerus* Thomson, 1892

Material: Ø, Trøgstad: Hemnessjøen (EIS 20), 1♀ 25 June 1995, leg. T.J. Olsen

Distribution: Palearctic; Finland and Sweden.

* *Bracon (Orthobracon) crassiceps* Thomson, 1892

Material: TEI, Notodden: Lisleherad (EIS 27), 1♀ 27 May–22 June 1993, 2♀♀ 22 June–6 August 1993, 3♀♀ 6 August–19 October 1993, Malaise trap, leg. A. Bakke.

Distribution: W. Palearctic; Finland and Sweden.

* *Bracon (Lucobracon) grandiceps* Thomson, 1892

Material: TEI, Notodden: Lisleherad (EIS 27), 1♀ 22 June–6 August 1993, Malaise trap, leg. A. Bakke.

Distribution: Palearctic, Finland and Sweden.

* *Bracon (Lucobracon) hylobii* Ratzeburg, 1848

Material: TEI, Notodden: Lisleherad (EIS 27), 1♀ 30 April–27 May 1993, Malaise trap, leg. A. Bakke.

Distribution: Palearctic, Denmark and Sweden.

* *Bracon (Glabrobracon) immutator* Nees, 1834

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 22 May 1994, leg. Olsen.

Distribution: Palearctic; Denmark, Finland, and Sweden.

* *Bracon (Glabrobracon) obscurator* Nees, 1811

Material: Ø, Fredrikstad: Onsøy, Rauer (EIS 19), 1♀ 29 July 1989, leg. L.O. Hansen.

Distribution: Palearctic; Denmark, Finland, and Sweden.

* *Bracon (Glabrobracon) parvulus* (Wesmael, 1838)

Material: Ø, Sarpsborg: Kvastebyen (EIS 20), 1♀ 7 April 1994, leg. T.J. Olsen; Sarpsborg: Tune, Råkil (EIS 20), 1♀ 20 July 1994, leg. T.J. Olsen.

Distribution: Palearctic and Oriental; Finland and Sweden.

* *Bracon (Lucobracon) picticornis* (Wesmael, 1838)

Material: VE, Re (Våle): Langøya N (EIS 19), 1♀ 8 July 1991, leg. L.O. Hansen.

Distribution: Palearctic and Oriental; Finland and Sweden.

* *Bracon (Bracon) subrugosus* Szepligeti, 1901

Material: Ø, Sarpsborg: Visterområdet (EIS 20), 2♀♀ 2 July 1992, leg. T.J. Olsen; Ø, Tune: Tunevannet (EIS 20), 1♀ 25 June 1992; VE, Re (Våle): Langøya N (EIS 19), 1♀ 3. July 1990, 1♀ 4 July 1990, leg. L.O. Hansen; AK, Ås: Årungen (EIS 28), 1♀ 25 July 1993, leg. Ø. Berg.

Distribution: Palearctic; Sweden.

* *Bracon (Bracon) tenuicornis* (Wesmael, 1838)

Material: ON, Nord-Fron: Vinstra, [Stordalsberget] (EIS 64), 1♀ July 1992, 1♀ 6 August–19 September 1992, Malaise trap, leg. L.O. Hansen & G. Myhr.

Distribution: Palearctic; Sweden.

* *Bracon (Glabrobracon) triangularis* Nees, 1834

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 10 August 1994, leg. T.J. Olsen.

Distribution: West Palearctic, Finland.

* *Bracon (Glabrobracon) variator* Nees, 1811

Material: AK, Frogn: Solbergstrand (EIS 28), 1♀ 20 August 1989, leg. Ø. Berg; BV, Rollag: Vårviken (EIS 35), Malaise trap, 1♀ July 1992, leg. B. Sagvolden; Ø, Fredrikstad: Onsøy, Rauer

(EIS 19), 1♀ 28–30 July 1989, leg. L.O. Hansen; **ON**, Nord-Fron: Vinstra, [Stordalsberget] (EIS 64), 5♀♀ 1–25 May 1992, 1♀ 6 August–19 September 1992, Malaise trap, leg. L.O. Hansen & G. Myhr.

Distribution: Palearctic; Finland and Sweden.

* *Bracomorpha rector* (Thunberg, 1824)

Material: **TEI**, Notodden: Lisleherad (EIS 27), 1♀ 27 May–22 June 1993, Malaise trap, leg. A. Bakke.

Distribution: West Palearctic; Finland and Sweden.

* *Coeloides filiformis* Ratzeburg, 1852

Material: **VE**, Re (Våle): Langøya N (EIS 19), 1♀ 19 May 1990, leg. L.O. Hansen.

Distribution: West Palearctic; Finland and Sweden.

* *Coeloides rossicus* (Kokujev, 1902)

Material: **Ø**, Hvaler: Skjørhalden, Prestgårdskog (EIS 12), 1♀ 4 July 2010, leg. T.J. Olsen.

Distribution: Holarctic; Finland and Sweden.

* *Coeloides melanostigma* Strand, 1918

Material: **TEI**, Notodden: Lisleherad (EIS 27), 3♀♀ 22 June–6 August 1993, Malaise trap, leg. A. Bakke.

Distribution: West Palearctic; Sweden and Finland.

* *Cyanopterus (Ipobracon) nigrator* (Zetterstedt, 1838)

Material: **TEI**, Notodden: Lisleherad (EIS 27), 2♀♀ 27 May–22 June 1993, 2♀♀ 22 June–6 August 1993, Malaise trap, leg. A. Bakke.

Distribution: Palearctic; Finland and Sweden.

Iphiaulax impostor (Scopoli 1763)

Material: **BØ**, Røyken: Hyggen, Kinnartangen (EIS 28), 2♀♀ 28 May–6 July and 6 July–4 August 1991, 1♂ 20 May 1990, leg. L.O. Hansen; **VE**, Larvik: Brunlanes, Lerungsand, 1♀ 28 June 1995, leg. Ø. Berg; **AK**, Frogn: Håøya, Dragesund, 1♀ 23 July 1995, leg. Ø. Berg; **BØ**, Hurum: Østnestangen, 1♀ 26 May–6 July 1995, Malaise trap, leg. L.O. Hansen.

Distribution: Palearctic and Oriental; Finland and Sweden; Norway (van Achterberg 2014).

CHELONINAE

Ascogaster abdominalator (Dahlbohm, 1833)

Material: **VE**, Re (Våle): Langøya N (EIS 19), 1♀ 8 July–2 August 1991, Malaise trap, leg. L.O. Hansen; **Ø**, Sarpsborg: Tune, Råkil, 2♀♀ 20 July 1994 and 28 July 1995, leg. T.J. Olsen; **Ø**, Aremark: Kutjern (EIS 21), 1♀ July 2013, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden; Norway (van Achterberg 2014).

Ascogaster annularis (Nees, 1816)

Material: **BØ**, Røyken: Hyggen, Kinnartangen (EIS 28), 1♀ 6 July–4 August 1991, Malaise trap, leg. L.O. Hansen.

Distribution: Palearctic; Finland and Sweden; Norway (van Achterberg 2014).

Ascogaster klugii (Nees, 1816)

Material: **TEI**, Notodden: Lisleherad (EIS 27), 1♀ and 5♂♂ 22 June–6 August 1993, Malaise trap, leg. A. Bakke; **BØ**, Røyken: Hyggen, Kinnartangen (EIS 28), 1♀ 6 July–4 August 1991, Malaise trap, leg. L.O. Hansen; **Ø**, Aremark: Kutjern (EIS 21), 1♀ July 2013, leg. T.J. Olsen.

Distribution: Palearctic; Sweden and Finland; Norway (van Achterberg 2014).

* *Ascogaster quadridentata* Wesmael, 1835

Material: **Ø**, Sarpsborg: Sandbakken (EIS 20), 1♀ 10 August 1998, leg. T.J. Olsen; **HES**, Stange: Linderud (EIS 46), 1♂ 6 August 2004, leg. Ø. Berg.

Distribution: Almost worldwide; Finland and Sweden.

* *Ascogaster rufipes* (Latreille, 1809)

Material: **Ø**, Rygge: Ekeby, Telemarkslunden (EIS 19), 1♀ 17 June–21 July 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Palearctic and Oriental; Finland and Sweden.

***Ascogaster scabricula* (Dahlbom, 1833)**

Material: BØ, Røyken: Hyggen, Kinnartangen (EIS 28) 1♂ July 1991, Malaise trap, leg. L.O. Hansen; VE, Re (Våle): Langøya N (EIS 19), 1♀ 8 July–2 August 1991, Malaise trap, leg. L.O. Hansen; AK, Bærum: Borøya (EIS 28), 1♀ 20 June 1989, leg. Ø. Berg.

Distribution: Palearctic, Finland and Sweden; Norway (van Achterberg 2014).

*** *Ascogaster varipes* Wesmael, 1835**

Material: HES, Stange: Linderud (EIS 46), 1♂ 6 August 2004, leg. Ø. Berg.

Distribution: Palearctic and Oriental; Finland and Sweden.

***Chelonus (Chelonus) annulatus* (Nees, 1816)**

Material: BØ, Røyken: Hyggen, Kinnartangen (EIS 28), 24♀♀ and 13♂♂ July–September 1991, Malaise trap, leg. L.O. Hansen; BØ, Hurum: Mølen (EIS 19), 1♂ 2 August 1991, leg. L.O. Hansen; Ø, Fredrikstad: Onsøy, Rauer (EIS 19), 1♂ 28 July 1989, leg. L.O. Hansen; AK, Bærum: Borøya (EIS 28), 1♀ 10 August 1993, leg. Ø. Berg.

Distribution: Palearctic; Finland and Sweden; Norway (van Achterberg 2014).

***Chelonus (Chelonus) annulipes* Wesmael, 1835**

Material: ON, Nord-Fron: Vinstra, [Stordalsberget] (EIS 64), 7♀♀ July 1992, Malaise trap, leg. L.O. Hansen & K. Myhr; AK, Asker: Bjerkås (EIS 28), 1♀ 19 July 1994, leg. L.O. Hansen; Ø, Moss: Jeløy Alby (EIS 19), 1♀ 31 July 2001, leg. T.J. Olsen; Sarpsborg: Kjærringåsen (EIS 20), 1♀ 25 July 1998, leg. T.J. Olsen.

Distribution: Holarctic and Oriental; Norway (van Achterberg 2014).

***Chelonus (Chelonus) bidentulus* Thomson, 1874**

Material: BØ, Røyken: Hyggen, Kinnartangen (EIS 28), 1♀ and 2♂♂ 6 July–4 August 1991, 1♂ 11 July 1993, Malaise trap, leg. L.O. Hansen; ON, Nord-Fron: Vinstra, [Stordalsberget] (EIS 64), 9♀♀ and 11♂♂ July–September 1992, Malaise trap, leg. L.O. Hansen & K. Myhr.

Distribution: West Palearctic; Finland and Sweden; Norway (van Achterberg 2014).

***Chelonus (Chelonus) brachyurus* Thomson, 1874**

Material: VE, Re (Våle): Langøya N (EIS 19), 12♀♀ 8 July–2 August 1991, Malaise trap, leg. L.O. Hansen; BØ, Hurum: Mølen (EIS 19), 1♂ 15 July 1989, leg. L.O. Hansen; Ø, Fredrikstad: Onsøy, Mærapanna (EIS 20), 2♀♀ 20 August 1996, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden; Norway (van Achterberg 2014).

*** *Chelonus (Microchelonus) contractus* (Nees, 1816)**

Material: ON, Nord-Fron: Vinstra, [Stordalsberget] (EIS 64), 2♀♀ 6 August–19 September 1992, Malaise trap, leg. L.O. Hansen & K. Myhr; BV, Hemsedal: Hemsedal (EIS 43) 1♂ 5 August 1995, leg. I. Wall; Rollag: Vårviken, 2♀♀ July 1992, leg. B. Sagvolden; Ø, Hvaler: Sæbyelva (EIS 20), 1♂ 10 August 1996, leg. T.J. Olsen.

Distribution: Palearctic; Sweden and Finland.

*** *Chelonus (Chelonus) lissogaster* Tobias, 1972**

Material: Ø, Hvaler: Kirkøy Ørekroken, 1♂ 27 July 2001, leg. Ø. Berg.

Distribution: Only known from Ukraine and Kazakhstan, new to Scandinavia.

***Chelonus (Chelonus) scabrator* (Fabricius, 1793)**

Material: BØ, Hurum: Verket, Verksøya (EIS 28), 1♀ 18 June 1989, leg. Ø. Berg; VE, Re (Våle): Langøya N (EIS 19), 1♀ 8 July–2 August 1991, Malaise trap, leg. L.O. Hansen; Nøtterøy: Mellom-Bolærne (EIS 19), 1♀ 26 July 1995, leg. Ø. Berg; AK, Oslo: Sogn (EIS 28), 1♀ 11 July 1989, leg. Ø. Berg; Ø, Aremark: Bøensætre (EIS 20), 1♀ 9 July 1993, leg. T.J. Olsen; Sarpsborg: Tune, Råkil, 1♀ 8 July 1989, 1♀ 4 July 2002, leg. T.J. Olsen; Sarpsborg: Sandbakken (EIS 20), 1♀ 5 May 2001, leg. T.J. Olsen; Halden: Vesttorp (EIS 20), 1♀ 1 July 2002, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden; Norway (van Achterberg 2014).

* *Chelonus (Microchelonus) rugicollis*

Thomson, 1874

Material: Ø, Rakkestad: Skjølja (EIS 20), 1♀
5 June 1994 leg. T.J. Olsen.

Distribution: West Palaearctic; Sweden.

* *Chelonus (Microchelonus) sulcatus* Jurine,
1807

Material: AK, Bærum: Lysaker (EIS 28), 1♀
28 June 1986, leg. M. Falck; OS, Sør-Aurdal:
Bagn (EIS 44), 1♀ 1 August 1992, leg. L.O.
Hansen.

Distribution: Palaearctic; Sweden and Fin-
land.

* *Phanerotoma dentata* (Panzer, 1805)

Material: BØ, Hurum: Tofteholmen (EIS 19),
1♂ 31 July–1 September 1991, leg. L.O. Hansen.

Distribution: Almost worldwide; Finland and
Sweden.

DORYCTINAE

Dendrosoter middendorffii (Ratzeburg, 1848)

Material: BØ, Drammen: Underlia (EIS 28),
4♀♀ and 1♂ June 1992, Malaise trap, leg. L.O.
Hansen.

Distribution: Palearctic and Oriental; Finland
and Sweden; Norway (van Achterberg 2014).

Dendrosoter protuberans (Nees, 1834)

Material: VAY, Kristiansand: Stangenes (EIS
2), 1♀ 20 May 1992, 1♀ 21 May 1992, leg. L.O.
Hansen.

Distribution: Holarctic; Finland and Sweden;
Norway (van Achterberg 2014).

Doryctes leucogaster (Nees, 1834)

Material: VE, Re (Våle): Langøya N (EIS
19), 1♂ May 1991, leg. L.O. Hansen.

Distribution: Palearctic and Oriental; Finland
and Sweden; Norway (van Achterberg 2014).

* *Ontsira antica* (Wollaston, 1858)

Material: TEI, Tinn: Rjukan (EIS 26), 1♀
May 1995, Malaise trap, leg. B. Sagvolden.

Distribution: Holarctic; Finland and Sweden.

* *Ontsira imperator* (Haliday, 1836)

Material: Ø, Fredrikstad: Bjørndalen (EIS
20), 1♀ 10 August 2008, leg. T.J. Olsen.

Distribution: Holarctic and Oriental; Finland
and Sweden.

* *Spathius erythrocephalus* Wesmael, 1838

Material: Ø, Rygge: Ekeby, Telemarkslunden
(EIS 19), 1♀ 21 July–24 August 1992, Malaise
trap, leg. L.O. Hansen & G. Walberg.

Distribution: West Palearctic; Denmark,
Finland and Sweden.

Spathius rubidus (Rossi, 1794)

Material: Ø, Rygge: Ekeby, Telemarkslunden
(EIS 19), 1♀ 19 May–17 June 1992, Malaise
trap, leg. L.O. Hansen & G. Walberg; Sarpsborg:
Kvastebyen (EIS 20), 1♀ 9 July 1995, leg. T.J.
Olsen.

Distribution: Holarctic; Denmark, Finland
and Sweden; Norway (van Achterberg 2014).

EUPHORINAE

* *Leiophron (Euphorus) pallidistigma* Curtis,
1833

Material: AK, Oslo: Kværner (EIS 28), 1♀
12–26 June 1990, leg. M. Falck.

Distribution: Palearctic; Finland and Sweden.

* *Syntretus conterminus* (Nees, 1834)

Material: AK, Ås: Ås Sentrum (EIS 20), 1♂
16 July 2001, leg. A.L. Aase.

Distribution: Palearctic; new to Scandinavia.

* *Syntretus zuijleni* van Achterberg & Haesel-
barth, 2003

Material: STI Oppdal: Oppdal (EIS 79), 1♀ 9
August 1995, leg. I. Wall.

Distribution: West Palearctic; Denmark and
Sweden.

HELCONINAE

* *Helcon angustator* Nees, 1812

Material: STI, Midtre Gauldal: Ramstad (EIS
87), 1♀ 17 July 2004, leg. Ø. Berg.

Distribution: Palearctic; Finland and Sweden.

MACROCENTRINAE

* *Macrocentrus cingulum* Brischke, 1882

Material: Ø, Sarpsborg: Sandbakken (EIS 20), 1♀ 6 August 2007, leg. T.J. Olsen

Distribution: Holarctic and Oriental, new to Scandinavia.

* *Macrocentrus townesi* Achterberg & Haeselbarth, 1983

Material: Ø, Sarpsborg: Skjeberg Krk., 1♀ 26 May 2007, leg. T.J. Olsen; Ø, Fredrikstad: Torsnes, Refsal (EIS 20), 1♀ 15 May–14 June 2009, leg. T.J. Olsen.

Distribution: Palearctic; Denmark.

MICROGASTERINAE

* *Apanteles (Apanteles) albipennis* (Nees, 1834)

Material: ON, Nord-Fron: Vinstra, [Stordalsberget] (EIS 62), 1♀ 6 August–19 September 1992, Malaise trap, leg. L.O. Hansen & K. Myhr.

Distribution: Palearctic; Denmark and Sweden.

* *Apanteles (Apanteles) metacarpalis* (Thomson, 1895)

Material: BØ, Hole: Busund (EIS 36), 1♀ 24 July 2004, leg. Ø. Berg.

Distribution: Palearctic; Finland and Sweden.

Apanteles (Apanteles) obscurus (Nees, 1834)

Material: VE, Re (Våle): Langøya N (EIS 19), 1♀ 16 May 1990, Malaise trap, leg. L.O. Hansen; Ø, Fredrikstad: Onsøy, Rauer (EIS 19), 1♀ 29 July 1989, leg. L.O. Hansen.

Distribution: Holarctic; Finland and Sweden; Norway (van Achterberg 2014).

* *Apanteles (Apanteles) xanthostigma* (Haliday, 1834)

Material: VE, Re (Våle): Langøya N (EIS 19), 2♀♀ 2 July–2 August 1991, Malaise trap, leg. L.O. Hansen; BV, Rollag: Veggli (EIS 35), 1♀ 23 June 1995, leg. B. Sagvolden; AK, Asker: Båstad (EIS 28), 1♀ 25 August 1993, leg. Ø. Berg; BØ, Røyken: Hyggen, Kinnartangen (EIS 28), 1♀ 6 July–4 August 1991, leg. L.O. Hansen.

Distribution: Holarctic; Finland and Sweden.

* *Cotesia tibialis* (Curtis, 1830)

Material: Ø, Rygge: Ekeby, Telemarkslunden (EIS 19), 1♀ 19 May–17 June 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Palearctic; Finland and Sweden.

* *Cotesia vestalis* (Haliday, 1834)

Material: ON, Nord-Fron: Vinstra, [Stordalsberget] (EIS 62), 1♀ 6 August–19 September 1992, Malaise trap, leg. L.O. Hansen & K. Myhr.

Distribution: Almost worldwide; Finland and Sweden.

* *Deuterixys carbonaria* (Wesmael, 1837)

Material: AK, Oslo: Kværner (EIS 28), 1♀ 12–26 June 1990, leg. M. Falck.

Distribution: Palearctic; Finland.

* *Microgaster luctuosa* Haliday, 1834

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 10 June 1994, 1♂ 25 May 1990, 1♀ 7 June 1993, 1♂ 20 June 1994, 1♂ 14 June 1994, 1♀ 25 June 1994, 1♂ 1 June 2001, leg. T.J. Olsen; AK, Sørum: Lørenfallet (EIS 37), 2♀♀ July 1994, leg. O. Sørlibråten; Asker: Vardåsen (EIS 28), 1♂ 3 June 1992, 1♀ 6 June 1993, leg. Ø. Berg; VE, Larvik: Mølen (EIS 11), 1♂ 12 June 1993, leg. Ø. Berg.

Distribution: Palearctic; Finland and Sweden.

* *Microgaster messoria* Haliday, 1834

Material: BØ, Røyken: Kinnartangen, 1♀ July 1991, Malaise trap, leg. L.O. Hansen.

Distribution: Holarctic; Finland and Sweden.

* *Microgaster subcompleta* Nees, 1834

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 1 July 2001, leg. T.J. Olsen.

Distribution: Holarctic and Oriental; new to Scandinavia.

* *Microplitis fulvicornis* (Wesmael, 1837)

Material: Ø, Halden: Vesttorp (EIS 20), 1♀ 7 June–15 July 2008, leg. T.J. Olsen.

Distribution: West Palearctic; Finland.

* *Microplitis spinolae* (Nees, 1834)

Material: Ø, Sarpsborg: Grimsøy (EIS 20),

1♀ 18 August 2001, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden.

* *Microplitis tuberculifer* (Wesmael, 1837)

Material: BV, Rollag: Bråtåsen, 1♀ July 1994, Malaise trap, leg. L.O. Hansen & B. Sagvolden; Ø, Trøgstad: Hemnessjøen (EIS 20), 1♀ 25 June 1995, leg. T.J. Olsen; OS, Sør-Aurdal: Bagn (EIS 44), 1♀ 8–12 July 1996, leg. T. Munk.

Distribution: Palearctic and Oriental; Finland and Sweden.

* *Paroplitis wesmaeli* (Ruthe, 1860)

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 22 July 1994, leg. T.J. Olsen.

Distribution: West Palearctic; Finland and Sweden.

* *Protapanteles (Protapanteles) aliphera* (Nixon, 1973)

Material: Ø, Aremark: Bøensætre (EIS 21), 1♂ 5 June 1993, leg. T.J. Olsen; Rygge: Ekeby, Telemarkslunden (EIS 19), 1♀ 26 August–16 October 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Palearctic; Finland and Sweden.

* *Protapanteles (Protapanteles) eugeni* (Papp, 1972)

Material: Ø, Rygge: Ekeby, Gunnarsbybekken (EIS 19), 1♀ 24 August–16 October 1992, Malaise trap, leg. L.O. Hansen & G. Walberg

Distribution: West Palearctic; Finland and Sweden.

* *Protapanteles (Protapanteles) fulvipes* (Haliday, 1834)

Material: Ø, Hvaler: Akerøya (EIS 12), 1♀ 29 May 1993, leg. Ø. Berg; FV, Måsøy: Rolvsøy, Gunnarnes (EIS 186), 1♀ August 1992, Malaise trap, leg. P. Tangen.

Distribution: Holarctic; Finland, Faroe Islands, Iceland, Greenland, Sweden.

* *Protapanteles (Protapanteles) lateralis* (Haliday, 1834)

Material: Ø, Rygge: Ekeby, Telemarkslunden (EIS 19), 1♂ 19 May–17 June 1992, 1♂ 17

June–21 July 1992, 1♂ 21 July–24 August 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Palearctic; Finland and Sweden.

Protapanteles (Sathon) falcatus (Nees, 1834)

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 28 July 1993, 1♀ 13 August 1993, 2♀♀ 20 July 1994, 1♀ and 1♂ 1 August 1995, 1♀ 22 August 1995, leg. T.J. Olsen; Sarpsborg: Sandbakken (EIS 20), 1♀ 10 July 1997, leg. T.J. Olsen; Aremark: Bøensætre (EIS 21), 1♀ 9 July 1993, leg. T.J. Olsen; AK, Bærum: Vestmarka (EIS 28), 1♂ 29 July 1992, leg. Ø. Berg; BV, Rollag: Vårviken (EIS 35), 1♀ July 1992, Malaise trap, leg. B. Sagvolden; ON, Nord-Fron: Vinstra, [Stordalsberget] (EIS 62), 2♀♀ July 1992, 7♀♀ 6 August–19 September 1992, Malaise trap, leg. L.O. Hansen & K. Myhr.

Distribution: Palearctic and Oriental; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

OPIINAE

* *Biosteres s.str. spinaciae* (Thomson, 1895)

Material: Ø, Hobøl: Tomter N (EIS 29), 1♀ 17 June 2009, leg. A.L. Aase & T.J. Olsen.

Distribution: Holarctic; Denmark, Finland and Sweden.

* *Biosteres (Chilotruchia) borealis* (Zetterstedt, 1838)

Material: BØ, Nedre Eiker: Hagatjern, Ryghsetra (EIS 28), 1♀ October 1994, Malaise trap, leg. Y. Berg & L.O. Hansen.

Distribution: West Palearctic; Denmark, Finland and Sweden.

* *Biosteres (Chilotruchia) scabriculus* (Wesmael, 1835)

Material: BØ, Nedre Eiker: Hagatjern, Ryghsetra (EIS 28), 1♀ October 1994, Malaise trap, leg. Y. Berg & L.O. Hansen; AK, Sørum: Lørenfallet, Egner (EIS 37), 1♀ October 1994, Malaise trap, leg. L.O. Hansen & Sørlibråten.

Distribution: West Palearctic; Finland.

Biosteres (Chilotrichia) sylvaticus (Haliday, 1837)

Material: BV, Rollag: Veggli (EIS 35), 1♀ 23 June 1995, leg. B. Sagvolden.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

Eurytenes (Opiotenes) leptostigma (Wesmael, 1835)

Material: Ø, Sarpsborg: Borgarsyssel (EIS 20), 1♀ 7 August 1996, leg. T.J. Olsen.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

Eurytenes (Stigmatopoea) macrocerus (Thomson, 1895)

Material: AK, Bærum: Kjæglidalen (EIS 28), 2♀♀ 11–25 July 1990, Malaise trap, leg. M. Falck; FV, Måsøy: Rolvsøy, Gunnarnes (EIS 186), 1♀ July 1992, Malaise trap, leg. P. Tangen.

Distribution: Holarctic; Finland; Norway (van Achterberg 2014).

*** *Opius (Nosopoea) celsus Haliday, 1837***

Material: FV, Måsøy: Rolvsøy, Gunnarnes (EIS 186), 5♀♀ July 1992, 3♀♀ August 1992, Malaise trap, leg. P. Tangen.

Distribution: Palearctic; Denmark, Finland and Sweden.

Opius (Nosopoea) cingulatus Wesmael, 1835

Material: Ø, Rygge: Ekeby, Telemarkslunden (EIS 19), 3♀♀ 19 May–17 June 1992, Malaise trap, leg. L.O. Hansen & G. Walberg; Rygge: Ekeby, Gunnarsbybekken (EIS 19), 1♀ 21 July–24 August 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

*** *Opius (Allotypus) geniculatus Thomson, 1895***

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 30 July 1994, leg. T.J. Olsen.

Distribution: Palearctic; Denmark, Finland and Sweden.

*** *Opius (Opiothorax) levis Wesmael, 1835***

Material: Ø, Sarpsborg: Borgarsyssel (EIS

20), 1♀ 13 July 1995, leg. T.J. Olsen.

Distribution: Palearctic and Afrotropical; Denmark, Finland and Sweden.

*** *Opius (Nosopoea) maculipes Wesmael, 1835***

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♂ 10 July 2002, leg. T.J. Olsen.

Distribution: Palearctic; Denmark, Finland and Sweden.

Opius (Opius) pallipes Wesmael, 1835

Material: Ø, Fredrikstad: Gansrød/Øra (EIS 20), 1♀ 5 July 1995, leg. T.J. Olsen; Sarpsborg: Borgarsyssel (EIS 20), 1♀ 13 July 1995, leg. T.J. Olsen.

Distribution: Holarctic and Oriental; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

Opius (Opius) pygmaeator (Nees, 1811)

Material: Ø, Trøgstad: Hemnessjøen (EIS 20), 1♀ 25 June 1995, leg. T.J. Olsen.

Distribution: West Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

Psytalia carinata (Thomson, 1895)

Material: Ø, Sarpsborg: Sandbakken (EIS 20), 1♀ 1 October 1996, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden; Norway (van Achterberg 2014).

Utetes (Utetes) caudatus (Wesmael, 1835)

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 10 August 1993, leg. T.J. Olsen.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

Utetes (Utetes) rotundiventris (Thomson, 1895)

Material: VE, Re (Våle): Langøya N (EIS 19), 1♀ 2 August–1 September 1991, Malaise trap, leg. L.O. Hansen.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

Utetes (Utetes) trisulcus (Thomson, 1895)

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 22 July 2002, leg. T.J. Olsen; Ø, Rygge:

Ekeby, Gunnarsbybekken (EIS 19), 1♀ 21 July–24 August 1992, Malaise trap, leg. L.O. Hansen & G. Walberg.

Distribution: Palearctic; Denmark, Finland and Sweden; Norway (van Achterberg 2014).

Xynobius (Xynobius) caelatus (Haliday, 1837)

Material: Ø, Fredrikstad: Gansrød/Øra (EIS 20), 1♀ 10 June 1996, leg. T.J. Olsen; Hobøl: Tomter N (EIS 29), 1♀ 4 June 2009, leg. A.L. Aase & T.J. Olsen; VAY, Lindesnes: Reme (EIS 1), 1♀ 9 May 1995, leg. M. Falck; AK, Bærum: Kjaglidalen (EIS 28), 1♀ 11–25 July 1990, Malaise trap, leg. M. Falck.

Distribution: Palearctic; Denmark; Norway (van Achterberg 2014).

ORGILINAE

*** *Orgilus achterbergi* Taeger, 1989**

Material: Ø, Våler: Sæbyelva (EIS 20), 1♀ 10 August 1996, leg. T.J. Olsen.

Distribution: West Palearctic; Norway (van Achterberg 2014).

*** *Orgilus ischnus* Marshall, 1898**

Material: BØ, Hurum: Tofteholmen (EIS 19), 1♀ 31 July 1991, leg. L.O. Hansen.

Distribution: Palearctic and Oriental; new to Scandinavia.

RHYSSALINAE

*** *Pseudobathysomus funestus* (Haliday, 1836)**

Material: Ø, Sarpsborg: Tune, Råkil (EIS 20), 1♀ 11 May 1993, leg. T.J. Olsen.

Distribution: Palearctic; Finland and Sweden.

Discussion

The distribution of Braconidae is incompletely known, even in better studied areas such as Europe. For Norway, only 271 Braconid species have been reported so far (Van Achterberg 2014).

Although the present study increases the number of known Norwegian Braconidae to 352 taxa, it is reasonable that a large number of

braconid species is still unreported from Norway. In other Scandinavian countries, the number of known braconid species is much higher, e.g. 849 taxa reported from Finland and 921 species from Sweden (Yu *et al.* 2012), and one can expect a similar diversity for Norway.

Acknowledgments. We are greatly indebted to all collectors who generously provided material of Ichneumonidae to this study, both by donating material or participating in the fieldwork, in particular Thor Jan Olsen and Øistein Berg. Also thanks to Trude Magnussen who checked and sorted out the species given from Norway in Fauna Europaea.

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Received: 19 May 2014

Accepted: 6 October 2014