Ichneumonidae (Hymenoptera) of selected regions of southern Poland

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Abstract. The investigation was carried out mainly in forest communities in 1984-1992. A total of 462 species (1910 specimens) of the family *Ichneumonidae* were collected, including 39 species new to the fauna of Poland. New trophic relations between 10 parasitoid species and 13 host species were established.

Key words: Hymenoptera, Ichneumonidae, parasite, trophic relations, Southern Poland.

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I. INTRODUCTION

The *Ichneumonidae* are one of the largest animal groups. This family includes more species than any other family and even more than the entire subphylum *Vertebrata*. In some parts of the world the *Ichneumonidae* form five to eight percent of all the insect species. As parasites of other insects, they are a major factor in the control of insect populations in gardens, orchards and forests (KAŹMIERCZAK 1973, 1979, 1981, 1982, 1991, 1992; TOWNES 1969).

The objective of this investigation was to determine the species composition of *Ichneumonidae*, to establish trophic relations between parasitoids and hosts, and to distinguish zoogeographical elements.

These investigations were carried out in 1984-1992 in the selected regions of Southern Poland (Fig. 1): the Wodzisław Ridge (Kołków, Chroberz), Miechów Upland (Klonów, Kalina Wielka), Wójczańsko-Pińczowski Ridge (Bogucice), Sandomierska Basin (Kostrze, Niepołomice Forest), Lublin Upland (Tuczapy), Pieniny Mountains (Stolarzówka, Kurnikówka, Trzy Korony), the Little Beskids (Andrychów region, nature reserve Madohora), Sądecki Beskid (Krynica region) and Dukla Pass.

The Ichneumonidae were collected in the following plant communities: fresh mixed forest (Chroberz, 305 m above sea-level, Klonów, 385 m a.s.l.), upland mixed forest

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(Kalina Wielka, 320 m a.s.l., Kołków, 252-269 m a.s.l.), mixed forest (Bogucice, 290 m a.s.l.); in the forests of the Trzy Korony massif: *Carici-Fagetum cephalantheretosum* (550-600 m a.s.l.), *Tilio-Carpinetum* (600-650 m a.s.l.), *Alnetum-incanae* (600-650 m a.s.l.), *Carici-Fagetum abietetosum* (800 m a.s.l.), *Phyllitido-Aceretum*(800-850 m a.s.l.); in selected glades of the Pieniny Mts.: *Anthylli-Trypholietum* (Stolarzówka, 650 m a.s.l.), with dominating *Dactylis glomerata* (Kurnikówka, 680 m a.s.l.), herb-thicket meadow *Veratrumlobelianum-Laserpitiumlatifolium* (Trzy Korony, 900-970, a.s.l.); upland forest (Andrychów region, 430-500 m a.s.l.), mountain mixed forest (Madohora, 800-929 m a.s.l., Krynica, 600-750 m a.s.l.) and the Dukla Pass (500 m a.s.l.).

The determination of the insects was made mostly according to the keys edited by CONSTNATINEANU & MUSTATA (1982), MEDVEDEV (1981), OBRTEL & ŠEDIVY (1957), TOLKANITZ (1981, 1987) and TOWNES (1969-1971), taking into account the critical comments on the revision of ichneumonids (AUBERT 1987). The hosts are given here mostly after MEDVEDEV (1981), TOLKANITZ (1981, 1987) and TOWNES (1969-1971). The classification and definitions of particular zoogeographical elements are those presented by PAWŁOWSKI (1967) and MEDVEDEV (1981).



Fig. 1. A map showing the places where ichneumonids dealt with in the present paper were collected. 1 – Kołków, 2 – Chroberz, 3 – Klonów, 4 – Kalina Wielka, 5 – Bogucice, 6 – Kostrze, 7 – Niepołomice Forest, 8 – Tuczapy, 9 – Pieniny Mts., 10 – Beskid Mały Mts., 11 – Beskid Sądecki Mts., 12 – Dukielska Pass.

The method of investigation is given in other publications of KAŹMIERCZAK (1982, 1987, 1989).

Almost the whole material of ichneumonids was collected by the author. Single specimens were caught by A. KOSIOR, D. KUBISZ, M. SKRZYPCZYŃSKA, J. R. STARZYK, P. SZWAŁKO, B. WAGA and M. WITRYLAK, to whom the author wishes to express his cordial thanks.

II. RESULTS

The results of the study are presented in a systematic arrangement. Each species is supplied, in succession, with a serial number, full Latin name, locality (and its height above sea-level), date of collection, plant association: number and sex of specimens taken; these data are repeadetly given for each locality of collection. The host species (and families) as well as the zoogeographical element are given at the end. Species new to the fauna of Poland and new trophic relations between ichneumonids and phytophagous insects (hosts) are marked by "!".

Ephialtinae

1. Exetastes longiseta (RATZEBURG, 1852). Andrychów (430 m), 22 Jul. 1988, upland forest: 3 99; Chroberz (305 m), 18 Jun. 1986, fresh mixed forests: 2 00, 1 9. Hosts: Pissodes validirostris GYLL. (Curculionidae), Laspeyresia conicolana HEYL., Grapholita dorsana F., Petrova resinella L., Rhyacionia buoliana DEN. et SCHIFF. (Tortricidae). Euro-Siberian element.

2. Exeristes raborator (FABRICIUS, 1793), Kołków (255 m), 18 Jul. 1990, upland mixed forest: 1 o, 1 o; Bogucice (290 m), 10 Aug. 1989, mixed forest: 2 oo; hosts: Cryptorrhynchus lapathi L., Lixus cardui OL. (Curculionidae), Aegeria formiceformis ESP., A. spheciformis DEN. et SCHIFF. (Aegeriidae), Petrova resinella L. (Tortricidae), Exoteleia dodecella L. (Gelechiidae). Subpontomediterranean element.

3. Scambus dilutus (RATZEBURG, 1852). Chroberz (305 m), 25 May 1986, fresh mixed forest: 2 o'o', 1 o; Klonów (385 m), 15 Jun. 1990, fresh mixed forest: 3 oo; Madohora (905 m), 8 Aug. 1991, mountain mixed forest: 2 o'o'; hosts: Petrova resinella L. (Tortricidae), Noctuidae. European element.

4. Scambus arundinator (FABRICIUS, 1798). Andrychów (450 m), 12 Jul. 1987, upland forest: 3 oo; Kalina Wielka (320 m), 20 Jun. 1989, upland mixed forest: 2 oo, 1 o; Kurnikówka (680 m), 17 Jul. 1987, meadow: 1 o, 1 o; Trzy Korony (930 m), 18 Jul. 1988, meadow: 1 o, 1 o; hosts: Lipara lucens MG., Platycephala sp. (Chloropidae). Palaearctic element.

5. Scambus pomorum (RATZEBURG, 1852). Kurnikówka (680 m), 4 Aug. 1987, meadow: 2 ơơ, 1 ç; Trzy Korony (970 m), 31 Jul. 1987, meadow: 1 ç; Krynica (750 m), 10 Jul. 1984, mountain mixed forest: 1 ơ, 1 ç; hosts: Anthonomus pomorum L., A. pyri KOLL. (Curculionidae), Lithocolletis viminetorum STT. (Gracillariidae), Eutromula pariana CL. (Choreutidae), Cataplectica profugella STT. (Epermeniidae), Euura atra L. (Tenthredinidae). European element.

6. Scambus nigricans (THOMSON, 1873). Kurnikówka (680 m), 30 Jul. 1988, meadow: 2 oo, 2 oo; Trzy Korony (930 m), 16 Jul. 1987, meadow: 2 oo; Madohora (929 m), 9 Aug. 1991, mountain mixed forest: 1 o; Krynica (750 m), 12 Jul. 1984, mountain mixed forest: 2 oo; hosts: Grapholita discretana WOCKE (Tortricidae), Depressaria pastinacella DUP. (Oecophoridae), Dioryctria abietella DEN. et SCHIFF. (Phycididae), Lycia pomorianus HB. (Geometridae), Lipara lucens MG. (Chloropidae). Euro-Caucasian element.

7. Scambus detritus (HOLMGREN, 1889), Kurnikówka (680 m), 29 Jul. 1988, meadow: 1 σ , 1 φ ; Trzy Korony (970 m), 20 Jul. 1989, meadow: 1 φ ; Chroberz (305 m), 14 Jul. 1988, fresh mixed forest: 2 $\varphi\varphi$; Krynica (950 m), 6 Jul. 1985, mountain forest: 1 σ ; hosts: Aegeria formicaeformis ESP. (Aegeriidae), Ryacionia buoliana DEN. et SCHIFF., Eupoecilia ambiguella HB. (Tortricidae), Lipara lucens MG. (Chloropidae), Andricus lignicola HTG. (Cynipidae). Euro-Siberian element.

8. Scambus signatus (PFEFFER, 1913). Kurnikówka (680 m), 16 Jul. 1987, meadow: 2 ơơ, 3 ợọ; Trzy Korony (950 m), 24 Aug. 1990, meadow: 2 ợọ; Bogucice (290 m), 16 Jul. 1989, mixed forest: 1 ơ, 1 ọ; hosts: Cataplectica fulvigutella Z. (Epermeniidae), Neodiprion sertifer GEOFFR. (Diprionidae). Euro-Caucasian element.

9. Scambus brevicornis (GRAVENHORST, 1829). Kurnikówka (680 m), 10 Aug. 1989, meadow: 3 qq; Andrychów (500 m), 18 Jul. 1987, upland forest: 1 q; Kalina Wielka (320 m) 8 Jul. 1990, upland mixed forest: 1 o, 1 q; hosts: Anthomus pomorum L. (Curculionidae), Plutella maculipennis CURT. (Plutellidae), Choristoneura murinana HB., Dioryctria abietella DEN. et SCHIFF. (Phycitidae). Holarctic element.

10. Scambus annulatus KISS, 1924). Kurnikówka (680 m), 22 Jul. 1987, meadow: 1 ơ, 1 ç; Kołków (269 m), 12 Jul. 1990, upland mixed forest: 2 ợç; Chroberz (305 m), 8 Jul. 1988, fresh mixed forest: 1 ơ; hosts: Curculio glandium MARSH., C. nucum L. (Curculionidae, Andricus lignicola HTG. (Cynipidae, Laspeyresia strobilella L., Tortrix viridana L. (Tortricidae). Holarctic element.

11. Ephialtes manifestator (LINNAEUS, 1758). Klonów (385 m), 9 Jul. 1990, fresh mixed forest: 3 oo, 2 oo; Chroberz (305 m), 2 Aug. 1986, fresh mixed forest: 1 o; Krynica (750 m), 12 Jul. 1984, mountain mixed forest: 1 o, 2 oo; hosts: Phymatodes testaceus L., Pogonocherus fasciculatus DEG. (Cerambycidae), Aegeria cephiformis OCHS. (Aegeridae). Palaearctic element.

12. Ephialtes spatulatus TOWNES, 1960. Kurnikówka (680 m), 25 Jul. 1987, meadow: 1 σ , 1 φ ; Andrychów (500 m), 5 Jul. 1988, upland forest: 2 $\sigma\sigma$, 1 φ ; Madohora (850 m), 16 Aug. 1992, mountain mixed forest: 1 σ ; hosts: Buprestidae, Rhynchium sp. (Eumenidae). Holarctic element.

13. Ephialtes brevis (MORLEY, 1909). Trzy Korony (900 m), 16 Jul. 1987, meadow: 1 ç; Krynica (750 m), 12 Jul. 1986, mountain forest: 1 ç; J. STARZYK leg. Madohora (829 m), 18 Aug. 1992, mountain mixed forest: 1 ç; hosts: Pieridae. Palaearctic element.

14. Townesia tenuiventris (HOLMGREN, 1859). Kurnikówka (680 m), 25 Jul. 1991, meadow: 1 °, 1 °; Kalina Wielka (320 m), 2 Aug. 1990, upland mixed forest: 2 °; Klonów (385 m), 10 Jul. 1989, fresh mixed forest: 1 °; hosts: Phymatodes testaceus L., Pogonocherus sp., Saperda populnea L. (Cerambycidae), Petrova resinella L. (Tortricidae), Xiphydria camelus L. (Xiphydriidae), Strongylogaster lineata CHRIST. (Tenthredinidae). Holarctic element.

15. Dolichomitus brevicornis (TSCHEK, 1868). Andrychów (500 m), 9 Jun. 1988, upland forest: 2 oo, 1 o; Chroberz (305 m), 10 Jul. 1987, fresh mixed forest: 2 oo; Trzy Korony (650 m), 6 Jul. 1991, *Tilio-Carpinetum*: 2 oo; hosts: xylophagous insects. Holarctic element.

16. Dolichomitus pterelas (SEYRING, 1927). Bogucice (290 m), 12 Jun. 1989, mixed forest: 2 qq; Chroberz (305 m), 10 Jul. 1986; fresh mixed forest: 1 q; Madohora (800 m), 12 Jul. 1992, mountain mixed forest: 1 q; hosts: ! Saperda scalaris L., ! Monochamus sartor F. (Cerambycidae). Holarctic element.

17. Dolichomitus cephalotes (HOLMGREN, 1859). Kołków (269 m), 3 Jul. 1989, upland mixed forest: 3 φ; Kalina Wielka (320 m), 11 Jun. 1986, upland mixed forest: 1 σ; P. SZWAŁKO leg.; hosts: xylophagous insects. Holarctic element.

18. Dolichomitus sericeus (HARTIG, 1840). Andrychów (500 m), 5 Jul. 1986, upland forest: 2 \oplus; Chroberz (305 m), 10 Jul. 1986, fresh mixed forest: 1 \vec{\sigma}, 1 \vec{o}; Krynica (750 m), 25 Jul. 1991, mountain forest: 2 \oplus; hosts: xylophagous insects. Holarctic element.

19. Dolichomitus tuberculatus (GEOFFROY, 1762). Kalina Wielka (320 m), 2 Jul. 1989, upland mixed forest: 1 σ , 1 φ ; Klonów (385 m), 14 Aug. 1986, fresh mixed forest: 2 $\varphi\varphi$; Krynica (650 m), 29 Jul. 1992, mountain mixed forest: 2 $\varphi\varphi$; hosts: xylophagous insects. Holarctic element.

20. Dolichomitus crassiceps (THOMSON, 1877). Bogucice (290 m), 12 Jun. 1989, mixed forest: 2 $\varphi\varphi$; Klonów (385 m), 14 Jul. 1987, fresh mixed forest: 1 σ , 1 φ ; host: ! Saperda scalaris L. (Cerambycidae). European element.

21. Dolichomitus imperator (KRIECHBAUMER, 1888). Andrychów (500 m), 4 Aug. 1986, upland forest: 2 qq; Chroberz (305 m), 10 Jul. 1986, fresh mixed forest: 3 dd; 1 q; host: ! Phymatodes testaceus L. (Cerambycidae). Holarctic element.

22. ! Dolichomitus mordator AUBERT, 1964. Kalina Wielka (320 m), 11 Jun. 1986, upland mixed forest: 2 o o, 1 o; Bogucice (290 m), 2 Jul. 1989, mixed forest: 2 oo; Madohora (900 m), 16 Jul. 1992, mountain mixed forest: 1 o; 2 oo; hosts: Hesperophanes pallidus OL. (Cerambycidae), Poecilonota variolosa PAYK. (Buprestidae), Xiphydria camelus L. (Xiphydriidae). Palaearctic element.

23. Acropimpla pictipes (GRAVENHORST, 1829). Kurnikówka (680 m), 2 Aug. 1992, meadow: 1 °; 2 °; Trzy Korony (900 m), 10 Aug. 1991, meadow: 1 °; hosts: Gelechiidae, Geometridae. Euro-Caucasian element.

24. Acropimpla didyma (GRAVENHORST, 1829). Andrychów (430 m), 5 Jun. 1986. upland forest: 2 °°, 1 °; Bogucice (290 m), 11 Jul. 1988, mixed forest: 2 °°; Kurnikówka (680 m), 3 Jul. 1991, meadow: 1 °; Pieniny (650 m), 10 Jul. 1992, *Tilio-Carpinetum*: 3 °°; hosts: Noctuidae. Palaearctic element.

25. Iseropus stercorator (FABRICIUS, 1804). Chroberz (305 m), 13 Jul. 1987, fresh mixed forest: 1 ç; Stolarzówka (650 m), 2 Aug. 1990, meadow: 4 ơơ, 3 çç; Trzy Korony (950 m), 18 Jul. 1991, meadow: 1 ơ, 1 ç; hosts: Zygaenidae, Pyraustidae. Euro-Siberian element.

26. Tromatobia variabilis HOLMGREN, 1854. Kalina Wielka (320 m), 11 Jun. 1986, upland mixed forest: 2 ° °, 1 ç; Stolarzówka (650 m), 21 Jul. 1990, meadow: 1 ç; Madohora (900 m), 5 Aug. 1992, mountain mixed forest: 2 çç; hosts: Araneidae. Holarctic element.

27. Tromatobia oculatoria (FABRICIUS, 1798). Bogucice (290 m), 10 Jul. 1991, mixed forest: 2 oo, 1 ç; Stolarzówka (650 m), 30 Jul. 1990, meadow: 1 ç; Kurnikówka (680 m), 2 Jul. 1992, meadow: 1 o, 1 ç; hosts: Araneidae, Thomisidae. Montane element.

28. Tromatobia ornata (GRAVENHORST, 1829). Klonów (385 m), 9 Jul. 1991, fresh mixed forest: 2 oo; Andrychów (430 m), 3 Jun. 1990, upland forest: 1 o; Stolarzówka (650 m), 19 Jul. 1990, meadow: 1 o; Kurnikówka (680 m), 16 Jul. 1991, meadow: 1 o; 1 o; Trzy Korony (900 m), 8 Jul. 1992, meadow: 2 oo; 3 oo; hosts: Araneidae. Palaearctic element.

29. *Tromatobia ovivora* (BOHEMAN, 1821). Kalina Wielka (320 m), 5 Jul. 1990, upland mixed forest: 1 φ ; Kurnikówka (680 m), 18 Jul. 1991, meadow: 1 φ ; hosts: *Theridiidae*. Palaearctic element.

30. Zatypota albicoxa (WALKER, 1954). Andrychów (500 m), 21 Jun. 1990, upland forest: 3 90; Trzy Korony (970 m), 24 Jul. 1990, meadow: 2 90; Madohora (900 m), 2 Aug. 1992, mountain mixed forest: 2 90; hosts: *Theridiidae*, *Agelenidae*. Euro-Siberian element.

31. Itoplectis melanocephala (GRAVENHORST, 1829). Kalina Wielka (320 m), 29 Jun. 1990, upland mixed forest: 2 qq; Bogucice (290 m), 18 Jul. 1990, mixed forest: 1 d; Stolarzówka (650 m), 20 Jul. 1992, meadow: 3 dd, 1 q; Kurnikówka (680 m), 5 Aug. 1990, meadow: 1 d, 1 q; hosts: Crambidae, Pyraustidae, Noctuidae. Palaearctic element.

32. Itoplectis viduata (GRAVENHORST, 1829). Stolarzówka (650 m), 17 Jul. 1991, meadow: 22 oo, 8 oo; Kurnikówka (680 m), 25 Jul. 1990, meadow: 2 oo; Trzy Korony (950 m), meadow: 1 o, 2 oo; Madohora (929 m), 5 Aug. 1992, mountain mixed forest: 3 oo; hosts: Noctuidae, Zygaenidae, Psychidae, Totricidae, Lymantriidae. Holarctic element.

33. Itoplectis tunetana (SCHMIEDEKNECHT, 1900). Klonów (385 m), 20 Jul. 1990, fresh mixed forest: 3 qq; Stolarzówka (650 m), 31 Aug. 1990, meadow: 1 o, 1 o; Kurnikówka (680 m), 20 Jul. 1992, meadow: 1 o; Trzy Korony (970 m), 5 Aug. 1991, meadow: 4 oo, 4 qq; hosts: Totricidae, Yponomeutidae, Coleophoridae, Syrphidae. Palaearctic element.

34. Itoplectis maculator (FABRICIUS, 1804). Kalina Wielka (320 m), 16 Jun. 1989, upland mixed forest: 2 °C, Stolarzówka (650 m), 10 Aug. 1991, meadow: 1 °C; Trzy Korony (900 m), 23 Jul. 1990, meadow: 2 °C, 3 °C; hosts: Tortrix viridana L. (Totricidae). Euro-Caucasian element.

35. Itoplectis curticauda KRIECHBAUMER, 1872. Stolarzówka (650 m), 29 Jul. 1991, meadow: 2 oo, 4 oo; Trzy Korony (970 m), 22 Jul. 1991, meadow: 3 oo, 4 oo; Krynica (900 m), 12 Jul. 1984, mountain forest: 2 oo; hosts: Lithocolletis populifoliella TR. (Gracillariidae), Zygaena filipendulae L. (Zygaenidae), Scrobipalpa saudella R. (Gelechiidae). Euro-Caucasian element.

36. Apechtis capulifera (KRIECHBAUMER, 1872). Stolarzówka (650 m), 23 Jul. 1991, meadow: 1 o, 2 oo; Kurnikówka (680 m), 17 Jul. 1990, meadow: 3 oo; Trzy Korony (600 m), 3 Aug. 1992, Carici-Fagetum cephalantheretosum: 2 oo; hosts: Pieridae, Tineidae, Totricidae, Phycitidae, Geometridae, Drepanidae, Arctiidae, Diprionidae. Palaearctic element. 37. Apechtis rufata (GMELIN, 1829). Stolarzówka (650 m), 21 Jul. 1991, meadow: 1 ơ, 2 ợç; Kurnikówka (680 m), 22 Jul. 1991, meadow: 1 ơ, 2 ợç; Krynica (600 m), 10 Jul. 1992, mountain alder carr: 2 ợç; hosts: Psychidae, Totricidae, Geometridae, Arctiidae, Diprionidae. Euro-Caucasian element.

38. Apechtis compunctor (LINNAEUS, 1758). Kurnikówka (680 m), 16 Jul. 1992, meadow: 1 o, 1 o; Madohora (850 m), 2 Aug. 1992, mountain mixed forest: 2 oo; hosts: Totricidae, Lasiocampidae, Lymantriidae, Pieridae, Pamphilidae, Diprionidae. Euro-Caucasian element.

39. Apechtis quadridentata (THOMSON, 1873). Kurnikówka (680 m), 30 Jul. 1990, 1 ơ, 1 ợ; Trzy Korony (650 m), 2 Aug. 1992, Alnetum incanae: 2 ợợ; hosts: Totricidae, Phycitidae, Geometridae, Drepanidae, Lasiocampidae, Pamphiliidae, Diprionidae. Palaearctic element.

40. Pimpla instigator (FABRICIUS, 1798). Andrychów (460 m), 24 Jun. 1991, upland forest: 3 $\varphi\varphi$; Stolarzówka (650 m), 3 Aug. 1992, meadow: 6 $\sigma\sigma$, 20 $\varphi\varphi$; Kurnikówka (680 m), 7 Jul. 1990, meadow: 1 σ , 1 φ ; Chroberz (305 m), 8 Jul. 1988, fresh mixed forest: 5 $\varphi\varphi$; hosts: Pieridae, Lasiocampidae, Arctiidae, Cimbicidae. Palaearctic element.

41. *Pimpla illecebrator* (VILLERS, 1789). Stolarzówka (650 m), 3 Aug. 1992, meadow: 1 ç; Klonów (385 m), 7 Jul. 1987, fresh mixed forest: 1 ç; hosts: *Sphingidae*, *Notodontidae*, *Noctuidae*. Euro-Caucasian element.

42. *Pimpla melanacrias* PERKINS, 1958. Kołków (270 m), 29 Jun. 1991, upland mixed forest: 3 ∞ ; Stolarzówka (650 m), 10 Aug. 1992, meadow: 2 $\sigma\sigma$, 1 \circ ; Kurnikówka (680 m), 2 Jul. 1991, meadow: 1 \circ ; hosts: *Totricidae*. Palaearctic element.

43. *Pimpla contemplator* (MÜLLER, 1766). Chroberz (305 m), 13 Jul. 1987, fresh mixed forest: 2 $\varphi\varphi$; Kurnikówka (680 m), 4 Aug. 1992, meadow: 1 σ , 2 $\varphi\varphi$; hosts: *Totricidae*. Euro-Caucasian element.

44. Perithous septemcinctorius (THUNBERG, 1824). Kurnikówka (680 m), 9 Aug. 1991, meadow: 1 ç; Krynica (670 m), 12 Jul. 1984, mountain mixed forest: 2 çç; hosts: Pemphredon lugubris LATR., P. clypealis THOMS., Psenulus pallipes PANZ. (Sphecidae). Palaearctic element.

45. Perithous mediator (FABRICIUS, 1804). Kurnikówka (680 m), 10 Aug. 1992, meadow: 1 ç; Madohora (900 m), 2 Jul. 1992, mountain mixed forest: $2 \varphi ;$ hosts: Eumenidae, Megachilidae. Mountain element.

46. Perithous divinator (ROSSI, 1859). Kalina Wielka (320 m), 5 Jul. 1990, upland mixed forest: 1 σ, 2 φç; Kurnikówka (680 m), 5 Aug. 1992, meadow: 1 σ, 1 ç; Krynica (750 m), 11 Jul. 1984, mountain mixed forest: 2 σσ, 3 φç; hosts: Chrysididae, Eumenidae, Sphecidae. Holarctic element.

47. Delomerista novita CRESSON, 1873. Klonów (385 m), 9 Jul. 1989, fresh mixed forest: 3 φ ; Kurnikówka (680 m), 12 Jul. 1991, meadow: $2 \sigma \sigma$, 1φ ; hosts: Curculionidae, Phycitidae. Holarctic element.

48. Delomerista mandibularis (GRAVENHORST, 1829). Stolarzówka (650 m), 14 Jul. 1991, meadow: 2 ° °; Krynica (600 m), 15 Jul. 1984, mountain alder carr: 1 °, 2 °; hosts: Tenthredinidae, Lasiocampidae, Braconidae. Boreal-montane element. 49. ! Delomerista laevis (GRAVENHORST, 1829). Kurnikówka (680 m), 25 Jul. 1992, meadow: 2 oo, 1 o; hosts: Tenthredinidae. Boreal-montane element.

50. Neoxorides nitens GRAVENHORST, 1829. Chroberz (305 m), 17 Jul. 1990, fresh mixed forest: 3 99; hosts: Cerambycidae, Curculionidae, Xiphydriidae. European element.

51. Rhyssa persuasoria (LINNAEUS, 1758). Andrychów (500 m), 16 Jun. 1989, upland forest: 6 oo, 8 oo; Chroberz (305 m), 10 Jul. 1990, fresh mixed forest: 4 oo, 6 oo; Bogucice (290 m), 14 Jun. 1989, mixed forest: 1 o, 3 oo; Kalina Wielka (320 m), 18 Jul. 1988, upland mixed forest: 3 oo, 5 oo; Krynica (850 m), 12 Jun. 1985, mountain forest: 4 oo, 7 oo; Madohora (815 m) 8 Jul. 1990, mountain mixed forest: 2 oo, 3 oo; hosts: Sirex juvencus L., S. noctilio F., Urocerus augur KL., U. gigas L., Xeris spectrum L. (Siricidae), Cerambycidae. Holarctic element.

52. Rhyssa amoena GRAVENHORST, 1829. Andrychów (500 m), 20 Jul. 1990, upland forest: 2 oo, 6 qq; Krynica (650 m), 9 Jul. 1985, mountain mixed forest: 5 oo, 5 qq; Trzy Korony (900 m), 4 Aug. 1992, Carici-Fagetum abietetosum: 1 o, 3 qq; Kołków (269 m), 10 Jun. 1988, upland mixed forest: 2 oo, 3 qq; Bogucice (290 m), 14 Jun. 1989, mixed forest: 4 oo, 2 qq; hosts: Sirex juvencus L., S. noctilio F., Urocerus gigas L., U. augur KL., Xeris spectrum L. (Siricidae), Cerambycidae. Palaearctic element.

53. Rhyssella approximator (FABRICIUS, 1793). Kalina Wielka (320 m), 8 Jul. 1990, upland mixed forest: 1 ç; Klonów (385 m), 4 Jun. 1989, fresh mixed forest: 1 ơ, 1 ç; Krynica (550 m), 13 Jul. 1986, mountain alder carr: 3 çç; hosts: Xiphydria camelus L., X. picta KNW., X. prolongata GEOFFR. (Xiphydriidae). Palaearctic element.

54. Megarhyssa emarginatoria (THUNBERG, 1827). Andrychów (500 m), 3 Jul. 1990, upland forest: 2 od, 3 ∞ ; Chroberz (305 m), 9 Jul. 1987, fresh mixed forest: 2 ∞ ; Krynica (750 m), 7 Jul. 1992, mountain forest: 2 ∞ ; Madohora (850 m), 17 Jul. 1991, mountain mixed forest: 2 od; hosts: Sirex juvencus L., S. noctilio F., Urocerus gigas L., U. augur KL., (Siricidae). Subpontic element.

55. Megarhyssa gigas (LAXMANN, 1770). Kołków (250 m), 2 Jul. 1990, fresh mixed forest: 1 q; hosts: Tremex fuscicornis F., T. magus F. (Siricidae). Palaearctic element.

Tryphoninae

56. Phytodietus geniculatus THOMSON, 1873. Klonów (385 m), 2 Jul. 1987, fresh mixed forest: 2 99; hosts: Ptycholomoides aeriferanus H.-S., Lobesia botrana DEN. et SCHIFF. (Tortricidae). Euro-Siberian element.

57. Netelia virgata (FOURCROY, 1785). Andrychów (480 m), 9 Aug. 1990, upland forest: 1 q; hosts: Cerura furcula CL. (Notodontidae), Noctua pronuba L. (Noctuidae). Palaearctic element.

58. ! Netelia tarsata (BRISCHKE, 1880). Chroberz (305 m), 12 Jul. 1989, fresh mixed forest: 2 qq; Krynica (600 m), 5 Jul. 1984, mountain mixed forest: 2 qq; hosts: Eupithecia absyntiata CL., E. abbreviata STEPH., E. lariciata F. (Geometridae), Drepana cultraria F. (Drepanidae). Holarctic element.

59. ! Netelia caucasica KOKUJEV, 1899. Klonów (380 m), 2 Jul. 1987, fresh mixed forest: 2 $\sigma\sigma$, 1 φ ; Chroberz (305 m), 3 Jul. 1987, fresh mixed forest: 2 $\varphi\varphi$; hosts: Geometridae. Euro-Siberian element.

60. Eclytus exornatus GRAVENHORST, 1829. Bogucice (290 m), 22 Jun. 1986, mixed forest: 1 \circ ; Kalina Wielka (320 m), 21 Jul. 1986, upland mixed forest: 1 \circ , 1 \circ ; hosts: Pristiphora erichsoni HTG., P. abietina CHRIST. (Tenthredinidae). Euro-Siberian element.

61. Cosmoconus nigriventris KASPARYAN, 1981. Stolarzówka (650 m), 18 Jul. 1992, meadow: 1 o; Kurnikówka (680 m), 17 Jul. 1990, meadow: 8 oo, 1 o; hosts: Tenthredinidae. Euro-Siberian element.

62. Cosmoconus elengator (FABRICIUS, 1775). Stolarzówka (650 m), 2 Aug. 1990, meadow: 20 oo, 4 oo; Trzy Korony (970 m), 19 Jul. 1991, meadow: 1 o; hosts: Tenthredinidae. Euro-Caucasian element.

63. Cosmoconus meridionator AUBERT, 1980. Stolarzówka (650 m), 3 Aug. 1990, meadow: 2 qq; Trzy Korony (950 m), 29 Jul. 1991, meadow: 1 q; Krynica (950 m), 18 Aug. 1984, mountain forest: 2 oo, 1 q; hosts: *Rhogogaster, Tenthredo*. Euro-Siberian element.

64. Cosmoconus ceratophorus (THOMSON, 1888). Kurnikówka (680 m), 5 Aug. 1991, meadow: 9 oo, 4 oo; Trzy Korony (600 m), 3 Jul. 1992, Carici-Fagetum cephalantheretosum: 3 oo, 2 oo; hosts: Tenthredinidae. Palaearctic element.

65. Cosmoconus hinzi KASPARYAN, 1981. Trzy Korony (960 m), 17 Jul. 1991, meadow: 2 qq; hosts: Tenthredinidae. European element.

66. Tryphon atriceps (STEPHENS, 1835). Stolarzówka (650 m), 12 Jul. 1991, meadow: 3 σσ, 1 φ; Krynica (950 m), 12 Jul. 1985, mountain forest: 1 σ, 1 φ; D. KUBISZ leg. hosts: Tenthredinidae. Euro-Caucasian element.

67. Tryphon auricularis THOMSON, 1883. Stolarzówka (650 m), 10 Jul. 1991, meadow: 1 σ, 2 φ; Trzy Korony (800 m), 2 Jul. 1992, Phyllitido-Aceretum: 1 φ; hosts: Tenthredinidae. Montane element.

68. Tryphon nigripes HOLMGREN, 1855. Stolarzówka (650 m), 5 Aug. 1992, meadow: 3 oo, 2 ∞ ; hosts: Dolerus sp. (Tenthredinidae). European element.

69. Tryphon signator GRAVENHORST, 1829. Stolarzówka (650 m), 9 Jul. 1991, meadow: 2 °C, 3 °C; A. KOSIOR leg. Krynica (750 m), 14 Jul. 1984, mountain forest: 10 °C, 2 °C; host: Dolerus sp. (Tenthredinidae). Euro-Siberian element.

70. Tryphon relator (THUNBERG, 1827). Andrychów (500 m), 2 Jun. 1990, upland forest: 4 °C, 3 °Q; Kurnikówka (680 m), 7 Jul. 1991, meadow: 1 °Q; Trzy Korony (800 m), 2 Aug. 1992, Carici-Fagetum abietetosum: 1 °C, 1 °Q; host: Loderus sp. (Tenthredinidae). European element.

71. Tryphon abditus KASPARYAN, 1981. Stolarzówka (650 m), 8 Jul. 1991, meadow: 1σ , $2 \varphi \phi$; hosts: Tenthredinidae. Euro-Siberian element.

72. Tryphon trochanteratus HOLMGREN, 1855. Trzy Korony (970 m), 4 Jul. 1992, meadow: 1 o, 1 o; Krynica (750 m), 15 Jul. 1984, mountain forest: 2 o; Madohora (900 m), 10 Aug. 1991, mountain mixed forest: 1 o; hosts: Tenthredinidae. Euro-Caucasian element.

73. Tryphon rutilator (LINNAEUS, 1758). Stolarzówka (650 m), 12 Jul. 1991, meadow: 1 σ, 1 φ; hosts: Tenthredinidae. Euro-Asiatic element.

74. Tryphon bidentulus THOMSON, 1883. Kurnikówka (680 m), 3 Aug. 1992, meadow: 1 o; Krynica (750 m), 18 Jun. 1985, mountain forest: 1 o; hosts: Tenthredinidae. Euro-Siberian element.

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75. Tryphon heliophilus GRAVENHORST, 1829. Kurnikówka (680 m), 9 Aug. 1991, meadow: 1 ç; Trzy Korony (950 m), 25 jun. 1991, meadow: 2 çç; hosts: Tenthredinidae. Euro-Siberian element.

76. Polyblastus tener HABERMEHL, 1922. Andrychów (500 m), 9 Aug. 1989, upland forest: 1 ç; Kurnikówka (680 m), 10 Aug. 1991, meadow: 1 ç; Krynica (750 m), 29 Jun. 1986, mountain forest: 1 ç; hosts: Tenthredinidae. European element.

77. Polyblastus varitarsus (GRAVENHORST, 1829). Kurnikówka (680 m), 20 Jul. 1991, meadow 1 φ ; Madohora (850 m), 2 Aug. 1992, mountain mixed forest: 2 $\varphi\varphi$; hosts: *Tenthredinidae*. Holarctic element.

78. Polyblastus palaemon (SCHIØDTE, 1838). Kurnikówka (680 m), 18 Jul. 1991, meadow: 2 qq; hosts: Tenthredinidae. Holarctic element.

79. Ctenochira propinqua (GRAVENHORST, 1829). Klonów (385 m), 2 Jul. 1987, fresh mixed forest: 1 o, 1 o; Kurnikówka (680 m), 20 Jul. 1991, meadow 1 o, 1 o; Trzy Korony (600 m), 2 Aug. 1992, Tilio-Carpinetum: 2 oo, 1 o; hosts: Nematinae. Palaearctic element.

80. Ctenochira pectinata BAUER, 1958. Kurnikówka (680 m), 2 Aug. 1992, meadow: 1 ç; hosts: Heterarthrinae. Euro-Siberian element.

81. Ctenochira marginata (HOLMGREN, 1855). Chroberz (305 m), 9 Jul. 1991, fresh mixed forest: 290; Trzy Korony (970 m), 17 Jul. 1991, meadow: 19; hosts: Heterarthrinae. Euro-Caucasian element.

82. Ctenochira pratensis (GRAVENHORST, 1829). Trzy Korony (970 m), 29 Jul. 1991, meadow: 2 $\sigma\sigma$, 1 φ ; Krynica (750 m), 29 Jun. 1984, mountain forest: 2 $\varphi\varphi$; hosts: Heterarthrinae. Euro-Caucasian element.

83. ! Ctenochira taiga KASPARYAN, 1972. Kalina Wielka (320 m), 18 Jul. 1991, upland mixed forest: 2 qq; hosts: Anoplonyx destructor BENSON, A. pectoralis LIP., Pristiphora laricis HTG. Heterarthrinae. Euro-Siberian element.

84. ! Erromenus bibulus KASPARYAN, 1981. Bogucice (290 m), 14 Jun. 1990, fresh mixed forest: 1 o, 2 qq; hosts: Tenthredinidae. Holarctic element.

85. Eridolius alacer GRAVENHORST, 1829. Kurnikówka (680 m), 12 Aug. 1992, meadow: 1 ç; Stolarzówka (650 m), 21 Jul. 1991, meadow: 1 ç; hosts: Tenthredinidae. Holarctic element.

86. Eridolius dorsator THUNBERG, 1827. Klonów (385 m), 3 Jul. 1990, fresh mixed forest: 1 ç; Stolarzówka (650 m), 12 Aug. 1991, meadow: 2 °C, 3 çç; Krynica (750 m), 27 Jun. 1985, mountain forest: 2 çç; hosts: *Tenthredinidae*. Holarctic element.

87. Eridolius deletus THOMSON, 1883. Stolarzówka (650 m), 17 Jul. 1992, 2 σσ, 3 φς; Madohora (800 m), 12 Aug. 1992, mountain mixed forest: 2 φς; hosts: Tenthredinidae. Holarctic element.

88. Eridolius mitigiosus GRAVENHORST, 1829. Stolarzówka (650 m), 10 Aug. 1992, meadow: 1 σ, 1 φ; Krynica (750 m), 23 Aug. 1986, mountain forest: 1 φ; hosts: Tenthredinidae. Holarctic element.

89. Eridolius punctipes THOMSON, 1883. Stolarzówka (650 m), 12 Aug. 1991, meadow: 1 σ, 3 φç; Trzy Korony (650 m), 3 Aug. 1992, Alnetum incanae: 1 ç; hosts: Tenthredinidae. Holarctic element.

90. Eridolius pygmaeus HOLMGREN, 1855. Stolarzówka (650 m), 9 Aug. 1992, meadow: 2 od, 1 o; Krynica (900 m), 26 Jul. 1987, mountain forest: 1 o; hosts: Tenthredinidae. Holarctic element.

91. Eridolius bimaculatus HOLMGREN, 1855. Kurnikówka (680 m), 5 Aug. 1992, meadow: 3 oo, 2 oo; Madohora (900 m), 15 Jul. 1992, mountain mixed forest: 1 o; hosts: Tenthredinidae. Holarctic element.

92. Eridolius pumilio HOLMGREN, 1855. Kurnikówka (680 m), 21 Jul. 1991, meadow: 4 oo, 1 q; Madohora (800 m), 2 Aug. 1992, mountain mixed forest: 2 oo; hosts: Tenthredinidae. Holarctic element.

93. Eridolius brevigenaTHOMSON, 1883. Trzy Korony (970 m), 12 Aug. 1991, meadow: 1 φ ; Krynica (950 m), 27 Jun. 1984, mountain mixed forest: 2 $\varphi \varphi$; hosts: Tenthredinidae. Holarctic element.

94. Eridolius pullus HOLMGREN, 1855. Trzy Korony (960 m), 10 Aug. 1991, meadow: 1 o, 1 o; hosts: Tenthredinidae. Holarctic element.

95. Kristotomus laetus (GRAVENHORST, 1829). Trzy Korony (960 m), 11 Aug. 1992, meadow: $\varphi \sigma\sigma$, 3 $\varphi\varphi$; Krynica (800 m), 27 Jun. 1984, mountain mixed forest: 2 $\sigma\sigma$, 1 φ ; hosts: Tenthredinidae. Holarctic element.

Eucerotinae

96. Euceros serricornis (HALIDAY, 1838). Stolarzówka (650 m), 28 Jul. 1991, meadow: 1 σ, 2 φ; Kurnikówka (680 m), 10 Aug. 1991, meadow: 2 φ; Krynica (750 m), 26 Jun. 1984, mountain forest: 2 φ; hosts: Tenthredinidae. Euro-Caucasian element.

97. Euceros superbus KRIECHBAUMER, 1901. Kurnikówka (680 m), 10 Aug. 1991, meadow: 1 ç; Madohora (900 m), 3 Aug. 1992, mountain mixed forest: 2 çç; hosts: Tenthredinidae. Euro-Caucasian element.

Labeninae

98. Brachycyrtus ornatus KRIECHBAUMER, 1872. Kurnikówka (680 m), 19 Jul. 1991, meadow: 1 ç; Krynica (750 m), 28 Jun. 1984, mountain forest: 2 qq; hosts: Chrysopidae. European element.

Xoridinae

99. Ischnoceros rusticus (GEOFFROY, 1762). Chroberz (305 m), 2 Jun. 1990, fresh mixed forest: 8 °C, 3 °C; Kalina Wielka (320 m), 9 Jul. 1987, upland mixed forest: 4 °C, 5 °C; Klonów (385 m), 5 Jun. 1988, fresh mixed forest: 3 °C, 7 °C; Krynica (600 m), 24 Jun. 1990, mountain alder carr: 2 °C; hosts: Aromia moschata L., Rhagium mordax DEG., Saperda carcharias L. (Cerambycidae). Euro-Caucasian element.

100. Ischnocerus caligatus (GRAVENHORST, 1829). Bogucice (290 m), 4 Jun. 1989, mixed forest: 6 °°; Kołków (269 m), 7 Jun. 1990, upland mixed forest: 1 °, 1 °; Krynica (750 m), 28 Jun. 1984, mountain mixed forest: 2 °°; hosts: Arhopalus rusticus L., Leiopus nebulosus L., Rhagium bifasciatum F., R. inquisitor L., R. mordax DEG., Saperda carcharias L. (Cerambycidae). Euro-Caucasian element. 101. Odontocolon spinipes (GRAVENHORST, 1829). Andrychów (490 m), 6 Jul. 1989, upland forest: 1 σ , 5 $\varphi\varphi$; Krynica (750 m), mountain mixed forest: 2 $\varphi\varphi$; hosts: ! *Rhagium sycophanta* SCHRK., ! *R. inquisitor* L., (*Cerambycidae*). Holarctic element.

102. Odontocolon appendiculatus (GRAVENHORST, 1829). Kołków (250 m), 9 Jul. 1989, fresh mixed forest: 2 ∞ ; hosts: Scolytidae. European element.

103. Xorides hedwigi CLÉMENT, 1924. Kalina Wielka (320 m), 8 Jul. 1987, upland mixed forest: 2 qq; Krynica (750 m), 14 Aug. 1987, mountain mixed forest: 1 o, 1 q; Madohora (820 m), 2 Aug. 1992, mountain mixed forest: 2 qq; hosts: ! Saperda scalaris L., ! Leiopus nebulosus L. (Cerambycidae). Euro-Siberian element.

104. Xorides filiformis GRAVENHORST, 1829. Andrychów (500 m), 3 Jun. 1989, upland forest: 2 qq; Krynica (750 m), 15 Jul. 1987, mountain mixed forest: 3 qq; hosts: Acanthocinus aedilis L., Callidium aeneum DEG., Ergates faber L., Phymatodes testaceus L., Plagionotus arcuatus L., Rhagium inquisitor L. (Cerambycidae), Xiphydria longicollis GEOFFR. (Xiphydriidae). Euro-Siberian element.

105. Xorides praecatorius FABRICIUS, 1798. Klonów (385 m), 5 Jun. 1987, fresh mixed forest: 2 oo, 3 oo; Kalina Wielka (320 m), 12 Jun. 1990, upland mixed forest: 2 oo; Trzy Korony (800 m) 3 Aug. 1992, Carici-Fagetum abietetosum: 2 oo; hosts: ! Agrilus viridis L. (Buprestidae), Aromia moschata L., Callidium aeneum DEG., C. violaceum L., Leiopus nebulosus L. (Cerambycidae). Euro-Siberian element.

106. Xorides securicornis (HOLMGREN, 1855). Kołków (260 m), 5 Jun. 1987, upland mixed forest: 1σ , 5∞ ; hosts: Psoa dubia ROSSI (Bostrychidae), Hedobia pubescens OL. (Anobiidae), ! Phymatodes testaceus L. (Cerambycidae). Euro-Caucasian element.

107. Xorides rufipes GRAVENHORST, 1829. Chroberz (305 m), 6 Jun. 1987, fresh mixed forest: 8 $\sigma\sigma$, 12 $\varphi\varphi$; Klonów (385 m), 5 Jun. 1988, fresh mixed forest: 5 $\varphi\varphi$; hosts: Cerambycidae. Euro-Siberian element.

108. Xorides niger PFEFFER, 1949. Andrychów (500 m), 6 Jul. 1989, upland forest: 5 oo, 14 ∞ ; Kalina Wielka (320 m), 8 Jul. 1987, upland mixed forest: 4 oo, 4 ∞ ; hosts: Cerambycidae. Euro-Siberian element.

109. Xorides brachylabis KRIECHBAUMER, 1901. Andrychów (450 m), 6 Jul. 1989, upland forest: 3 qq; Krynica (800 m), 15 Jul. 1990, mountain forest: 2 qq; hosts: Tetropium castaneum L., T. fuscum F., T. gabrieli WEISE (Cerambycidae). Euro-Siberian element.

110. Xorides irrigator (FABRICIUS, 1798). Kołków (260 m), 7 Jun. 1990, upland mixed forest: 5 $\sigma\sigma$, 2 $\varphi\varphi$; Kalina Wielka (320 m), 8 Jul. 1987, upland mixed forest: 5 $\sigma\sigma$, 8 $\varphi\varphi$; Madohora (800 m), 4 Aug. 1991, mountain mixed forest: 2 $\varphi\varphi$; hosts: ! Acanthocinus aedilis L., A. carinulatus GEBL., Rhagium inquisitor L., Tetropium gabrieli WEISE (Cerambycidae). Euro-Siberian element.

Gelinae

111. Chirotica trifasciator (THUNBERG, 1827). Stolarzówka (650 m), 18 Jul. 1991, meadow: 2 oo, 1 o; hosts: Lepidopsyche unicolor HUFN. (Psychidae). European element.

112. Chirotica maculipennis GRAVENHORST, 1829. Stolarzówka (650 m), 29 Jul. 1991, meadow: 1 σ, 1 φ; Madohora (820 m), 3 Aug. 1992, mountain mixed forest: 2 φ; hosts: *Psychidae*. European element.

113. Encrateola laevigata RATZEBURG, 1848. Stolarzówka (650 m), 19 Jul. 1991, meadow: 2 qq; Krynica (500 m), 14 Jul. 1991, mountain alder carr: 1 q; hosts: Diadegma armillata GRAV. (Ichneumonidae), Apanteles dilectus HAL., Macrocentrus sp. (Braconidae). European element.

114. Acrolyta distincta (BRIDGMAN, 1880). Kurnikówka (680 m), 18 Jul. 1991, meadow: 4 oo, 1 q; hosts: Ichneumonidae, Braconidae. European element.

115. Acrolyta secernenda SCHMIEDKNECHT, 1933. Kurnikówka (680 m), 17 Jul. 1991, meadow: 1 ç; Krynica (700 m), 12 Aug. 1988, mountain mixed forest: 2 çç; hosts: Braconidae. European element.

116. Arotrephes speculator GRAVENHORST, 1829. Stolarzówka (650 m), 15 Jul. 1991, meadow: 1 ç; Kurnikówka (680 m), 18 Jul. 1990, meadow: 1 ç; hosts: Calliphoridae. European element.

117. Aclastus minutus BRIDGMAN, 1880. Kurnikówka (680 m), 17 Jul. 1988, meadow: 1 ç; Trzy Korony (900 m), 3 Aug. 1992, meadow: 2 çç; hosts: *Braconidae*. European element.

118. Polyaulon incertus FOERSTER, 1850. Stolarzówka (650 m), 16 Jul. 1987, meadow: 1 ç; Kurnikówka (680 m), 17 Jul. 1987, meadow: 1 ç; Andrychów (450 m), 17 Jun. 1992, upland forest: 2 çç; hosts: *Braconidae*. European element.

119. Gelis agilis FABRICIUS, 1798. Krynica (700 m), 16 Jun. 1984, mountain mixed forest: 2 φ; Stolarzówka (650 m), 29 Jul. 1988, meadow: 1 σ, 3 φ; Kurnikówka (680 m), 24 Jul. 1987, meadow: 1 φ; hosts: *Braconidae*. European element.

120. Gelis sericeus FOERSTER, 1850. Stolarzówka (650 m), 22 Jul. 1987, meadow: 1 q; Kurnikówka (680 m), 24 Jul. 1987, meadow: 1 q; hosts: Apanteles vitripennis HAL. (Braconidae), Camponotus sp. (Formicidae). European element.

121. Gelis festinans (FOERSTER, 1850). Stolarzówka (650 m), 22 Jul. 1987, meadow: 2 \overline{2}; Krynica (750 m), 15 Jun. 1985, mountain mixed forest: 1 \overline{2}; hosts: Tenthredinidae. European element.

122. Gelis canaliculatus FOERSTER, 1850. Stolarzówka (650 m), 27 Jul. 1987, meadow; Madohora (800 m), 6 Aug. 1992, mountain mixed forest: 2 $\varphi\varphi$; hosts: Tenthredinidae. European element.

123. Gelis acarorum LINNAEUS, 1758. Trzy Korony (970 m), 17 Jul. 1991, meadow: 2°°, 3°°; Krynica (750 m), 16 Jul. 1991, mountain forest: 1°, 1°; hosts: *Ichneumonidae*. European element.

124. Gelis latrator (FOERSTER, 1850). Stolarzówka (650 m), 16 Jul. 1987, fresh mixed forest: 1 o, 1 o; hosts: Ichneumonidae. European element.

125. Mastrus inimicus (GRAVENHORST, 1829). Stolarzówka (650 m), 20 Jul. 1987, meadows: 1 ç; Kołków (260 m), 12 Jul. 1986, upland mixed forest: 2 çç; hosts: Itamoplex leucoceir RATZ., Exenterus abruptorius THUNB., Orthopelma mediator THUNB. Ichneumonidae. European element.

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126. Mastrus hirticeps THOMSON, 1896. Kurnikówka (680 m), 30 Jul. 1987, meadow: 1 ç; Krynica (750 m), 13 Jun. 1984, mountain forest: 2 qç; hosts: Ichneumonidae. European element.

127. Mastrus castaneus TASCHENBERG, 1863. Stolarzówka (650 m), 19 Jul. 1991, meadow: 1 ç; Krynica (600 m), 18 Jun. 1985, mountain alder carr: 2 çç; Klonów (385 m), 9 Jun. 1987, fresh mixed forest: 1 ç; hosts: Banchus femoralis THOMS., Exenterus abruptorius THUNB. (Ichneumonidae), Meteorus albiditarsis CURT. (Braconidae), Panzeria rudis FALL. (Tachinidae), Diprion pini L. (Diprionidae). Euro-Caucasian element.

128. Mastrus armatus (GRAVENHORST, 1829). Trzy Korony (900 m), 22 Jul. 1991, meadow: 1 σ , 2 ∞ ; Krynica (650 m), 29 Jul. 1991, mountain mixed forest: 2 $\sigma\sigma$, 3 ∞ ; Madohora (800 m), 2 Aug. 1990, mountain mixed forest: 1 \circ ; hosts: Gymnomerus laevipes SHUCK. (Eumenidae), Crossocerus nigritus LEP. et BRULLÉ, Trypoxylon figulus L. (Sphecidae). European element.

129. *Rhembobius quadrispinus* GRAVENHORST, 1829. Kurnikówka (680 m), 10 Aug. 1991, meadow: 1 φ; Krynica (750 m) 27 Aug. 1989, mountain forest: 1 σ, 2 φ; Chroberz (305 m), 12 Jun. 1990, fresh mixed forest: 1 φ; hosts: *Syrphidae*. European element.

130. Endasys erythrogaster GRAVENHORST, 1829. Kurnikówka (680 m), 10 Aug. 1992, meadow: 1 σ , 1 φ ; Kołków (360 m), 6 Jul. 1989, upland mixed forest: 1 σ , 1 φ ; Krynica (750 m) 29 Jun. 1985, mountain forest: 1 $\varphi\varphi$; hosts: Diprion sp. (Diprionidae), Pristiphora abietina CHRIST., Pachynematus montanus ZADD. (Tenthredinidae). European element.

131. Endasys brevis GRAVENHORST, 1829. Kurnikówka (680 m), 20 Jul. 1992, meadow: 1 °, 1 °; Andrychów (500 m), 2 Jul. 1992, upland forest: 2 °; Krynica (750 m), 28 Jun. 1986, mountain forest: 1 °; hosts: Nematus ribesii SCOP., Pristiphora abietina CHRIST., Pachynematus montanus ZADD. (Tenthredinidae), Laspeyresia pomonella L. (Tortricidae), Malacosoma neustrium L. (Lasiocampidae). European element.

132. Glyphicnemis profligator FABRICIUS, 1804. Stolarzówka (650 m), 17 Jul. 1991, meadow: 3 GO, 3 QQ; Krynica (950 m), 28 Jun. 1988, mountain forest: 3 GO, 1 Q; hosts: Diprion pini L., Neodiprion sertifer GEOFFR. (Diprionidae), Nematinus acuminatus THOMS., Nematus crassusFALL., N. salicis L., Trichiocampus viminalis L. (Tenthredinidae). European element.

133. Glyphicnemis vagabundus GRAVENHORST, 1829. Andrychów (450 m), 12 Jun. 1989, upland forest: 2 qq; Krynica (650 m), 27 Jul. 1990, mountain mixed forest: 1 q; hosts:*Tenthredinidae*. European element.

134. Phygadeuon geniculatus (KRIECHBAUMER, 1901). Stolarzówka (650 m), 17 Jul. 1991, meadow: 1 ç; Krynica (900 m), 19 Jul. 1986, mountain forest: 1 ç; hosts: Anthomyiidae. European element.

135. *Phygadeuon ovatus* GRAVENHORST, 1829. Stolarzówka (650 m), 17 Jul. 1991, meadow: 2 ç; Kurnikówka (680 m), 16 Jul. 1991, meadow: 2 çç; Krynica (650 m), 29 Jul. 1986, mountain alder carr: 1 ç; hosts: *Anthomyiidae*. European element.

136. Phygadeuon cephalotes GRAVENHORST, 1829. Stolarzówka (650 m), 19 Jul. 1992. meadow: 1 o; Krynica (850 m), 25 Jul. 1991, mountain forest: 2 oo, 3 oo; hosts: Anthomyiidae. European element 137. Phygadeuon trichops THOMSON, 1886. Stolarzówka (650 m), 12 Aug. 1992, meadow: 1 φ; Klonów (385 m), 7 Jul. 1990, fresh mixed forest: 3 σσ; Krynica (650 m), 24 Jun. 1986, mountain mixed forest: 1 σ, 1 φ; hosts: Pegomyia betae CURT., Delia platura MG. (Anthomyiidae). European element.

138. Phygadeuon pegomyiae HABERMEHL, 1922. Stolarzówka (650 m), 16 Jul. 1991, meadow: 1 o; Krynica (800 m), 25 Jun. 1992, mountain forest: 1 o; hosts: Pegomyia hyoscyami PANZ., P. betae CURT., P. albimargo PAND. (Anthomyiidae), Norellisoma spinimatum FALL. (Scatophagidae). European element.

139. ! Phygadeuon filipendulae HORSTMANN, 1986. Andrychów (500 m), 8 Jul. 1988, upland forest: 2 $\sigma\sigma$, 1 φ ; Krynica (850 m), 22 Jul. 1989, mountain forest: 2 $\varphi\varphi$; hosts: Pegomya rubivora COQUILLET (Anthomyiidae). European element.

140. ! Stilpnus fallax FOERSTER, 1876. Andrychów (450 m), 8 Jul. 1988, upland forest: 2 φ ; hosts: Anthomyiidae. European element.

141. ! Stilpnus rossicus JUSSILA, 1987. Stolarzówka (650 m), 16 Jul. 1990, meadow: 1 ç; Madohora (850 m), 3 Aug. 1992, mountain mixed forest: 2 çç; hosts: Muscidae. European element.

142. Stilpnus angustatus THOMSON, 1896. Stolarzówka (650 m), 16 Jul. 1991, meadow: 1 ç; Krynica (900 m), 25 Jul. 1990, mountain forest: 1 ç; hosts: Muscidae. European element.

143. Stilpnus blandus (GRAVENHORST, 1829). Kurnikówka (680 m), 16 Jul. 1992, meadow: 1 σ; Andrychów (500 m), 21 Jun. 1992, upland forest: 1 σ; hosts: Muscidae. European element.

144. *Mesoleptus ripicolus* THOMSON, 1873. Stolarzówka (650 m), 20 Jul. 1992, meadow: 1 ç; Krynica (850 m), 30 Jun. 1988, mountain forest: 1 ç; hosts: *Muscidae*. European element.

145. Mesoleptus marginatus (THOMSON, 1896), Kurnikówka (680 m), 11 Aug. 1992, meadow: $\sigma \varphi \varphi$; Krynica (950 m), 25 Jun. 1990, mountain forest: 1 φ ; hosts: Muscidae. European element.

146. *Mesoleptus filicornis* THOMSON, 1896. Stolarzówka (650 m), 23 Jul. 1991, meadow: 2 qq; Chroberz (305 m), 12 Jun. 1990, fresh mixed forest: 1 σ ; Krynica (850 m), 29 Jul. 1991, mountain forest: 1 φ ; hosts: *Muscidae*. European element.

147. Mesoleptus transversator (THUNBERG, 1827). Stolarzówka (650 m), 17 Jul. 1992, meadow: 1 o; Andrychów (450 m), 8 Jul. 1988, upland forest: 2 o; hosts: Muscidae. European element.

148. Mesoleptus scrutator (HALIDAY, 1832). Kurnikówka (680 m), 28 Jul. 1992, meadow: 1 ç; Andrychów (500 m), 5 Jul. 1987, upland forest: 2 çç; Krynica (800 m), 23 Jul. 1987, mountain forest: 1 ơ; hosts: Muscidae. European element.

149. Atractodes gravidus GRAVENHORST, 1829. Madohora (900 m), 5 Aug. 1991, mountain mixed forest: 2 qq; Krynica (850 m), 26 Jul. 1988, mountain forest: 1 q; hosts: Tortricidae. European element.

150. Atractodes gilvipes HOLMGREN, 1858. Andrychów (450 m), 12 Jun. 1989, upland forest: 1 ç; Krynica (650 m), 23 Jul. 1985, mountain mixed forest: 1 ç; hosts: Tortricidae. European element.

151 Atractodes punctator ROMAN, 1943. Madohora (929 m), 29 Jun. 1991, mountain mixed forest: 2 ∞ ; Krynica (950 m), 22 Jul. 1984, mountain forest: 1 ∞ ; hosts: *Muscidae*. European element.

152. Cubocephalus anatorius GRAVENHORST, 1829. Stolarzówka (650 m), 12 Aug. 1992, meadow: 299; Krynica (750 m), 22 Jul. 1985, mountain forest: 19; hosts: Sphecidae. European element.

153. Cubocephalus associator, THUNBERG, 1827. Kurnikówka (680 m), 16 jul. 1991, meadow: 2 oo, 4 99; hosts: Sphecidae. European element.

154. Cubocephalus brevicornis TASCHENBERG, 1865. Stolarzówka (650 m), 3 Aug. 1992, meadow: 1 o, 1 o; Krynica (600 m), 19 Jul. 1984, mountain alder carr: 2 oo, 1 o; hosts: Cerambycidae. European element.

155. Cubocephalus nigriventris THOMSON, 1896. Kurnikówka (680 m), 18 Jul. 1991, meadow: 1 o; Krynica (800 m), 20 Jun. 1989, mountain forest: 1 o; hosts: Cerambycidae. European element.

156. Cubocephalus erythrinus GRAVENHORST, 1829. Stolarzówka (650 m), 16 Jul. 1991, meadow: 1 °; Krynica (800 m), 20 Jul. 1984, mountain forest: 1 °; hosts: Cerambycidae. European element.

157. Echthrus reluctator (LINNAEUS, 1758). Kołków (269 m), 14 Jul. 1988, upland mixed forest: 2 $\varphi \varphi$; Krynica (750 m), 20 Jun. 1984, mountain forest: 1 φ ; hosts: Cerambycidae. European element.

158. Oresbius arridens (GRAVENHORST, 1829). Kurnikówka (680 m), 16 Jul. 1991, meadow: 1 φ; Krynica (750 m), 19 Jul. 1990, mountain forest: 1 σ, 1 φ; hosts: Cerambycidae. European element.

159. Oresbius subguttatus (GRAVENHORST, 1829). Madohora (920 m), 29 Jun. 1991, mountain mixed forest: 1σ , 2φ ; Krynica (800 m), 20 Jul. 1991, mountain forest: 1σ , 1φ ; hosts: Diprionidae. European element.

160. Polytribax perspicillator GRAVENHORST, 1829. Chroberz (305 m), 8 Jul. 1987, fresh mixed forest: 1 φ ; Krynica (700 m), 19 Jul. 1985, mountain mixed forest: 1 φ ; hosts: Diprionidae. European element.

161. *Plectocryptus digittatus* GRAVENHORST, 1827. Kalina Wielka (320 m), 10 Jul. 1988, upland mixed forest: 1 φ; Madohora (900 m), 3 Aug. 1992, mountain mixed forest: 1 σ, Krynica (850 m), 20 Jul. 1985, mountain forest: 1 φ; *Diprionidae*. European element.

162. Schenkia graminicola GRAVENHORST, 1829. Kołków (269 m), 19 Jul. 1987, upland mixed forest: 2 oo, Krynica (750 m), 27 Jun. 1988, mountain forest: 1 q; hosts: Zygaenidae. European element.

163. Pleolophus basizonus GRAVENHORST, 1829. Chroberz (305 m), 8 Jul. 1987, fresh mixed forest: 3 oo, 3 oo; Krynica (650 m), 29 Jun. 1984, mountain mixed forest: 2 oo; hosts: Gilpinia frutetorum F., G. pallida KL., Diprion pini L., Neodiprion sertifer GEOFFR. (Diprionidae). European element.

164. Pleolophus curtulus KRIECHBAUMER, 1901. Bogucice (290 m), 6 Jul. 1986, mixed forest: 2 or; Krynica (700 m), 21 Jul. 1985, mountain mixed forest: 1 q; hosts: *Diprionidae*. European element.

165. Aptesis desertor (GRAVENHORST, 1829). Madohora (829 m), 5 Sep. 1991, mountain mixed forest: 1 or, Krynica (750 m), 20 Jul. 1986, mountain forest: 1 o; hosts: Zygaenidae. European element.

166. Agrothereutes funipennis (GRAVENHORST, 1829). Stolarzówka (650 m), 15 Jul. 1991, meadow: 1 σ; Krynica (700 m), 18 Jul. 1986, mountain mixed forest: 1 σ, 1 φ; hosts: Zygaena filipendulae L., Zygaena sp. (Zygaenidae). European element.

167. Agrothereutes aterrimus (GRAVENHORST, 1829). Andrychów (500 m), 12 Jun. 1989, upland forest: 1 σ , 1 φ ; Krynica (750 m), 30 Jun. 1984, mountain forest: 1 φ ; hosts: Aegeriidae. European element.

168. Gambrus incubitor (LINNAEUS, 1758). Madohora (900 m), 6 Aug. 1991, mountain mixed forest: $3 \sigma\sigma$, $2 \varphi\varphi$; Krynica (850 m), 15 Jul. 1990, mountain forest: 1σ ; hosts: Aegeria formicaeformisESP. (Aegeriidae), Malacosoma neustrium L. (Lasiocampidae). European element.

169. Gambrus ornatulus (THOMSON, 1878). Madohora (920 m), 9 Aug. 1991, mountain mixed forest: 1 σ , 2 ∞ ; Krynica (950 m), 24 Jun. 1990, mountain forest: 1 \circ ; hosts: *Tortricidae*. European element.

170. Aritranis mesoxanthus (THOMSON, 1873). Chroberz (305 m), 8 Jul. 1988, fresh mixed forest: 1 q; Klonów: (385 m), 8 Jul. 1988, fresh mixed forest: 1 d, 2 qq; Krynica (750 m), 19 Jul. 1986, mountain forest: 1 d, 1 q; hosts: Tortricidae. European element.

171. Trychosis pauper (TSCHEK, 1870). Trzy Korony (970 m), 7 Jul. 1991, meadow: 1 ç; Kurnikówka (680 m), 12 Aug. 1992, meadow: 2 çç; Krynica (950 m), 20 Jul. 1985, mountain forest: 2 çç; hosts: Tortricidae. European element.

172. Enclisis macilenta (GRAVENHORST, 1829). Andrychów (500 m), 12 Jun. 1989, upland forest: 2 φ ; Krynica (750 m), 18 Jun. 1987, mountain forest: 1 φ ; hosts: Lymantriidae. European element.

173 Ischnus punctiger (THOMSON, 1873). Kołków (269 m), 11 Jul. 1989, upland mixed forest: 1 σ , 1 φ ; Krynica (850 m), 25 Jun. 1986, mountain forest: 1 φ ; hosts: Tortricidae. European element.

174. Ischnus inquisitorius (MÜLLER, 1932). Bogucice (290 m), 5 Jul. 1987, mixed forest: 3 od, 1 q; Krynica (750 m), 23 Jul. 1986, mountain forest: 2 od, 1 q; hosts: Lymantria dispar L. (Lymantriidae), Pandemis cerasana HB., Archips rosana L. (Tortricidae). European element.

175. Itamoplex inculator (LINNAEUS, 1758). Chroberz (305 m), 5 Jul. 1987, fresh mixed forest: 4 99; Krynica (750 m), 17 Jul. 1985, mountain forest: 1 9; hosts: Panolis flammea DEN. et SCHIFF., Agrotis vestigialis ROTT. (Noctuidae). European element.

176. Itamoplex triguttatus (GRAVENHORST, 1829). Chroberz (305 m), 5 Jul. 1987, fresh mixed forest: 1 o; Stolarzówka (650 m), 9 Aug. 1989, meadow: 1 o; Krynica (750 m), 28 Jun. 1987, mountain forest: 1 o; hosts: Lasiocampidae. European element.

177. Schreineria annulata (BRISCHKE, 1880). Kalina Wielka (320 m), 29 Jun. 1990, upland mixed forest: 1 o, 2 oo; Krynica (750 m), 30 Jun. 1987, mountain forest: 2 oo; hosts: Aegeria formicaeformis ESP., A. spheciformis DEN. et SCHIFF. (Aegeriidae). European element.

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178. Meringopus cyanator (GRAVENHORST, 1829). Bogucice (290 m), 5 Jul. 1987, mixed forest: 2 qq; Madohora (900 m), 9 Jul. 1991, mountain mixed forest: 1 o; Krynica (850 m), 24 Jun. 1985, mountain forest: 1 q; hosts: Malacosoma neustrium L. (Lasiocampidae), Panolis flammea DEN. et SCHIFF. (Noctuidae). European element.

Lycorininae

179. Lycorina triangulifera HOLMGREN, 1855. Madohora (929 m), 9 Aug. 1991, mountain mixed forest: 1 o; Krynica (950 m), 23 Jul. 1984, mountain forest: 2 o; hosts: Aegeriidae, Noctuidae. Euro-Asiatic element.

Stilbopinae

180. ! Stilbops plementaschi HENS, 1930. Stolarzówka (650 m), 10 Jul. 1991, meadow: 2 çç; Krynica (850 m), 29 Jun. 1991, mountain forest: 1 ç; hosts: Noctuidae. European element.

181. ! Stilbops robustus KASPARYAN, 1984. Madohora (820 m), 26 Jun. 1991, mountain mixed forest: 1 o; Krynica (850 m), 28 Jun. 1987, mountain forest: 2 oo; hosts: Adelidae. Euro-Siberian element.

182. Stilbops abdominalis GRAVENHORST, 1829. Kurnikówka (680 m), 8 Jul. 1991, meadow: 2 oo; Kołków (260 m), 12 Jul. 1986, upland mixed forest: 1 o; Krynica (750 m), 26 Jun. 1985, mountain forest: 1 o; hosts: Adelidae. Holarctic element.

Banchinae

183. Glypta extincta RATZEBURG, 1852. Madohora (920 m), 12 Jul. 1991, mountain mixed forest: 1 φ ; Krynica (950 m), 19 Jul. 1989, mountain mixed forest: 1 φ ; hosts: *Tortricidae*. Holarctic element.

184. Glypta resinanae HARTIG, 1837. Chroberz (305 m), 5 Jul. 1987, fresh mixed forest: 1 σ , 1 φ ; Krynica (600 m), 18 Jun. 1985, mountain alder carr: 1 φ ; hosts: Choristoneura murinana HB., Blastethia turionella L., Petrova resinella L. (Tortricidae). Euro-Siberian element.

185. Lissonota nitida (GRAVENHORST, 1829). Kalina Wielka (320 m), 7 Jul. 1988, upland mixed forest: 3 99; Krynica (750 m), 23 Jun. 1987, mountain mixed forest: 1 9; hosts: Aegeria tipuliformis CL. (Aegeriidae), Apamea sordens HUFN. (Noctuidae). Euro-Siberian element.

186. Lissonota impressifrons (THOMSON, 1896). Kurnikówka (680 m), 18 Jul. 1991, meadow: 2 oo; Krynica (750 m), 18 Jul. 1988, mountain mixed forest: 1 o; hosts: Aegeria formiceformis ESP., A. spheciformis DEN. et SCHIFF. (Aegeriidae). European element.

187. Cryptopimpla errabunda GRAVENHORST, 1823. Klonów (385 m), 6 Jul. 1987, fresh mixed forest: 1 σ, 1 φ; Krynica (750 m), 23 Jun. 1984, mountain mixed forest: 1 σ; hots: Aegeriidae. Euro-Siberian element.

188. Syzeuctus apicalis GRAVENHORST, 1829. Stolarzówka (650 m), 8 Jul. 1991, Krynica (750 m), 22 Jul. 1984, mountain mixed forest: 1 o; hosts: *Tortricidae*. Euro-Siberian element.

189. Exetastes adpressorius THUNBERG, 1827. Andrychów (500 m), 7 Jun. 1988, upland forest: 1 ç; Krynica (750 m), 19 Jul. 1988, mountain forest: 1 ç; hosts: Noctuidae. European element.

190. Exetastes albiger KRIECHBAUMER, 1901. Bogucice (290 m), 8 Jul. 1987, mixed forest: 2 $\varphi\varphi$; Krynica (800 m), 24 Jun. 1990, mountain forest: 2 $\sigma\sigma$; hosts: Noctuidae. European element.

Ctenopelmatinae (Scolobatinae)

191. Homaspis rufinus (GRAVENHORST, 1829). Kołków (252 m), 9 Jul. 1987, upland mixed forest: 1 ç; Madohora (900 m), 3 Aug. 1992, mountain mixed forest: 1 ç; Krynica (750 m), 26 Jun. 1986, mountain forest: 1 c; hosts: Tenthredinidae. European element.

192. Homaspis robustus THOMSON, 1896. Chroberz (305 m), 5 Jul. 1987, fresh mixed forest: 2 oo; Krynica (650 m), 28 Jun. 1987, mountain mixed forest: 1 o; hosts: Tenthredinidae. European element.

193. *Glyptorhaestus selandrivorus* GIRAUD, 1872. Kalina Wielka (320 m), 7 Jul. 1988, upland mixed forest: 1 q; Krynica (600 m), 27 Jun. 1986, mountain alder carr: 1 q; hosts: *Tenthredinidae*. Euro-Siberian element.

194. Rhorus substitutor THUNBERG, 1791. Bogucice (290 m), 8 Jul. 1987, mixed forest: 2 $\varphi\varphi$; Krynica (750 m), 21 Jul. 1989, mountain forest: 1 φ ; hosts: Diprion pini L., Microdiprion pallipes FALL. (Diprionidae). Euro-Siberian element.

195. Pion crassipes (HOLMGREN, 1889). Chroberz (305 m), 19 Jul. 1986, fresh mixed forest: 1 σ , 2 $\varphi\varphi$; Krynica (750 m), 20 Jul. 1989, mountain forest: 1 σ , 1 φ ; hosts: *Tenthredinidae*. European element.

196. Pion stammeri (BAUER, 1958). Andrychów (500 m), 12 Jun. 1990, upland forest: 2 or, 1 ç; Krynica (750 m), 23 Jun. 1986, mountain forest: 1 or; hosts: Tenthredinidae. European element.

197. Scolobates auriculatus (FABRICIUS, 1804). Kołków (260 m), 9 Jul. 1987, upland mixed forest: 1 ç; Krynica (800 m), 20 Jun. 1987, mountain forest: 1 ç; hosts: Argidae. Holarctic element.

198. Rhinotorus mesocastanus (THOMSON, 1896). Kalina Wielka (320 m), 7 Jul. 1988, upland mixed forest: 1 q; Trzy Korony (900 m), 5 Aug. 1992, meadow: 1 q; hosts: Cladius difformis PANZ., Crosesus septentrionalis L., Nematus melanocephalus HTG. (Tenthredinidae). Holarctic element.

199. Anoncus referendus HEINRICH, 1960. Bogucice (290 m), 9 Jun. 1987, mixed forest: 2_{\$\phi\$}; Krynica (500 m), 12 Jul. 1984, mountain alder carr: 1_{\$\phi\$}; hosts: *Tenthredinidae*. Holarctic element.

200. Alexeter fallax HOLMGREN, 1855. Bogucice (290 m), 9 Jun. 1987, mixed forest: 3 qq; Krynica (750 m), 22 Jun. 1985, mountain forest: 1 q; hosts: Tenthredopsis sp., Strongylogaster sp. (Tenthredinidae). Holarctic element.

201. Alexeter niger GRAVENHORST, 1829. Kurnikówka (680 m), 8 Jul. 1991, meadow: 2 ∞ ; Krynica (750 m), 23 Jun. 1985, mountain forest: 1 ∞ ; hosts: Aglostigma sp., *Rhogogaster* sp. (*Tenthredinidae*). Holarctic element.

202. Barytarbes colon GRAVENHORST, 1829. Chroberz (305 m), 13 Jul. 1987, fresh mixed forest: 1 q; Krynica (500 m), 24 Jun. 1986, mountain alder carr: 1 q; hosts: Tenthredinidae. Holarctic element.

203. Lagarotis semicaligata GRAVENHORST, 1829. Madohora (920 m), 12 Jul. 1991, mountain mixed forest: 2 qq; Krynica (950 m), 23 Jun. 1987, mountain forest: 1 q; hosts: *Tenthredinidae*. European element.

204. Lagarotis ustulatus HOLMGREN, 1857. Stolarzówka (650 m), 11 Sep. 1991, meadow: 1 o; Krynica (750 m), 24 Jul. 1984, mountain forest: 1 o; hosts: Tenthredinidae. European element.

205. Ollophorus pulverulentus (HOLMGREN, 1889). Madohora (929 m), 8 Jul. 1991, mountain mixed forest: 2 $\varphi\varphi$; Krynica (950 m), 25 Jun. 1986, mountain forest: 1 σ , 1 φ ; hosts: *Tenthredinidae*. Holarctic element.

206. Dentimachus flavipes (GRAVENHORST, 1829). Kołków (269 m), 9 Jul. 1987, upland mixed forest: 1 σ , 1 2; Krynica (500 m), 23 Jun. 1984, mountain alder carr: 1 φ ; hosts: Tenthredinidae. European element.

207. Lamachus transiens (RATZEBURG, 1852). Bogucice (290 m), 9 Jun. 1987, mixed forest: 1 σ , 1 φ ; Krynica (500 m), 22 Jun. 1984, mountain alder carr: 1 σ , 1 φ ; hosts: Diprion pini L., Gilpinia frutetorum F., G. virensis KL. (Diprionidae). European element.

208. Hyperbatus segmentator HOLMGREN, 1855. Chroberz (305 m), 13 Jul. 1987, fresh mixed forest: 1 ç; Krynica (750 m), 29 Jun. 1985, mountain forest: 1 ç; hosts: Nematus melanaspis HTG., N. pavidus LEP., Croessus latipes VILL. (Tenthredinidae). Holarctic element.

209. Synomelix scutulata (HARTIG, 1837). Bogucice (290 m), 9 Jun. 1987, mixed forest: 1 σ , 2 ∞ ; Krynica (800 m), 18 Jun. 1984, mountain forest: 1 σ ; hosts: Gilpinia frutetorum F., G. virensis KL., Neodipirion sertifer GEOFFR. (Diprionidae). Holarctic element.

Phrudinae

210. Seleucus cuneiformis HOLMGREN, 1889. Madohora (900 m), 10 Jun. 1991, mountain mixed forest: 1 o; Krynica (950 m), 29 Jun. 1985, mountain forest: 2 oo; hosts: Curculionidae. Holarctic element.

Tersilochinae

211. Barycnemis guttator (THUNBERG, 1824). Madohora (929 m), 29 Jun. 1991, mountain mixed forest: 2 °°; Krynica (950 m), 27 Jun. 1984, mountain forest: 1 °°, hosts: Curculionidae. European element.

212. Aneuclis melanarius HOLMGREN, 1889. Kalina Wielka (320 m), 7 Jul. 1988, upland mixed forest: 2 qq; Krynica (750 m), 23 Jun. 1984, mountain forest: 1 q; hosts: Ceutorhynchus pleurostigma MARSH., C. assimilis PAYK. (Curculionidae), Psylliodes chrysocephala L. (Chrysomelidae). European element.

213. Phradis minutus (BRIDGMAN, 1886). Madohora (929 m), 5 Aug. 1991, mountain mixed forest: 1 φ ; hosts: Curculionidae. European element.

214. ! *Phradis nigritulus* (GRAVENHORST, 1829). Andrychów (450 m), 12 Jul. 1991, upland forest: 2 99; hosts: *Chrysomelidae*. European element.

215. Probles microcephalus GRAVENHORST, 1829. Trzy Korony (900 m), 6 Jul. 1991, meadow: 1 °, 2 °; Krynica (950 m), 19 Jul. 1986, mountain forest: 2 °; hosts: Chrysomelidae. Euro-Caucasian element.

216. Probles marginatus BRIDGMAN, 1886. Stolarzówka (650 m), 12 Sep. 1991, meadow: 2 qq; Krynica (750 m), 24 Jun. 1985, mountain forest: 1 q; hosts: Curculionidae. European element.

217. Nanodiaparsis frontellus HOLMGREN, 1889. Kołków (252 m), 9 Jul. 1987, upland mixed forest: 1 ç; Krynica (550 m), 25 Jun. 1986, mountain alder carr: 2 çç; hosts: (Scolytidae). European element.

218. Diaparsis truncatus GRAVENHORST, 1829. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ , 1 φ ; Krynica (750 m), 18 Jul. 1984, mountain forest: 1 σ ; hosts: Chrysomelidae. European element.

219. Diaparsis stramineipes BRISCHKE, 1871. Klonów (385 m), 6 Jul. 1987, fresh mixed forest: 3 qq; Krynica (750 m), 21 Jun. 1985, mountain forest: 1 q; hosts: Curculionidae. European element.

220. Gonolochus stenocari GREGOR, 1939. Trzy Korony, (800 m), 9 Jul. 1991, Carici-Fagetum abietetosum: 1 ç; Krynica (800 m), 19 Jun. 1984, mountain forest: 1 ç; hosts: Stenocarus fuliginosus MARSH., S. cardui HBST. (Curculionidae). European element.

221. Tersilochus tripartitus BRISCHKE, 1882. Chroberz (305 m), 6 Jun. 1986, fresh mixed forest: 1 σ , 1 φ ; Krynica (750 m), 16 Jul. 1984, mountain forest: 1 σ ; hosts: Curculionidae. European element.

222. Tersilochus spiracularis HORSTMANN, 1980. Andrychów (500 m), 29 Jun. 1991, upland forest: 2 $\varphi\varphi$; Krynica (750 m), 24 Jun. 1984, mountain forest: 1 φ ; hosts: Curculionidae. European element.

223. ! Tersilochus clypeatus HORSTMANN, 1980. Stolarzówka (650 m), 8 Jul. 1991, meadow: 1 σ , 1 φ ; Krynica (800 m), 21 Jun. 1984, mountain forest: 1 σ ; hosts: Curculionidae. European element.

224. Tersilochus subdepressus THOMSON, 1896. Kurnikówka (680 m), 7 Jul. 1991, meadow: 2 qq; Krynica (750 m), 18 Jul. 1984, mountain forest: 1 q; hosts: Chrysomelidae. European element.

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225. Tersilochus obliquus THOMSON, 1896. Madohora (926 m), 10 Jul. 1991, mountain mixed forest: 1 ç; Krynica (950 m), 22 Jul. 1984, mountain forest: 1 ç; hosts: Curculionidae. European element.

Cremastinae

226. Dimophora evanialis (GRAVENHORST, 1829). Trzy Korony (900 m), 10 Jul. 1991, meadow: 3 qq; Krynica (950 m), 20 Jul. 1995, mountain forest: 1 q; hosts: Lepidoptera. European element.

227. Pristomerus vulneator PANZER, 1806. Bogucice (290 m), 7 Jul. 1986, mixed forest: 1 o, 1 o; Krynica (750 m), 15 Aug. 1990, mountain forest: 1 o; hosts: Laspeyresia pomonella L., Rhyacionia buoliana DEN. et SCHIFF. (Tortricidae), Ostrinia nubilalis HB. (Pyraustidae). European element.

228. Cremastus geminus (GRAVENHORST, 1829). Madohora (920 m), 9 Jul. 1991, mountain mixed forest: 1 q; Krynica (950 m), 29 Jun. 1984, mountain forest: 1 q; hosts: Pyraustidae. Euro-Siberian element.

229. Cremastus pungens (GRAVENHORST, 1829). Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: $2 \varphi ;$ Krynica (600 m), 28 Jul. 1985, mountain alder carr: $1 \sigma ;$ hosts: Pyraustidae. Euro-Siberian element.

230. Temelucha subnasuta (THOMSON, 1873). Stolarzówka (650 m), 10 Jul. 1991, meadow: 1 q; Kołków (260 m), 12 Jul. 1985, upland mixed forest: 1 q; hosts: Pyraustidae. European element.

231. Temelucha schoenobius (THOMSON, 1873). Klonów (385 m), 6 Jul. 1986, fresh mixed forest: 2 ∞ ; hosts: Tortricidae. European element.

Campoplegini (Porizontinae)

232. Venturia campoplegiformis (HORSTMANN, 1973). Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 q; hosts: Epermeniidae. European element.

233. ! Bathypiesta carinata (HORSTMANN, 1974). Madohora (920 m), 9 Jul. 1991, mountain mixed forest: 1 q; hosts: Epermeniidae. Euro-Asiatic element.

234. ! Cymodusa declinator (GRAVENHORST, 1829). Trzy Korony (800 m), 9 Jul. 1991, Carici-Fagetum abietetosum: 2 99; Krynica (750 m), 23 Jun. 1985, mountain forest: 1 9; hosts: Epermeniidae. European element.

235. Cymodusa cruentata (GRAVENHORST, 1829). Klonów (385 m), 6 Jul. 1986, fresh mixed forest: 2 99; hosts: Epermeniidae. Palaearctic element.

236. ! Cymodusa antennator (HOLMGREN, 1858). Andrychów (500 m), 14 Jun. 1989, upland forest: 1 σ, 3 φ; hosts: Epermeniidae. Euro-Siberian element.

237. ! Nemeritis major SZÉPLIGETI, 1916. Madohora (920 m), 9 Jul. 1991, mountain mixed forest: 2 99; hosts: Raphidiidae, Cleridae. Holarctic element.

238. ! Nemeritis specularis HORSTMANN, 1973. Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 q; Krynica (750 m), 26 Jul. 1989, mountain forest: 1 q; hosts: Raphidia flammi ASP. et ASP., R. nigricollis ALB., R. notata F., Inocellia braueri ALB., (Raphidiidae). Holarctic element.

239. Nemeritis fallax GRAVENHORST, 1829. Kołków (239 m), 9 Jul. 1987, upland mixed forest: 1σ , $2 \varphi \varphi$; hosts: Cleridae. Holarctic element.

240. Nemeritis breviventris HORSTMANN, 1973. Chroberz (305 m), 13 Jul. 1987, fresh mixed forest: 1 ç; Krynica (800 m), 24 Jul. 1987, mountain forest: 1 ç; hosts: Cleridae. Holarctic element.

241. Nemeritis macrocentra GRAVENHORST, 1829. Bogucice (290 m), 9 Jun. 1987, mixed forest: 1 ç; Krynica (750 m), 18 Jul. 1985, mountain forest: 1 ç; hosts: Raphidiidae. Holarctic element.

242. Nemeritis brevicauda HORSTMANN, 1973. Klonów (385 m), 14 Mar. 1987, fresh mixed forest: 1 ç; Krynica (500 m), 12 Aug. 1986, mountain alder carr: 1 ç; hosts: Raphidiidae. Holarctic element.

243. Lathroplex clypearis THOMSON, 1896. Madohora (920 m), 9 Jul. 1991, mountain mixed forest: 1 φ ; Krynica (950 m), 22 Aug. 1985, mountain forest: 1 φ ; hosts: Dermestidae. European element.

244. Bathyplectes stenostigma (THOMSON, 1896). Bogucice (290 m), 9 Jun. 1987, mixed forest: 1 q; Krynica (750 m), 20 Jun. 1985, mountain forest: 1 q; hosts: Curculionidae. Holarctic element.

245. Bathyplectes curculionis (THOMSON, 1896). Trzy Korony (850 m), 10 Jul. 1991, *Phyllitido-Aceretum*: 1 q; Krynica (950 m), 19 Jun. 1985, mountain forest: 1 σ ; hosts: *Phytonomus variabilis* HBS., *P. plantaginis* DEG. (*Curculionidae*). Holarctic element.

246. Bathyplectes exiguus (GRAVENHORST, 1829). Trzy Korony (850 m), 5 Jul. 1991, *Phyllitido-Aceretum*: 1 q; Krynica (950 m), 14 Aug. 1984, mountain forest: 1 q; hosts: *Curculionidae*. Holarctic element.

247. Biolysia tristis (GRAVENHORST, 1829). Chroberz (305 m), 13 Jul. 1987, fresh mixed forest: 1 ç; Krynica (750 m), 29 Jun. 1984, mountain forest: 1 ç; hosts: Curculionidae. Holarctic element.

248. Napiesta mandibularis (HOLMGREN, 1889). Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 9; hosts: Noctuidae. European element.

249. Pyracmon sepiellum (HOLMGREN, 1889). Kołków (250 m), 6 Jul. 1986, upland mixed forest: 1 ç; Krynica (750 m), 24 Jun. 1985, mountain forest: 1 ç; hosts: Noctuidae. Holarctic element.

250. Spudastica robusta (WOLDSTEDT, 1876). Bogucice (290 m), 8 Jul. 1986, mixed forest: 1 q; hosts: Orthosia incerta HUFN., O. gracilis DEN. et SCHIFF. (Noctuidae). Holarctic element.

251. Campoletis fuscipes (HOLMGREN, 1889). Trzy Korony (600 m), 11 Sep. 1991, Carici-Fagetum cephalantheretosum: 2 99; hosts: Noctuidae. Cosmopolitic element.

252. Campoletis viennensis (GRAVENHORST, 1829). Andrychów (500 m), 29 Jun. 1991, upland forest: 1 ç; hosts: Tortricidae. Cosmopolitic element.

253. Meloboris alternans (GRAVENHORST, 1829). Klonów (385 m), 6 Jul. 1986, fresh mixed forest: 1 ç; Krynica (750 m), 22 Aug. 1984, mountain forest: 1 ç; hosts: Epinotia mercuriana FRÖL. (Tortricidae), Platytes cerusellus DEN. et SCHIFF. (Crambidae). European element.

254. Dolophron pedellum HOLMGREN, 1889. Trzy Korony (800 m), 7 Jul. 1991, Carici-Fagetum abietetosum: 2 99; hosts: Tenthredinidae. European element.

255. Tranosema latiuscula (THOMSON, 1896). Kalina Wielka (320 m), 12 Jun. 1990, upland mixed forest: 2 °C, hosts: Tenthredinidae. European element.

256. Macrus parvulus GRAVENHORST, 1829. Chroberz (305 m), 13 Jul. 1987, fresh mixed forest: 2 od, 1 o; hosts: Solenobia cembrella L., S. triquetrella HB. (Psychidae). European element.

257. Macrus filiventris (GRAVENHORST, 1829). Madohora (920 m), 8 Jul. 1991, mountain mixed forest: 1 q; Krynica (950 m), 25 Jun. 1984, mountain forest: 1 q; hosts: *Psychidae*. European element.

258. Tranosemella taeniopora VIERECK, 1925. Bogucice (290 m), 8 Jul. 1986, mixed forest: 1 σ, 1 φ; hosts: Coleophoridae. Holarctic element.

259. Diadegma laricinella STROBL, 1901. Andrychów (450 m), 29 Jun. 1991, upland forest: 2 99; hosts: Coleophoridae. Holarctic element.

260. Diadegma crassicornis (GRAVENHORST, 1829). Madohora (920 m), 12 Jul. 1991, mountain mixed forest: 2 qq; hosts: Noctuidae. Palaearctic element.

261. Diadegma stagnalis HOLMGREN, 1889. Trzy Korony (800 m), 9 Jul. 1991, Carici-Fagetum abietetosum: 1 o, 2 oo; hosts: Tortricidae. Palaearctic element.

262. Diadegma apostata (GRAVENHORST, 1829). Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 ç; hosts: Tortricidae. Palaearctic element.

263. ! Diadegma flexa HORSTMANN, 1980. Kołków (260 m), 8 Jul. 1987, upland mixed forest: 1 q; hosts: Tortricidae. European element.

264. ! Diadegma germanica HORSTMANN, 1980. Trzy Korony (600 m), 5 Jul. 1991, Carici-Fagetum cephalantheretosum: 2 99; hosts: Psychidae. European element.

265. Diadegma consumptor GRAVENHORST, 1829. Chroberz (305 m), 10 Jul. 1986, fresh mixed forest: 1 ç; Krynica (600 m), 20 Jun. 1987, mountain forest: 1 ç; hosts: *Psychidae*. European element.

266. Diadegma ledicola HORSTMANN, 1980. Bogucice (290 m), 8 Jul. 1986, mixed forest: 1σ , 1φ ; hosts: *Psychidae*. European element.

267. ! Diadegma glabricola (HOLMGREN, 1873). Madohora (920 m), 8 Aug. 1991, mountain mixed forest: 2 qq; hosts: Coleophoridae. Palaearctic element.

268. Diadegma neomajalis HORSTMANN, 1973. Andrychów (500 m), 29 Jun. 1992, upland forest: 2 qq; hosts: Coleophoridae. European element.

269. ! Diadegma rufigaster HORSTMANN, 1973. Trzy Korony (600 m), 6 Jul. 1991, Carici-Fagetum cephalantheretosum: 2 99; hosts: Psychidae. European element.

270. Diadegma incompleta HORSTMANN, 1980. Klonów (380 m), 3 Jul. 1990, fresh mixed forest: 1 q; hosts: Psychidae. European element.

271. Diadegma terebrans (GRAVENHORST, 1829). Chroberz (305 m), 20 Jul. 1986, fresh mixed forest: 1 ç; Krynica (750 m), 16 Jul. 1984, mountain forest: 1 ç; hosts: *Pyraustidae*. European element.

272. Diadegma coleophorarum RATZEBURG, 1852. Madohora (920 m), 9 Aug. 1991, mountain mixed forest: 1 q; Krynica (950 m), 20 Jul. 1986, mountain forest: 1 q; hosts: *Plutellidae*. European element.

273. Diadegma crassiseta (THOMSON, 1896). Andrychów (500 m), 18 Jul. 1989, upland forest: 1 q; Krynica (800 m), 30 Jun. 1986, mountain forest: 1 q; hosts: *Plutellidae*. European element.

274. Diadegma fenestralis (HOLMGREN, 1889). Andrychów (460 m), 12 Jun. 1990, upland forest: 1 o, 3 oo; hosts: Plutellidae. Euro-Siberian element.

275. Lathrostizus lugens (GRAVENHORST, 1829). Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 o; hosts: Tenthredinidae. European element.

276. Lathrostizus flexicauda HOLMGREN, 1889. Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 q; hosts: Trichiocampus viminalis L., Nematus reticulatus HOLMGR. Tenthredinidae. European element.

277. Lathrostizus curvicauda HOLMGREN, 1889. Klonów (385 m), 6 Jul. 1986, fresh mixed forest: 2 99; hosts: Tenthredinidae. European element.

278. Ophion areolaris BRAUNS, 1905. Trzy Korony (550 m), 6 Jul. 1991, Carici-Fagetum cephalantheretosum: 1 q; Krynica (500 m), 20 Jun. 1984, mountain alder carr: 1 q; hosts: Noctuidae. European element.

279. Ophion minutus KRIECHBAUMER, 1901. Kołków (260 m), 6 Jul. 1987, upland mixed forest: 1 ç; Krynica (600 m), 17 Jul. 1985, mountain alder carr: 1 ç; hosts: Noctuidae. European element.

280. Ophion ventricosus GRAVENHORST, 1829. Trzy Korony (650 m), 7 Jul. 1991, *Tilio-Carpinetum*: 1 σ , 1 φ ; Krynica (750 m), 13 Jul. 1985, mountain forest: 1 σ ; hosts: *Noctuidae*. European element.

281. Ophion parvulus KRIECHBAUMER, 1901. Chroberz (305 m), 19 Jul. 1987, fresh mixed forest: 2 99; Krynica (750 m), 19 Jun. 1985, mountain forest: 1 9; hosts: Noctuidae. European element.

282. Ophion luteus LINNAEUS, 1758. Klonów (385 m), 6 Jul. 1986, fresh mixed forest: 1 ç; Krynica (800 m), 29 Jun. 1986, mountain forest: 1 ç; hosts: Noctuidae. European element.

283. Ophion obscuratus FABRICIUS, 1804. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ , 3 $\varphi\varphi$; Krynica (750 m), 28 Jun. 1984, mountain forest: 1 φ ; hosts: Noctuidae. European element.

284. Enicospilus ramidulus LINNAEUS, 1758. Kołków (260 m), 10 Jun. 1986, upland mixed forest: 2 99; Krynica (800 m), 19 jul. 1984, mountain forest: 1 9; hosts: Noctuidae. Euro-Siberian element.

285. Enicospilus undulatus (GRAVENHORST, 1829). Klonów (385 m), 6 Jul. 1986, fresh mixed forest: 1 q; hosts: Lasiocampidae. European element.

286. Enicospilus repentinus (HOLMGREN, 1889). Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 ç; Krynica (750 m), 17 Jul. 1984, mountain forest: 1 ç; hosts: Lasiocampidae. Euro-Siberian element.

287. Enicospilus inflexus (RATZEBURG, 1852). Chroberz (305 m), 20 Jul. 1987, fresh mixed forest: 1 σ ; Krynica (750 m), 29 Jun. 1985, mountain forest: 1 σ ; hosts: Lasiocampidae. Euro-Siberian element.

288. Anomalon foliator (FABRICIUS, 1804). Trzy Korony (600 m), 10 Jul. 1991, Carici-Fagetumcephalantheretosum: 2, \$\varphi\$; Krynica (500 m), 25 Jun. 1984, mountain alder carr: 1, \$\varphi\$; hosts: Opatrum sabulosum L., Gonocephalum pusillum F., Pedinus femoralis L., (Tenebrionidae). Euro-Siberian element.

289. Therion brevicorne (GRAVENHORST, 1829). Trzy Korony (650 m), 6 Jul. 1991, Tilio-Carpinetum: 1 σ , 2 ∞ ; Krynica (750 m), 29 Jun. 1985, mountain forest: 1 σ ; hosts: Cuculia scrophulariae DEN. et SCHIFF., C. verbasci L., Acronicta euphorbiae DEN. et SCHIFF. (Noctuidae). Euro-Asiatic element.

290. Therion circumflexum (LINNAEUS, 1758). Andrychów (500 m), 23 Jun. 1988, upland forest: 1σ , $2 \varphi \varphi$; Krynica (750 m), 27 Jun. 1985, mountain forest: 1σ , 1φ ; hosts: Sphinx pinastri L., S. ligustri L. (Sphingidae), Odontosia ziczac L. (Notodontidae), Lasiocampidae, Noctuidae. Holarctic element.

291. Heteropelma calcator WESMAEL, 1844. Kalina Wielka (320 m), 8 Jun. 1986, upland mixed forest: 2 qq; Krynica (800 m), 21 Jun. 1985, mountain forest: 1 q; hosts: Bupalus piniarius L. (Geometridae), Panolis flammea DEN. et SCHIFF., Anarta myrtilli L., Bena fagana F. (Noctuidae). Palaearctic element.

292. Heteropelma amictum FABRICIUS, 1798. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ , 1 φ ; Krynica (750 m), 22 Jun. 1984, mountain forest: 1 σ ; hosts: Sphingidae, Phalera bucephala L. (Notodontidae), Geometridae, Thaumetopoeidae, Lymantriidae, Noctuidae, Arctiidae. Euro-Asiatic element.

293. Trichomma enecator ROSSI, 1849. Kołków (260 m), 10 Jun. 1989, upland mixed forest: 13 qq; Krynica (800 m), 16 Jul. 1985, mountain forest: 18 qq; hosts: Psychidae, Tortrix viridana L., Acleris hastiana L. (Tortricidae), Lymantriidae, Noctuidae. Palaearctic element.

294. Trichomma occisor HABERMEHL, 1902. Klonów (385 m), 6 Jul. 1986, fresh mixed forest: 1 σ , 20 ∞ ; Krynica (850 m), 19 Jun. 1985, mountain mixed forest: 9 ∞ ; hosts: Tortricidae, Noctuidae. Palaearctic element.

295. Trichomma fulvidens WESMAEL, 1859. Trzy Korony (600 m), 6 Jul. 1991, Tilio-Carpinetum: 1 ç; Krynica (900 m), 28 Jun. 1985, mountain forest: 1 ç; hosts: Noctuidae. Palaearctic element.

296. Habronyx heros (WESMAEL, 1859). Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 q; hosts: Dendrolimus pini L., Pachypasa otus DRURY (Lasiocampidae), Sphingidae. Palaearctic element.

297. Camposcopus perspicuus (WESMAEL, 1844). Chroberz (305 m), 20 Jul. 1987, fresh mixed forest: 1 q; Krynica (950 m), 18 Jul. 1984, mountain forest: 1 q; hosts: Geometridae. Palaearctic element.

298. Aphanistes armatus WESMAEL, 1859. Chroberz (305 m), 18 Jul. 1990, fresh mixed forest: 1 ç; Krynica (800 m), 20 Jul. 1985, mountain forest: 1 ç; hosts: Sphingidae, Geometridae, Agrotis ripae HB., Cuculia lychnitis RAMB. (Notodontidae). Euro-Caucasian element.

299. Aphanistes ruficornis GRAVENHORST, 1829. Bogucice (290 m), 8 Jul. 1990, mixed forest: 1 ç; Krynica (750 m), 15 Jul. 1985, mountain forest: 1 ç; hosts: Sphingidae, Lymantria monacha L. (Lymantriidae), Bena fagana F. (Noctuidae), Arctiidae. Euro-Caucasian element.

300. Aphanistes megasoma HEINRICH, 1930. Kołków (260 m), 10 Jul. 1988, upland mixed forest: 1 o, 1 o; Krynica (800 m), 20 Jun. 1985, mountain forest: 1 o; hosts: Sphingidae. Euro-Caucasian element.

301. Erigorgus fibulator GRAVENHORST, 1829. Trzy Korony (650 m), 6 Jul. 1991, Tilio-Carpinetum:1 q; Krynica (900 m), 23 Jun. 1985, mountain forest: 1 q; hosts: Zygaenidae, Malacosoma castrensis L. (Lasiocampidae), Diloba caeruleocephala L. (Notodontidae). Euro-Caucasian element.

302. Erigorgus leucopus SZÉPLIGETI, 1900. Trzy Korony (600 m), 10 Jul. 1991, Carici-Fagetum cephalantheretosum: 1 ç; Krynica (750 m), 22 Jun. 1984, mountain forest: 1 ç; hosts: Noctuidae. Euro-Caucasian element.

303. Erigorgus biguttatus GRAVENHORST, 1829. Klonów (385 m), 6 Jul. 1990, fresh mixed forest: 1 σ , 1 φ ; Krynica (750 m), 23 Jun. 1985, mountain forest: 1 σ ; hosts: Bupalus piniarius L. (Geometridae), Noctuidae. Palaearctic element.

304. Erigorgus cerinops GRAVENHORST, 1829. Madohora (900 m), 8 Aug. 1991, mountain mixed forest: 2 oo; Krynica (950 m), 19 Jun. 1984, mountain forest: 1 o; hosts: Noctuidae. Palaearctic element.

305. Barylypa amabilis (TOSQUINET, 1903). Andrychów (500 m), 29 Jun. 1991, upland forest: 1 σ , 1 φ ; Krynica (750 m), 24 Jun. 1985, mountain forest: 1 σ ; hosts: Lymantriidae, Spodoptera exiqua HB. (Noctuidae). Palaearctic element.

306. Barylypa longicornis BRAUNS, 1905. Chroberz (305 m), 19 Jul. 1987, fresh mixed forest: 1 φ ; Krynica (850 m), 29 Jun. 1985, mountain forest: 1 φ ; hosts: Notodontidae. Palaearctic element.

307. Barylypa delictor THUNBERG, 1824. Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 q; Krynica (800 m), 28 Jun. 1985, mountain forest: 1 q; hosts: Thaumeto-poedidae, Lasiocampidae, Lymantriidae, Noctuidae. Palaearctic element.

308. Trichionotus anxius (WESMAEL, 1859). Madohora (920 m), 10 Jun. 1990, mountain mixed forest: 1σ , 1φ ; Krynica (950 m), 16 Jul. 1985, mountain forest: 1σ ; hosts: Tortricidae, Yponomeutidae. Palaearctic element.

309. Trichionotus flexorius THUNBERG, 1822. Trzy Korony (600 m), 10 Jul. 1991, Carici-Fagetum cephalantheretosum: 1 o, 1 o; Krynica (750 m), 26 Jun. 1985, mountain forest: 1 o; hosts: Tortricidae. Palaearctic element.

310. Trichionotus delarvatus GRAVENHORST, 1829. Kołków (260 m), 8 Jul. 1990, upland mixed forest: 1 q; Krynica (800 m), 21 Jun. 1984, mountain forest: 1 q; hosts: Hesperiidae. Palaearctic element.

311. Parania geniculata HOLMGREN, 1855. Madohora (900 m), 12 Jul. 1991, mountain mixed forest: 1 σ , 2 $\varphi\varphi$; Krynica (950 m), 27 Jun. 1984, mountain forest: 1 φ ; hosts: Noctuidae. Palaearctic element.

312. ! Atrometus insignis (FOERSTER, 1876). Trzy Korony (600 m), 5 Jul. 1991, Carici-Fagetum cephalantheretosum: 1 ç; Krynica (500 m), 16 Jul. 1984, mountain alder carr: 1 ç; hosts: Pachytelia villosella OCHS. (Psychidae), Zygaena carniolica SCOP., Z. laeta HB. (Zygaenidae). Palaearctic element.

Metopiinae

313. Chorineus talpa (HALIDAY, 1939). Andrychów (500 m), 27 Jun. 1991, upland forest: 2 og; Krynica (750 m), 28 Jun. 1985, mountain forest: 1 og; hosts: Gracillariidae, Tortricidae. Euro-Asiatic element.

314. Chorineus flavipes BRIDGMAN, 1881. Trzy Korony (650 m), 3 Aug. 1992, *Tilio-Carpinetum*: 1 ç; Krynica (800 m), 19 Jun. 1985, mountain forest: 1 ç; hosts: *Tortricidae*. Euro-Asiatic element.

315. Chorineus australis THOMSON, 1896. Klonów (385 m), 8 Jul. 1987, fresh mixed forest: 1 ç; Krynica (750 m), 23 Jun. 1985, mountain forest: 1 σ ; hosts: Geometridae. Euro-Siberian element.

316. Chorineus funebris (GRAVENHORST, 1829). Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 o; hosts: Tortricidae, Teleia saltuum Z. (Gelechiidae), Eupithecia nanata HB. (Geometridae). Holarctic element.

317. Trieces tricarinatus HOLMGREN, 1856. Madohora (920 m), 5 Aug. 1991, mountain mixed forest: 1 q; Krynica (950 m), 18 Jun. 1985, mountain forest: 2 oo; hosts: Tortricidae, Yponomeutidae, Agonopterix scopariella HEIN. (Oecophoridae). Euro-Caucasian element.

318. Metopius pinatorius BRULLÉ, 1846. Chroberz (305 m), 20 Jul. 1987, fresh mixed forest: 1 o, 1 o; hosts: Attacidae, Notodontidae, Malacosoma neustrium L. (Lasiocampidae), Noctuidae. Euro-Siberian element.

319. ! Metopius dissectorius PANZER, 1805. Klonów (385 m), 6 Jul. 1987, fresh mixed forest: 2 °C, Krynica (750 m), 22 Jun. 1985, mountain forest: 1 °C; hosts: Biston betularius L. (Geometridae), Simyra albovenosa GOEZE (Noctuidae). Euro-Asiatic element.

320. ! Triclistus areolatus THOMSON, 1887. Chroberz (305 m), 21 Jul. 1987, fresh mixed forest: 2 oo; Krynica (750 m), 21 Jun. 1984, mountain forest: 1 o; hosts: Earias chlorana L., E. vernana HB. (Noctuidae). Euro-Siberian element.

321. ! Triclistus spiracularis THOMSON, 1887. Madohora (920 m), 9 Aug. 1991, mountain mixed forest: 2 qq; Krynica (950 m), 16 Jun. 1985, mountain forest: 1 q; hosts: Chloroclystis coronata HB., Eupithecia trisignaria H.-S. (Geometridae). Euro-Siberian element.

322. Triclistus pallipes (HOLMGREN, 1873). Chroberz (305 m), 19 Jun. 1987, fresh mixed forest: 1 q; hosts: Strophedra weirana DGL., Rhopobota naevana HB. (Tortricidae. Holarctic element.

323. Triclistus pygmaeus (CRESSON, 1864). Kołków (260 m), 6 Jul. 1986, upland mixed forest: 2 $\varphi\varphi$; hosts: Archips rosana L., Strophedra weirana DGL. (Tortricidae). Holarctic element.

324. Triclistus niger BRIDGMAN, 1883. Trzy Korony (800 m), 10 Jul. 1991, Phyllitido-Aceretum: 1 σ , 1 φ ; Krynica (900 m), 21 Jun. 1985, mountain forest: 1 φ ; hosts: Tortricidae. Euro-Caucasian element.

325. ! Triclistus aethiops (GRAVENHORST, 1829). Andrychów (450 m), 29 Jun. 1988, upland forest: 1 σ , 1 φ ; hosts: Lathronympha strigana F. (Tortricidae), Agonopterix alpigena FREY, A. hypericella HB. (Oecophoridae). European element.

326. Triclistus albicinctus THOMSON, 1887. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ , 1 φ ; Krynica (750 m), 28 Jun. 1985, mountain forest: 1 φ ; hosts: Zeirafera isertana F., Tortrix viridana L. (Tortricidae). European element.

327. ! Periope longiceps BAUER, 1968. Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 σ , 1 φ ; hosts: Tortricidae. Euro-Asiatic element.

328. Spudeus scaber (GRAVENHORST, 1829). Chroberz (305 m), 18 Jul. 1986, fresh mixed forest: 1σ , 1φ ; hosts: Noctuidae. Holarctic element.

329. ! Apolophus borealis TOWNES, 1971. Andrychów (500 m), 18 Jul. 1989, upland forest: 1 ç; Krynica (750 m), 22 Jun. 1985, mountain forest: 1 ç; hosts: *Noctuidae*. Holarctic element.

330. ! Ischyrocnemis quadridens PERKINS, 1962. Trzy Korony (650 m), 10 Jul. 1991, Tilio-Carpinetum: 2 °C; hosts: Tortricidae. European element.

331. ! Lapton femoralis NESS, 1816. Trzy Korony (600 m), 9 Jul. 1991, Carici-Fagetum cephalantheretosum: 2 qq; hosts: Tortricidae. European element.

332. ! *Exochus pictus* HOLMGREN, 1856. Madohora (800 m), 8 Jul. 1991, mountain mixed forest: 1σ , 1φ ; hosts: *Noctuidae*. Holarctic element.

333. Exochus gravipes GRAVENHORST, 1820. Andrychów (500 m), 29 Jun. 1988, upland forest: 1 σ ; Krynica (750 m), 29 Jun. 1984, mountain forest: 1 φ ; hosts: Tortricidae. Holarctic element.

334. Exochus lentipes GRAVENHORST, 1829. Trzy Korony (800 m), 5 Jul. 1991, Carici-Fagetum abietetosum: 1 ç; Krynica (800 m), 24 Jun. 1985, mountain forest: 1 ç; hosts: Noctuidae. European element.

335. ! *Exochus separandus* SCHMIEDEKNECHT, 1924. Chroberz (305 m), 19 Jul. 1987, fresh mixed forest: 1σ , 2∞ ; hosts: *Noctuidae*. European element.

Mesochorinae

336. Cidaphus alarius (GRAVENHORST, 1829). Kalina Wielka (320 m), 8 Jun. 1986, upland mixed forest: 1σ ; Krynica (750 m), 18 Aug. 1986, mountain forest: 1φ ; hosts: Braconidae, European element.

337. Astiphromma varipes (HOLMGREN, 1858). Trzy Korony (600 m), 10 Jul. 1991, Carici-Fagetum cephalantheretosum: 1 ç; Krynica (950 m), 24 Jun. 1984, mountain forest: 1 ç; hosts: Braconidae. European element.

338. ! Astiphromma pictum (BRISCHKE, 1880). Trzy Korony (650 m), 6 Jul. 1991, Tilio-Carpinetum: 1 o; 1 o; hosts: Notodontidae. European element.

339. Astiphromma striatum (BRISCHKE, 1880). Trzy Korony (800 m), 3 Jul. 1992, *Phyllitido-Aceretum*: 1 ♂; Krynica (950 m), 22 Jul. 1986, mountain forest: 1 ç; hosts: *Yponomeutidae*. European element.

340. Mesochorus stigmator THUNBERG, 1822. Madohora (920 m), 10 Jul. 1991, mountain mixed forest: 1 φ ; Krynica (950 m), 22 Jul. 1984, mountain forest: 1 σ ; hosts: *Yponomeutidae*. European element.

341. Mesochorus tuberculiger THOMSON, 1887. Madohora (920 m), 12 Jul. 1991, mountain mixed forest: 1σ , 1φ ; Krynica (950 m), 16 Jun. 1985, mountain forest: 1σ ; hosts: Loxostege sticticalis L. (Pyraustidae), Pieris brassicae L. (Pieridae). European element.

342. Mesochorus brevicollis THOMSON, 1885. Trzy Korony (650 m), 10 Jun. 1991, Tilio-Carpinetum: 1 q; Krynica (800 m), 17 Jun. 1985, mountain forest: 2 qq; hosts: Tortricidae. European element.

343. Mesochorus temporalis THOMSON, 1887. Kalina Wielka (312 m), 8 Jun. 1986, upland mixed forest: 1 o; Krynica (750 m), 13 Jul. 1985, mountain forest: 1 o; hosts: Braconidae, Yponomeutidae, Zygaena lipendulae L. (Zygaenidae). European element.

344. *Mesochorus testaceus* GRAVENHORST, 1829. Kołków (385 m), 9 Jul. 1987, upland mixed forest: 1 ç; Krynica (750 m), 12 Jul. 1985, mountain forest: 1 ç; hosts: *Geometridae*. European element.

345. Mesochorus pallipes BRISCHKE, 1894. Madohora (920 m), 9 Jul. 1991, mountain mixed forest: 1σ , 1ϕ ; Krynica (950 m), 24 Jun. 1984, mountain forest: 1σ ; hosts: Yponomeuta variabilis ZELLD., Y. padellus (Yponomeutidae), Euproctis chrysorrhoea L. (Orgyidae), Braconidae. European element.

346. Mesochorus ruficornis BRISCHKE, 1882. Madohora (900 m), 8 Aug. 1992, mountain mixed forest: 1 ç; Krynica (950 m), 19 Jun. 1985, mountain forest: 1 ç; hosts: Yponomeuta cognatellus HB., Y. mahalebella GUENEÉ Yponomeutidae. European element.

347. Mesochorus ocellatus BRISCHKE, 1882. Klonów (385 m), 6 Jul. 1987, fresh mixed forest: 1 σ ; Krynica (900 m), 22 Jun. 1985, mountain forest: 1 σ ; hosts: *Yponomeutidae*. European element.

348. Mesochorus femoralis BRISCHKE, 1894. Klonów (385 m), 6 Jul. 1986, fresh mixed forest: 1 ç; Krynica (950 m), 21 Jun. 1985, mountain forest: 1 c; hosts: *Yponomeutidae*. European element.

Acaenitinae

349. Coleocentrus soldanskii BISCHOFF, 1932. Chroberz (305 m), 19 Jul. 1986, fresh mixed forest: 2 $\varphi \varphi$; Krynica (750 m), 29 Jun. 1985, mountain forest: 1 φ ; hosts: Cerambycidae, Siricidae. Holarctic element.

350. Coleocentrus caligatus GRAVENHORST, 1829. Bogucice (290 m), 8 Jul. 1987, mixed forest: $2 \sigma\sigma$, $3 \varphi\varphi$; Krynica (750 m), 21 Jul. 1984, mountain forest: 1σ ; hosts: ! Callidium aeneum L., ! C. violaceum L., Tetropium castaneum L. (Cerambycidae). Holarctic element.

351. Coleocentrus excitator PODA, 1829. Chroberz (305 m), 21 Jul. 1987, fresh mixed forest: 3 φ ; Krynica (750 m), 18 Jul. 1985, mountain forest: 1 φ ; hosts: Ergates faber L., ! Monochamus sutor L. (Cerambycidae), Urocerus gigas L., U. phantoma F. (Siricidae). Holarctic element.

352. Coleocentrus croceicornis GRAVENHORST, 1829. Kołków (269 m), 7 Jul. 1988, upland mixed forest: 2 qq; Krynica (750 m), 23 Jun. 1985, mountain forest: 2 qq; hosts: Siricidae. Holarctic element.

353. Phaenolobus terebrator (SCOPOLI, 1763). Kalina Wielka (320 m), 10 Jun. 1987, upland mixed forest: 1 ç; Krynica (600 m), 21 Jun. 1985, mountain alder carr: 1 ç; hosts: Oberea linearis L. (Cerambycidae), Aegeria formiceformis ESP., A. spheciformis DEN. et SCHIFF. (Aegeriidae). Palaearctic element.

Microleptinae

354. Aniseres pallipes FOERSTER, 1976. Andrychów (450 m), 29 Jun. 1989, upland forest: 1 ç; Krynica (750 m), 20 Jun. 1985, mountain forest: 1 ç; hosts: Mycetophilidae. Holarctic element.

Orthocentrinae

355. Orthocentrus protervus HOLMGREN, 1855. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 q; Stolarzówka (650 m), 3 Aug. 1992, meadow: 1 q; hosts: Mycetophilidae. Holarctic element.

356. Woldstedtius abdominator (BRIDGMAN, 1886). Madohora (900 m), 9 Aug. 1991, mountain mixed forest: 1 ç; Krynica (950 m), 12 Jul. 1984, mountain forest: 1 ç; hosts: Syrphidae. Holarctic element.

Ichneumoninae

357. Alomya semiflava STEPHENS, 1835. Krynica (750 m), 28 Jun. 1989, mountain forest: 1 ç; P. SZWAŁKO leg.; hosts: Lepidoptera. Palaearctic element.

358. Alomya debellator (FABRICIUS, 1802). Chroberz (305 m), 21 Jul. 1986, fresh mixed forest: 1 o, 1 o; Krynica (750 m), 22 Jun. 1988, mountain forest: 1 o; hosts: Hepialus humuli L., Korscheltellus lupulinus L. (Hepialidae). European element.

359. *Rhexidermus debilis* (GRAVENHORST, 1829). Kołków (269 m), 7 Jul. 1988, upland mixed forest: 1 ç; Krynica (750 m), 27 Jun. 1988, mountain forest: 1 ç; M. WITRYLAK leg. hosts: (*Hepialidae*). European element.

360. *Rhexidermus nigricollis* WESMAEL, 1859. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 q; Krynica (750 m), 26 Jun. 1987, mountain forest: 1 q; hosts: *Pterophoridae*. Euro-Siberian element.

361. Rhexidermus tineidarum GIRAUD, 1872. Chroberz (305 m), 19 Jul. 1987, fresh mixed forest: 1 ç; Krynica (750 m), 29 Jun. 1988, mountain forest: 1 ç; hosts: Oecophoridae, Talaeporia politella OCHS., T. tubulosa RETR. (Psychidae), Yponomeutidae. European element. 362. Heterischnus rufipes WESMAEL, 1859. Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 σ ; Krynica (750 m), 29 Jun. 1989, mountain mixed forest: 2 $\varphi\varphi$; hosts: Psychidae.European element.

363. Dicaelotus pumilus GRAVENHORST, 1829. Andrychów (500 m), 15 Jun. 1989, upland forest: 1 q; Krynica (800 m), 21 Jun. 1986, mountain forest: 1 q; hosts: Agonopterix nervosa HW. (Oecophoridae), Gelechia plantaginella STT. (Gelechiidae). Holarctic element.

364. Dicaelotus inflexus THOMSON, 1896. Madohora (920 m), 10 Aug. 1991, mountain mixed forest: 1 q; Krynica (750 m), 28 Jun. 1989, mountain forest: 1 q; hosts: Oecophoridae. European element.

365. Dicaelotus gravis GRAVENHORST, 1829. Andrychów (500 m), 3 Jul. 1988, upland forest: 1 ç; Krynica (900 m), 27 Jun. 1988, mountain forest: 1 ç; D. KUBISZ leg. Hosts: Gelechiidae. European element.

366. Colpognathus divisus THOMSON, 1873. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1σ , 2∞ ; hosts: Oecophoridae. European element.

367. Colpognathus divisus THOMSON, 1873. Przełęcz Dukielska (500 m), 23 Mar. 1991, mountain forest: 1σ , φ ; D. KUBISZ leg. Hosts: Oecophoridae. European element.

368. Centeterus opprimator GRAVENHORST, 1829. Madohora (920 m), 10 Aug. 1992, mountain mixed forest: 1 ç; Krynica (950 m), 23 Jun. 1985, mountain forest: 1 ç; hosts: Argyresthiidae. European element.

369. ! Herpestomus phaeocerus WESMAEL, 1859. Tuczapy (200 m), 6 May 1988, meadow: 2 $_{QQ}$; A. KOSIOR leg.; hosts: Argyresthiidae. European element.

370. Herpestomus furunculus WESMAEL, 1859. Bogucice (290 m), 10 Jun. 1988, mixed forest: 1 q; Krynica (750 m), 29 Jun. 1986, mountain forest: 1 q; hosts: Eupoecilia ambiguella HB., Lobesia botrana DEN. et SCHIFF. (Tortricidae). European element.

371. ! Stenodontus biguttatus (GRAVENHORST, 1829). Puszcza Niepołomicka (193 m), 9 Mar. 1991, fresh mixed forest: 3 qq; P. SZWAŁKO leg. Krynica (600 m), 16 Jul. 1986, mountain alder carr: 1 q; hosts: Tortricidae. Palaearctic element.

372. Diadromus candidatus GRAVENHORST, 1829. Chroberz (305 m), 19 Jul. 1988, fresh mixed forest: 1 q; Krynica (750 m), 24 Jun. 1986, mountain forest: 1 q; hosts: Tortricidae. European element.

373. ! Diadromus albinotatus GRAVENHORST, 1829. Klonów (385 m), 6 Jun. 1988, fresh mixed forest: 1 q; hosts: Tortricidae. European element.

374. Diadromus intermedius WESMAEL, 1859. Trzy Korony (800 m), 11 Sep. 1992, Carici-Fagetum abietetosum: 1 ç; Krynica (950 m), 24 Jun. 1984, mountain forest: 1 ç; hosts: Plutellidae. European element.

375. ! Aethecerus nitidus WESMAEL, 1859. Kalina Wielka (320 m), 8 Jun. 1988, upland mixed forest: 1 ç; Krynica (750 m), 18 Aug. 1989, mountain forest: 1 ç; hosts: Cosmia diffinis L. (Noctuidae), Depressaria depressella HB. (Oecophoridae). European element.

376. Aethecerus discolor WESMAEL, 1844. Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 σ , 1 \circ ; Krynica (750 m), 22 Jun. 1990, mountain forest: 1 σ ; hosts: Aegeriidae. European element.

377. Proscus cephalotes WESMAEL, 1844. Bogucice (290 m), 6 Jul. 1988, mixed forest: 1 o; Krynica (750 m), 15 Jul. 1989, mountain forest: 1 o; hosts: Tortricidae, Aegeriidae. European element.

378. Proscus elongatus THOMSON, 1896. Trzy Korony (600 m), 11 Jun. 1991, Tilio-Carpinetum: 1 q; Krynica (750 m), 12 Aug. 1989, mountain forest: 1 σ , 1 q; hosts: Tortricidae. European element.

379. ! *Baeosemus mitigosus* GRAVENHORST, 1829. Madohora (920 m), 8 Aug. 1992, mountain mixed forest: 1 q; Krynica (950 m), 30 Jul. 1990, mountain forest: 1 q; hosts: *Tortricidae*. European element.

380. Phaeogenes maculicornis STEPHENS, 1835. Kostrze (210 m), 24 Aug. 1991, meadow: 1 q; A. KOSIOR leg.; hosts: Tortricidae. European element.

381. Phaeogenes semivulpnis GRAVENHORST, 1829. Bogucice (290 m), 6 Jun. 1989, mixed forest: 1 ç; Krynica (750 m), 20 Jun. 1990, mountain forest: 1 ç; hosts: Archips rosana L., Tortrix viridana L., Croesia bergmanniana L. (Tortricidae). Euro-Siberian element.

382. Phaeogenes socialis RATZEBURG, 1848. Trzy Korony (800 m), 5 Jul. 1992, Carici-Fagetum abietetosum: 1 ç; Krynica (950 m), 21 Jun. 1990, mountain forest: 1 ç; hosts: Psyche viciella DEN. et SCHIFF., Fumea casta PALL. (Psychidae). European element.

383. Phaeogenes septentrionalis HOLMGREN, 1889. Andrychów (500 m), 29 Jun. 1990, upland forest: 1 q; Krynica (900 m), 8 Aug. 1990, mountain forest: 1 q; hosts: Psychidae. European element.

384. *Phaeogenes eques* WESMAEL, 1844. Klonów (385 m), 7 Jul. 1987, fresh mixed forest: 1 φ ; Krynica (750 m), 9 Aug. 1991, mountain forest: 1 φ ; hosts: *Tortricidae*. European element.

385. *Phaeogenes modestus* WESMAEL, 1859. Bogucice (290 m), 8 Jul. 1988, mixed forest: 1 φ ; Krynica (750 m), 19 Jun. 1987, mountain forest: 1 φ ; hosts: *Tortricidae*. European element.

386. *Phaeogenes fuscicornis* WESMAEL, 1859. Chroberz (305 m), 19 Jul. 1990, fresh mixed forest: 1 σ ; Krynica (750 m), 7 Aug. 1990, mountain forest: 1 φ ; hosts: *Tortricidae*. Euro-Caucasian element.

387. Phaeogenes stipator WESMAEL, 1859. Bogucice (290 m), 12 Jul. 1987, mixed forest: 1 q; Krynica (750 m), 10 Aug. 1992, mountain forest: 1 q; hosts: Orthotaelia sparganella THUNB. (Plutellidae), Depresaria ultimella STT. (Oecophoridae). European element.

388. Phaeogenes rusticatus WESMAEL, 1859. Klonów (385 m), 6 Jul. 1989, fresh mixed forest: 1 q; Krynica (750 m), 14 Aug. 1992, mountain forest: 2 dd; hosts: Tortricidae. European element.

389. Cyclolabus nigricollis WESMAEL, 1844. Chroberz (305 m), 21 Jul. 1990, fresh mixed forest: 1 q; Krynica (750 m), 14 Jul. 1990, mountain forest: 1 q; hosts: Pterophoridae. Euro-Caucasian element.

390. *Rhyssolabus bassicus* TISCHBEIN, 1868. Madohora (920 m), 10 Jun. 1991, mountain mixed forest: 1 σ , 1 φ ;Krynica (950 m), 3 Aug. 1990, mountain forest: 1 σ ; hosts: *Pterophoridae*. European element.

391. Pristicerops laetepicus COSTA, 1888. Trzy Korony (800 m), 10 Jul. 1991, Carici-Fagetum abietetosum: 1 ç; Krynica (900 m), 8 Aug. 1990, mountain forest: 1 ç; hosts: Geometridae. European element.

392. Asthenolabus latiscapus THOMSON, 1873. Madohora (920 m), 5 Jul. 1991, mountain mixed forest: 1 q; Krynica (950 m), 5 Aug. 1990, mountain forest: 1 q; hosts: Geometridae. Holarctic element.

393. Asthenolabus vitratorius GRAVENHORST, 1829. Trzy Korony (800 m), 10 Jul. 1991, Phyllitido-Aceretum: 1 ç; Krynica (850 m), 28 Jun. 1986, mountain forest: 1 ơ; hosts: Geometridae. Holarctic element.

394. Asthenolabus stali HOLMGREN, 1858. Klonów (385 m), 7 Jul. 1987, fresh mixed forest: 1 °, 1 °; Krynica (750 m), 12 Aug. 1984, mountain forest: 1 °; M. SKRZYPCZYŃSKA leg.; hosts: Geometridae. Holarctic element.

395. Platylabus nigrocyaneus GRAVENHORST, 1829. Chroberz (305 m), 20 Jul. 1987, fresh mixed forest: 1 σ , 2 ∞ ; Krynica (800 m), 15 Aug. 1988, mountain forest: 1 σ ; hosts: Bupalus piniarus L. (Geometridae), Panolis flammea DEN. et SCHIFF., Plusia festucae (Noctuidae). Holarctic element.

396. Platylabus rufus WESMAEL, 1859. Bogucice (290 m), 6 Jul. 1988, mixed forest: 1 q; hosts: Geometridae. Holarctic element.

397. Platylabus tenuicornis GRAVENHORST, 1829. Andrychów (500 m), 29 Jul. 1991, upland forest: 2 σσ, 1 φ; Krynica (750 m), 14 Aug. 1986, mountain forest: 1 σ; hosts: Geometridae. Holarctic element.

398. Platylabus rufiventris WESMAEL, 1859. Chroberz (305 m), 19 Jul. 1987, fresh mixed forest: 2 qq; Krynica (800 m), 12 Aug. 1984, mountain forest: 1 q; J. STARZYK leg.; hosts: Semiothisa liturata CL., Itame wauaria L. (Geometridae). Holarctic element.

399. Platylabus vibratorius THUNBERG, 1784. Bogucice (290 m), 6 Jul. 1988, mixed forest: 1σ , $1 \circ$; hosts: Bupalus piniarus L., Thera juniperata L. (Geometridae). Holarctic element.

400. Platylabus dolorosus GRAVENHORST, 1829. Kołków (260 m), 7 Jul. 1987, upland mixed forest: 2 od, 1 ç; Krynica (800 m), 12 Aug. 1984, mountain forest: 1 ç; hosts: Geometridae. Holarctic element.

401. Eurylabus larvatus CHRIST, 1857. Bogucice (290 m), 9 Jul. 1987, mixed forest: 2 qq; Krynica (750 m), 14 Aug. 1984, mountain forest: 1 q; hosts: Cerura vinula L., Stauropus fagi L. (Notodontidae). Palaearctic element.

402. Pseudoplatylabus violentus GRAVENHORST, 1829. Madohora (920 m), 12 Jul. 1991, mountain mixed forest: 1 q; hosts: Notodontidae. Holarctic element.

403. Cratichneumon dissimilis GRAVENHORST, 1829. Chroberz (305 m), 19 Jul. 1987, fresh mixed forest: 299; hosts: Bupalus piniarus L., (Geometridae), Panolis flammea DEN. et SCHIFF., (Noctuidae). Holarctic element.

404. Cratichneumon sicarius WESMAEL, 1859. Klonów (385 m), 8 Jul. 1989, fresh mixed forest: 1σ , $2 \varphi \varphi$; Krynica (850 m), 15 Jul. 1988, mountain forest: $4 \sigma \sigma$, $2 \varphi \varphi$; hosts: Geometridae, Lithosiidae, Lymantriidae, Sphingidae. Holarctic element.

405. Cratichneumon luteiventris GRAVENHORST, 1829. Kołków (260 m), 8 Jul. 1987, upland mixed forest: 2 qq; hosts: Notodontidae, Geometridae. Holarctic element.

406. Cratichneumon albifrons (STEPHENS, 1835). Trzy Korony (800 m), 10 Jul. 1991, Carici-Fagetum abietetosum: 2 99; hosts: Notodontidae. Holarctic element.

407. Cratichneumon semirufus GRAVENHORST, 1829. Andrychów (500 m), 29 Jun. 1991. upland forest: 1 °, 2 °; hosts: Geometridae. Holarctic element.

408. Eupalamus oscillator WESMAEL, 1859. Andrychów (500 m), 19 Jun. 1991, upland forest: 2 o o, 1 o; Krynica (750 m), 12 Aug. 1984, mountain forest: 1 o; hosts: Geometridae. Holarctic element.

409. Platylabus virginalis WESMAEL, 1859. Madohora (920 m), 10 Jun. 1991, mountain mixed forest: 2 oo; Krynica (950 m), 14 Aug. 1984, mountain forest: 1 o; hosts: *Geometridae*. Holarctic element.

410. Platylabops corniculus WESMAEL, 1859. Trzy Korony (800 m), 6 Jul. 1991, Carici-Fagetum abietetosum: 1 o, 1 o; Krynica (950 m), 16 Aug. 1984, mountain forest: 1 o; hosts: Tortricidae. Holarctic element.

411. Aoplus ruficeps GRAVENHORST, 1829. Chroberz (305 m), 20 Jul. 1987, fresh mixed forest: 1 σ, 1 φ; Krynica (950 m), 16 Aug. 1985, mountain forest: 1 σ; hosts: Selenia lunaria DEN. et SCHIFF., Bupalus piniarius L., (Geometridae). Holarctic element.

412. Homotherus magus (WESMAEL, 1844). Kalina Wielka (320 m), 10 Jun. 1986, upland mixed forest: 1 σ , 1 φ ; Krynica (750 m), 19 Jun. 1986, mountain forest: 2 $\varphi \varphi$; hosts: *Tortricidae*. Holarctic element.

413. Crypteffigies tenuicinctus SCHMIEDEKNECHT, 1933. Madohora (920 m), 24 Jun. 1991, mountain mixed forest: 1 ç; Krynica (950 m), 27 Jun. 1986, mountain forest: 1 ç; hosts: Tortricidae. Holarctic element.

414. Crypteffigies albilarvatus GRAVENHORST, 1829. Trzy Korony (850 m), 11 Sep. 1992, Phyllitido-Aceretum: 1 o, 1 o; hosts: Noctuidae. Holarctic element.

415. Melanichneumon spectabilis HOLMGREN, 1889. Madohora (920 m), 12 Sep. 1991, mountain mixed forest: 2 qq; Krynica (950 m), 18 Aug. 1984, mountain forest: 1 q; hosts: Noctuidae, Arctiidae. Holarctic element.

416. Virgichneumon monostagon GRAVENHORST, 1829. Trzy Korony (600 m), 10 Jul. 1991, Carici-Fagetum cephalantheretosum 1 σ , 2 $\varphi\varphi$; Krynica (750 m), 24 Jun. 1985, mountain forest: 1 σ , 1 φ ; hosts: Archanara sparganii ESP., A. geminipuncta Hw. (Noctuidae), Spilosoma lubricipeda L. (Arctiidae). Holarctic element.

417. Virgichneumon dumeticola GRAVENHORST, 1829. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ, 2 φ; Krynica (750 m), 26 Jun. 1985, mountain forest: 1 σ, 1 φ; hosts: Lithosia quadra L. (Lithosiidae), Panolis flammea DEN. et SCHIFF. (Noctuidae). Holarctic element.

418. Virgichneumon callicerus GRAVENHORST, 1829. Kalina Wielka (320 m), 8 Jul. 1987, upland mixed forest: 2 99; Krynica (750 m), 21 Jun. 1987, mountain forest: 1 9; hosts: Lycaenidae. Holarctic element.

419. Barichneumon perigrinator LINNAEUS, 1758. Chroberz (305 m), 21 Jul. 1991, fresh mixed forest: 1σ , $2 \varphi \varphi$; Krynica (750 m), 13 Aug. 1984, mountain forest: 1φ ; hosts: Geometridae. Holarctic element.

420. Barichneumon bilunulatus GRAVENHORST, 1829. Kołków (290 m), 7 Jul. 1987, upland mixed forest: 1 °, 1 °; Krynica (750 m), 8 Aug. 1988, mountain mixed forest: 1 °; hosts: Geometridae. Holarctic element.

421. Barichneumon plagiarius WESMAEL, 1844. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ , 1 φ ; Krynica (750 m), 12 Aug. 1987, mountain forest: 1 σ , hosts: Semiothisa liturata CL. (Geometridae), Panolis flammea DEN. et SCHIFF. (Noctuidae). Holarctic element.

422. Stenobarichneumon protervus (HOLMGREN, 1889). Madohora (920 m), 7 Jul. 1991, mountain mixed forest: 1 o, 1 o; Krynica (750 m), 22 Aug. 1988, mountain forest: 1 o; hosts: Geometridae. Holarctic element.

423. Vulgichneumon deceptor GRAVENHORST, 1829. Trzy Korony (800 m), 10 Jul. 1991, Carici-Fagetum abietetosum: 1 σ, 1 φ; Krynica (950 m), 12 Aug. 1984, mountain forest: 1 σ; hosts: Noctuidae. Holarctic element.

424. Syspasis scutellator GRAVENHORST, 1829. Andrychów (450 m), 29 Jun. 1989, upland forest: 1 ç; Krynica (750 m), 17 Jun. 1987, mountain forest: 1 ç; hosts: Euproctis chrysorrhoea L. (Lymantriidae), Abraxas glossulariata L. (Geometridae), Panolis flammea DEN. et SCHIFF. (Noctuidae). Holarctic element.

425. Syspasis alboguttatus GRAVENHORST, 1829. Chroberz (305 m), 19 Jul. 1987, fresh mixed forest: 1 σ , 2 $\varphi\varphi$; Krynica (750 m), 18 Aug. 1984, mountain forest: 1 σ ; hosts: Euproctis similis FUESSLY, Dasychira pudibunda L. (Lymantriidae). Holarctic element.

426. Ichneumon primatorius FOERSTER, 1876. Trzy Korony (650 m), 10 Jul. 1991, Tilio-Carpinetum: 1 ç; Krynica (950 m), 19 Aug. 1989, mountain forest: 1 ç; hosts: Arctiidae. Holarctic element.

427. Ichneumon albiornatus (TISCHBEIN, 1868). Madohora (920 m), 16 Sep. 1991, mountain mixed forest: 1 ç; Krynica (950 m), 15 Jul. 1989, mountain mixed forest: 1 ç; Krynica (950 m), 15 Jul. 1989, mountain forest: 1 ç; hosts: Limenitis populi L., L. camilla L. (Nymphalidae). Holarctic element.

428. Ichneumon leucopeltis THOMSON, 1873. Trzy Korony (600 m), 6 Jul. 1991, Carici-Fagetum cephalantheretosum: 1 ç; Krynica (750 m), 14 Aug. 1984, mountain forest: 1 ç; hosts: Nymphalidae. Holarctic element.

429. Ichneumon balteatus WESMAEL, 1859. Klonów (385 m), 6 Jul. 1986, upland mixed forest: 2 $\varphi\varphi$; Krynica (650 m), 16 Aug. 1987, mountain alder carr: 1 φ ; hosts: Dasychira pudibunda L. (Lymantriidae), Melitaea cynxia L. (Nymphalidae). Holarctic element.

430. Ichneumon inquinatus WESMAEL, 1859. Kołków (260 m), 7 Jul. 1987, upland mixed forest: 1 o; hosts: Orthosia incerta HUFN., O. gothica L. (Noctuidae). Holarctic element.

431. Ichneumon novemalbatus KRIECHBAUMER, 1901. Madohora (929 m), 9 Jul. 1991, mountain mixed forest: 2 qq; Krynica (950 m), 15 Aug. 1984, mountain forest: 1 q; hosts: Noctuidae. Holarctic element.

432. Ichneumon emancipandus HEINRICH, 1962. Madohora (920 m), 10 Jul. 1991, mountain mixed forest: 1 ç; Krynica (790 m), 14 Aug. 1990, mountain forest: 1 ç; hosts: Noctuidae. Holarctic element.

433. Ichneumon hinzi HEINRICH, 1962. Andrychów (500 m), 29 Jun. 1991, upland forest: 1 σ ; Krynica (750 m), 18 Aug. 1984, mountain forest: 1 φ ; hosts: Satyridae. Holarctic element.

434. Ichneumon exilicornis WESMAEL, 1859. Madohora (929 m), 9 Aug. 1991, mountain mixed forest: 2φ ; Krynica (950 m), 26 Jun. 1986, mountain forest: 1σ ; hosts: Nymphalidae. Holarctic element.

435. Ichneumon nereni (THOMSON, 1896). Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 ç; Krynica (750 m), 20 Jul. 1985, mountain forest: 1 ç; hosts: Argynnis sp. (Nymphalidae), Satyridae. Holarctic element.

436. Stenichneumon militarius THUNBERG, 1824. Chroberz (305 m), 20 Jul. 1987, fresh mixed forest: 1σ , 1ϕ ; Krynica (750 m), 17 Aug. 1985, mountain forest: 1ϕ ; hosts: Noctuidae. Holarctic element.

437. Patrocloides chalybeatus GRAVENHORST, 1829. Kalina Wielka (320 m), 10 Jun. 1988, upland mixed forest: 1 q; Krynica (750 m), 28 Jul. 1985, mountain forest: 2 oo; hosts: Nymphalidae. Holarctic element.

438. Patrocloides sputator FABRICIUS, 1804. Trzy Korony (800 m), 10 Jul. 1991, Carici-Fagetum abietetosum: 1 o, 1 o; Krynica (950 m), 24 Jul. 1985, mountain forest: 1 o; hosts: Noctuidae. Holarctic element.

439. Excephanes caelebs KRIECHBAUMER, 1901. Madohora (929 m), 17 Oct. 1991, mountain mixed forest: 1 q; hosts: Noctuidae. Holarctic element.

440. Excephanes amabilis KRIECHBAUMER, 1901. Andrychów (500 m), 10 Jul. 1987, upland forest: 2 qq; Krynica (750 m), 14 Jul. 1985, mountain forest: 1 q; hosts: Noctuidae. Holarctic element.

441. Diphyus tricolor KRIECHBAUMER, 1872. Bogucice (290 m), 8 Jul. 1986, mixed forest: 1 q; hosts: Noctuidae. Holarctic element.

442. Diphyus raptorius (LINNAEUS, 1758). Chroberz (305 m), 12 Jul. 1987, fresh mixed forest: 2 $\varphi\varphi$; hosts: Mythima vitellina HB., Cirrhia togata ESP. (Noctuidae). Holarctic element.

443. Diphyus fossorius (LINNAEUS, 1758). Trzy Korony (850 m), 11 Sep. 1991, Phyllitido-Aceretum: 1 q; hosts: Noctuidae. Holarctic element.

444. Diphyus luctatorius (LINNAEUS, 1758). Trzy Korony (800 m), 10 Jul. 1991, *Phyllitido-Aceretum*: 2 99; Krynica (800 m), 17 Aug. 1985, mountain forest: 1 9; hosts: *Noctuidae*. Holarctic element.

445. Diphyus gradatorius (THUNBERG, 1784). Madohora (929 m), 9 Jul. 1991, mountain mixed forest: 2 99; hosts: Noctuidae. Holarctic element.

446. Limerodopselongatus BRISCHKE, 1894. Klonów (385 m), 6 Jul. 1987, fresh mixed forest: 1 q; Krynica (750 m), 14 Aug. 1984, mountain forest: 1 q; hosts: Noctuidae. Holarctic element.

447. Ctenichneumon edictorius (LINNAEUS, 1758). Madohora (920 m), 2 May 1991, mountain mixed forest: 2 φ ; Krynica (950 m), 12 Aug. 1985, mountain forest: 1 φ ; hosts: Noctuidae. Holarctic element.

448. Ctenichneumon inspector WESMAEL, 1859. Kołków (260 m), 7 Jul. 1988, upland mixed forest: 1 ç; hosts: Noctuidae. Holarctic element.

449. Spilichneumon podolicus HEINRICH, 1959. Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ, 2 φ; hosts: Noctuidae. Holarctic element.

450. Spilichneumon notatorius THUNBERG, 1791. Chroberz (305 m), 19 Jul. 1987, fresh mixed forest: 1 ç; Krynica (750 m), 12 Aug. 1985, mountain forest: 1 ç; hosts: Noctuidae. Holarctic element.

451. Triptognathus unidentatus BERTHOUMIEU, 1904. Trzy Korony (800 m), 5 Jul. 1991, Carici-Fagetum abietetosum: 2 ∞; hosts: Noctuidae. Holarctic element.

452. Coelichneumon desinatorius (THUNBERG, 1789). Trzy Korony (650 m), 6 Jul. 1991. Tilio-Carpinetum: 1 9; hosts: Noctuidae. Holarctic element.

453. Coelichneumon leucocerus (GRAVENHORST, 1829). Chroberz (305 m), 20 Jul. 1987, fresh mixed forest: 1 σ , 1 φ ; Krynica (750 m), 18 Aug. 1986, mountain forest: 1 σ ; hosts: Euxoa nigricans L., Mamestra persicariae L. (Noctuidae). Holarctic element.

454. Coelichneumon quadriannulatus (GRAVENHORST, 1829). Madohora (920 m), 2 May 1991, mountain mixed forest: 1 φ; Krynica (950 m), 16 Aug. 1985, mountain forest: 1 φ; hosts: Noctuidae. Holarctic element.

455. Coelichneumon comitator (LINNAEUS, 1758). Chroberz (305 m), 20 Jul. 1987, fresh mixed forest: 1σ, 2 φ; Krynica (750 m), 14 Aug. 1985, mountain forest: 1 σ; hosts: Noctuidae, Geometridae. Holarctic element.

456. Coelichneumon haemorrhoidalis (GRAVENHORST, 1829). Trzy Korony (800 m), 5 Jul. 1991, Carici-Fagetum abietetosum: 2 qq; Krynica (950 m), 17 Aug. 1984, mountain forest: 1 q; hosts: Noctuidae, Geometridae. Holarctic element.

457. Coelichneumon nigerrimus (STEPHENS, 1835). Kołków (385 m), 10 Jun. 1986, upland mixed forest: 1 ç; Krynica (750 m), 14 Aug. 1985, mountain forest: 1 ơ; hosts: Noctuidae. Holarctic element.

458. Protichneumon pisorius (LINNAEUS, 1758). Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ, 2 φ; Krynica (750 m), 21 Jul. 1984, mountain forest: 1 σ, 1 φ; hosts: Sphinx pinastri L., S. ligustri L., Laothoe populi L., Smerinthus ocellatus L. (Sphingidae). Holarctic element.

459. Protichneumon fusorius (LINNAEUS, 1758). Trzy Korony (850 m), 10 Jul. 1991, Phyllitido-Aceretum: 1 σ, 2 ∞; Andrychów (500 m), 18 Aug. 1992, upland forest: 1 ç; Krynica (900 m), 13 Aug. 1990, mountain forest: 1 σ; hosts: Sphinx pinastri L., Smerinthus ocellatus L. (Sphingidae). Holarctic element.

460. Amblyjoppa fuscipennis WESMAEL, 1859. Chroberz (305 m), 21 Jul. 1987, fresh mixed forest: 1 σ, 2 φ; Madohora (920 m), 10 Aug. 1992, mountain mixed forest: 1 φ; Krynica (950 m), 12 Aug. 1984, mountain forest: 1 σ; hosts: Deilephila elpenor L., D. porcellus L., Sphinx igustri L., Herse convolvuli L., Macroglossum stellatarum L. (Sphingidae). Holarctic element.

461. Calajoppa exaltatoria (PANZER, 1804). Bogucice (290 m), 8 Jul. 1987, mixed forest: 1 σ; Chroberz (305 m), 21 Jul. 1988, fresh mixed forest: 1 φ; Krynica (750 m), 17 Jul. 1985, mountain forest: 1 φ; hosts: Sphingidae. Holarctic element.

462. Trogus lapidator FABRICIUS, 1804. Trzy Korony (800 m), 6 Jul. 1991, Carici-Fagetum abietetosum: 1 σ , 1 φ ; Andrychów (430 m), 12 Aug. 1992, upland forest: 1 φ ; Madohora (900 m), 10 Jul. 1992, mountain mixed forest: 1 φ ; Krynica (950 m), 12 Aug. 1984, mountain forest: 1 σ ; hosts: Papilio machaon L., P. alexanor ESP. (Papilionidae). Holarctic element.

III. COMMENTS

During eight years' investigation carried out in a region sellected in South Poland, 1910 specimens belonging to 462 species from the family Ichneumonidae were collected. They formed 18.5% of the total number of ichneumonidan species known from Poland and belonged to 201 genera from 23 subfamilies of the family Ichneumonidae. Out of the 39 ichneumonidan species new to Poland (Table I), the most interesting were those collected in woodland glades in the Pieniny Mts (600-790 m a.s.l.), up to that time known only from very distant regions, namely, Delomerista laevis, so far recorded from the Chukchi Pen., Transbaykalia and Sakhalin, Stilpnus rossicus, known from the region of Moscow, Stilbops plementaschi, reported from the Caucasus and Alps, and Cymodusa declinator. noted from Torino. Two interesting species were caught in a fresh mixed forest at Chroberz (305 m a.s.l.) in the Nida Basin: Netelia tarsata, hitherto known from the Caucasus Mts., Sakhalin and Kuril Is., and Triclistus areolatus, recorded from the Sikhote Alin' Range. It is worth while to give attention also to Stilpnus fallax, so far known only from Sweden and Finland, and Cymodusa antennator, reported from Mongolia, Siberia and Germany, now found in a mixed mountain forest at Andrychów (850-860 m a.s.l.) as well as to Metopius dissectorius, occurring in Sakhalin and the Kherson district and now captured in a fresh mixed forest at Klonów (385 m a.s.l.).

The parasitoid Hymenoptera dealt with in the present paper controlled the abundance of the phytofagous insects from 132 families. Until now no host have been known for as many as 185 ichneumonidan species under discussion. During this study new trophic relationships were detected between 10 ichneumons and 13 species of their hosts (Table II). Hosts of the parasitoids Dolichomitus pterelas, D. imperator, D. crassiceps and Xorides hedwigi are not given in literature either at home or abroad. A trophic relationship between D. pterelas and Saperda scalaris was detected in oak deadwood in a woodland near Bogucice on 12 June 1989. In an unciform pupal cradle of the hosts in wood, at a depth of 10 mm, a cocoon was found, from which an imago of D. pterelas was raised. A cocoon with an almost completely pigmented ichneumon D. pterelas in it was collected from a larval tunnel of Monochamus sartor in a withered-up pine in a woodland near Chroberz on 10 July 1985. A year later, on 10 July 1986 ichneumon's cocoon with a pigmented female imago was found in the larval tunnel of a cerambycid in a dry oak not far from the previous site. A trophic relationship between Dolichomitus crassiceps and Xorides hedwigi, on the one hand, and the cerambycid Saperda scalaris, on the other, was detected in a woodland in the Klonów area on 14 July 1987 and in oaks near Kalina Wielka on 8 July 1987. In both these cases the ichneumons' cocoons were in the pupal cradles at a depth of about 2.5 cm. According to MEDVEDEV (1981), Odontocolon spinipes is a parasitoid of Rhagium sp. That parasitoid species was discovered in pupal cradles of

Table I	n Poland (c region)	ły Mts.		ław Ridge	v Ridge		98				/ Mts.	Mały Mts.		/ Mts.	Mały Mts.	/ Mts.			
pu	Locality ir (Geographi	Miechów Upland, Beskid Ma	Pieniny Mts.	Beskid Sądecki Mts., Wodzis	Miechów Upland, Wodzisław	Miechów Upland	Wójczańsko-Pińczowski Rid _i	Beskid Mały Mts.	Beskid Mały Mts.	Pieniny Mts.	Beskid Sądecki Mts., Pieniny	Beskid Sądecki Mts., Beskid	Beskid Mały Mts.	Beskid Sądecki Mts., Pieniny	Beskid Sądecki Mts., Beskid	Beskid Sądecki Mts., Pieniny	Beskid Mały Mts.	Beskid Mały Mts.	Miechów Upland
List of species new to the fauna of Pola	Formerly recorded localities	Russia, Primorski Krai, France	Zabaicale, Sakhalin	Crimea, Caucasus Mts., Armenia, Sakhalin, Kuril	Byelorussia, Lithuania, environs of Kiev, Georgia, Ka- zakhstan, Germany	Mongolia, Germany	Byelorussia, environs of Sanct Petersburg and Mo- scow	Germany	Sweden, Finland	environs of Moscow	Caucasus, Alps	Caucasus	Central Europe	Slovakia	Turkey, Germany	Torino	Mongolia, Siberia, Germany	Hungary, Tunisia, Chile	Germany, Chile
	Species	Dolichomitus mordator	Delomerista laevis	Netelia tarsata	Netelia caucasica	Ctenochira taiga	Erromenus bibulus	Phygadeuon filipendulae	Stilpnus fallax	Stilpnus rossicus	Stilbops plementaschi	Stilbops robustus	Phradis nigritulus	Tersilochus clypeatus	Batypiesta carinata	Cymodusa declinator	Cymodusa antennator	Nemeritis major	Nemeritis specularis
	Number	1	2	3	4	5	6	7	∞	6	10	11	12	13	14	15	16	17	18

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19	Diadegma flexa	Germany	Wodzisław Ridge
20	Diadegma germanica	Germany, France	Pieniny Mts.
21	Diadegma glabricula	Europe, Canada	Beskid Maty Mts.
22	Diadegma rufigaster	Germany	Pieniny Mts.
23	Metopius dissectorius	Sakhalin, Chersonian region	Beskid Sądecki Mts., Miechów Upland, Pieniny Mts.
24	Atrometus insignis	Hungary, England, Marocco	Beskid Mały Mts., Pieniny Mts.
25	Triclistus areolatus	the Sichote-Alin Mts., western Europe	Beskid Sądecki Mts., Wodzisław Ridge
26	Triclistus spiracularis	the Sichote-Alin Mts., western Europe	Beskid Mały Mts., Beskid Sądecki Mts.
27	Triclistus aethiops	northern Europe, œntral Europe	Beskid Maty Mts.
28	Periope longiceps	Japan, Kamchatka, Black Forest Mts.	Miechów Upland
29	Apolophus borealis	Germany, northern America	Beskid Sądecki Mts., the Beskid Mały Mts.
30	Ischyrocnemis quadridens	Moldavia, central Europe	Pieniny Mts.
31	Lapton femoralis	central Europe	Pieniny Mts.
32	Exochus pictus	western Europe, northern America	Beskid Mały Mts.
33	Astiphromma pictum	Hungary, Germany, Roumania	Pieniny Mts.
34	Exochus separandus	central Europe	Wodzisław Ridge
35	Herpestomus phaeocerus	Belgium, Germany, Roumania	Pieniny Mts.
36	Stenodontus biguttatus	central Europe, southern Europe, northern Africa	Beskid Sądecki Mts., Sandomierska Hollow
37	Diadromus albinotatus	Sweden, western England, Germany, Roumania	Miechów Upland
38	Aethecerus nitidus	Russia, central Europe, England, Roumania	Beskid Small Mts., Wodzisław Ridge, Wójczańsko-Piń- czowski Ridge
39	Baeosemus mitigosus	Roumania, central Europe, northern Europe	Beskid Sądecki Mts., Beskid Mały Mts., Pieniny Mts.

Ichneumonidae of Southern Poland

Table II

The new trophic relations	between Ichneumonida	e and	their	hosts
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Parasitoid	Host					
Dolichomitus pterelas	Saperda scalaris, Monochamus sartor					
Dolichomitus imperator	Phymatodes testaceus					
Dolichomitus crassiceps	Saperda scalaris					
Odontocolon spinipes	Rhagium inquisitor, Rhagium sycophanta					
Xorides hedwigi	Saperda scalaris					
Xorides praecatorius	Agrilus viridis					
Xorides securicornis	Phymatodes testaceus					
Xorides irrigator	Acanthocinus aedilis					
Coleocentrus caligatus	Callidium aeneum, Callidium violaceum					
Coleocentrus excitator	Monochamus sutor					

Rhagium inquisitor in spruces and in a pupal cradle of Rhagium sycophanta in a birch in a mixed mountain forest near Andrychów on 6 July 1989. So far the buprestid Agrillus viridis has not been recorded as the host of Xorides praecatorius, which now was found in a larval tunnel of Agrillus viridis under the bark of a poplar near Klonów on 12 June 1990. The ichneumon Xorides securicornis has hitherto been known as a parasitoid of species from the families Bostrychidae and Anobiidae (MEDVEDEV 1981). In examining some oak deadwood in a woodland near Kołków. I came upon a cocoon encasing an unpigmented female imago of Xorides securiformes in a pupal cradle of Phymatodes testaceus on 5 June 1987. The ichneumon Xorides irrigator was discovered in a pupal cradle of Acanthocinus aedilis in pine deadwood in a woodland near Kołków on 7 June 1990. I found a pigmented male Coleocentrus caligatus in the pupal cradle of Callidium aeneum in a lying fir trunk at Bogucice on 8 June 1987. This is a new trophic relationship, never mentioned in literature before. In another, standing and unbarked fir, above 10 m apart, I uncovered a female parasitoid Coleocentrus caligatus in an unciform cradle made in wood by a larva of Callidium violaceum. On 21 July 1987 I found an almost completely pigmented female Coleocentrus excitator in the pupal cradle made a larva of Monochamus sutor in a lying trunk of the common pine. That was a trophic relation also observed for the first time.

Each of the plant communities under investigation had a distinct ichneumonid fauna. The main agent inducing the differentiation of the parasitoid Hymenopteran population was the fauna of host species, which in turn depended on the species composition of the plant community. The species composition of the ichneumonids is largely influenced by the availability of food for imagines and by the occurrence of predators – birds and insects, parasitoids of higher orders, kleptoparasitoids, old trees left lying and providing winter shelters, etc.

The ichneumonids captured in the study area have been included in the following 11 zoogeographical groups according to the criteria given by MEDVEDEV(1981) and PA-

wŁowski (1967): European element – 178 species, Holarctic – 140, Euro-Siberian – 51, Palaearctic – 50, Euro-Caucasian – 29, Euro-Asiatic – 7, Mountainous – 3, Boreal-mountainous – 2, Cosmopolitan – 2 each and Subpontic and Subpontomediterranean – 1 species each.

The zoogeographical structure of the ichneumonidan fauna of the selected plant communities is presented in Fig. 2. Three groups of species can be distinguished in this fauna. The European and Holarctic elements occurred in all plant communities examined. The proportion of either of these elements ranged from 14.7 to 54%. Fairly large was the proportion of the species included in the Palaearctic and Euro-Siberian elements, which species were constant constituents in the ichneumonidan fauna (up to 26.5%), whereas the remaining elements distinguished, i.e. the Euro-Caucasian, Euro-Asiatic, Mountainous, Subpontomediterranean, Cosmopolitan and Boreal-mountainous elements were represented by small numbers of ichneumonids and appeared only in some of the plant communities. The proportion of each of these elements varied from 0 to 2.9%.





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