

UDC 595.792(477)

ANOMALONINE WASPS OF THE GENUS *AGRYPON* (HYMENOPTERA, ICHNEUMONIDAE) FROM UKRAINE

A. D. Nuzhna

Schmalhausen Institute of Zoology NAS of Ukraine,
vul. B. Khmelnytskogo, 15, Kyiv, 01601 Ukraine
E-mail: ganna.nuzhna@gmail.com

Anomalonine Wasps of the Genus *Agrypon* (Hymenoptera, Ichneumonidae) from Ukraine. Nuzhna A. D. — A key to the 12 species of the genus *Agrypon* Förster recorded from Ukraine is given. Some additional invariable characters such as morphometric index CI of the forewing, the presence of the small concavity on the anterior margin of mesoscutum and the metasternal tooth on propodeum are used in the key.

Key words: Hymenoptera, Ichneumonidae, Anomaloninae, Agrypon, Ukraine.

Ихневмониды-аномалонины рода *Agrypon* (Hymenoptera, Ichneumonidae) фауны Украины. Нужна А. Д. — Приведена таблица для определения 12 видов рода *Agrypon* Förster, известных из Украины, составленная с использованием признаков, менее подверженных изменчивости: морфометрического индекса CI переднего крыла, наличия небольшого вдавления на переднем крае среднеспинки и метастернального зубца на проподеуме.

Ключевые слова: Hymenoptera, Ichneumonidae, Anomaloninae, Agrypon, Украина.

The genus *Agrypon* includes more than 183 species, among them 68 species are known from the Palaearctic Region (Yu, Horstmann, 1997). As most anomalonines, the representatives of the genus *Agrypon* are primary larval and pupal endoparasites of Arctiidae, Coleophoridae, Depressariidae, Drepidae, Gelechiidae, Geometridae, Hesperiidae, Lycaenidae, Noctuidae, Notodontidae, Oecophoridae, Papilionidae, Plutellidae, Tortricidae, Yponomeutidae (Atanasov, 1981).

The genus *Agrypon* was established by A. Förster (1869), but its concept was different in the papers of different authors. C. Morley (1914), N. F. Meyer (1935) and O. Schmiedeknecht (1902, 1903) attributed some species, now placed in the genus *Agrypon*, to the genus *Labrorychus* Förster on the basis of broken nervellus and presence of lateral branches (cubital vein). Further studies showed that these characters are very variable and therefore have no diagnostic value.

H. Townes (Townes et al., 1965; Townes, 1976) united representatives of the genus *Labrorychus* and most of species earlier assigned to the genera *Atrometus* Förster and *Agrypon* Förster, in the genus *Trichionotus* Cameron, whose main distinguishing character was the presence of the carina on the fore coxae. A. Z. Atanasov (1981) accepted concept of H. Townes (1971), who included in *Trichionotus* all species previously assigned *Agrypon* (except its type species, *A. flaveolatum*) and *A. faciale* Szepligeti, 1905, most species of *Labrorychus* and some species of *Atrometus* of Palaearctic fauna. The genus name *Labrorychus* (type species *Anomalon nigricorne* Wesmael, 1849) was synonymized with *Camposcopus* by Townes (1971), and then included in *Habronyx*.

I. Gauld (1978) synonymized *Trichionotus* with *Agrypon* based on the study of anomalonines from New Guinea and South-East Asia, because of evident significant differences in the shape and degree of carina manifestation on the fore coxae even in males and females of the same species. According to that author (Gauld, 1977) inclusion of species into *Agrypon* only on the basis of carina absence on the fore coxa makes it an artificial group. In this case many representatives of the group, by the combination of other characters (veination of wings, structural characters of the head and mesoscutum) are much closer to the species of *Trichionotus* than to *Agrypon*. Study of material from Ukraine confirms such peculiarities, which are typical for the species of the given region (e. g., *Agrypon flexoriooides* Schnee). In this work Gauld's opinion is followed and the species previously described in *Trichionotus* are transferred to *Agrypon*. The apex of clypeus with one tooth in the middle, fore coxa with a pronounced carina, deviation of the parallel vein above the middle of the apical margin of humeral cell, postfurcal position of the second recurrent vein are considered to be the most important characteristics of *Agrypon*.

Material and methods

For more accurate species identification I. Gauld (1976) suggested to use morphometric indices (fig. 1): CI (Cubital index of fore wing) = length of Cu₁ between 1m-cu and Cu_{1a} divided to length of Cu_{1b}; NI (Nervellar

index of the hind wing) = length of Cu₁ between M+Cu₁ and cu-a divided to length of cu-a. The nervellar index is not used in the key below because the hind wing venation in this genus is subject to strong variability. All the measurements are given in millimetres. Morphological terminology of Anomaloninae follows Gauld (1976).

All the material is deposited in the collection of I.I. Schmalhausen Institute of Zoology (Kyiv).

Agrypon Förster, 1860

Type species: *Ophion flaveolatum* Gravenhorst, 1807, by subsequent designation of Morley (1913).

Reliable identification of these species is often difficult due to the strong variability of a number of characters, expressed in some representatives. Atanasov (1974) used such a character as the presence or absence of a hind wing cubital vein, noting its variability in *Agrypon flexorium* (Thunberg). Gauld (1977) drew attention to the fact that the hind wing cubital vein is expressed or absent also in *A. varitarsum* (Wesmael), *A. anxi-um* (Wesmael) and rare in *A. clandestinum* (Gravenhorst). The epicnemial carina bent as a tooth near the lower corner of pronotum is another important character, considered unique to *A. flexorium* (Thunberg), also sometimes occurring (but less pronounced) in *A. gracilipes* (Curtis) and *A. varitarsum* (Wesmael).

The key includes 12 species of the genus *Agrypon* known from Ukraine. Less variable characters are used: the morphometric index CI, the presence of a small concavity near the apical margin of mesoscutum and the metasternal tooth on propodeum. Couplets are supplemented with the distribution of each species in Ukraine and the Palaearctic Region (Atanasov, 1981).

Таблица для определения видов рода *Agrypon*

Key to the species of the genus *Agrypon*

- 1 (2). Fore coxa smooth, without transverse carina. Posterior transverse carina interrupted in front of each mid coxa. Notaula well expressed. Frons margins with yellow strip. 5.9–9.01. Ukraine (everywhere); Russia (European Territory, South-East of Western Siberia, Baikal, Amur Region, Primorskiy Kray, Sakhalin, the Kurile Islands), West Europe, the Caucasus, Kazakhstan, Kyrgyzstan, North-East China, Korea. *A. flaveolatum* Gravenhorst

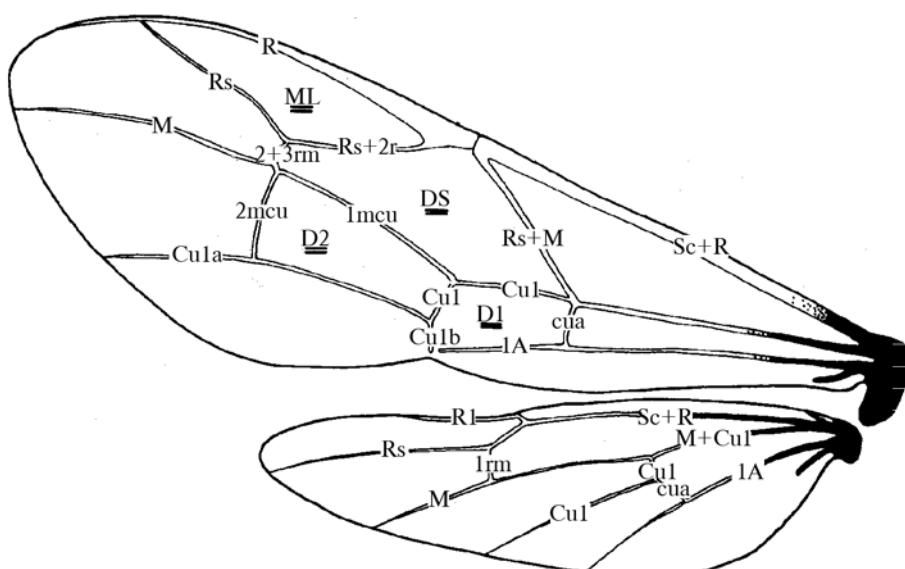


Fig. 1. Fore- and hindwing of Anomaloninae (after Gauld, Mitchel, 1977).

Рис. 1. Переднее и заднее крыло Anomaloninae (по: Gauld, Mitchel, 1977).

- 2 (1). Fore coxa usually with carina (fig. 3, 6). Posterior transverse carina complete or interrupted in front of each mid coxa. If the fore coxa without carina, the metasternal tooth on the propodeum strongly expressed.
- 3 (6). Fore wing CI = 0.4–0.6 (fig. 4, 1). Flagellum segment length \leq 1.6 times as long as wide (fig. 2, 2). Propodeum short, its top not reach the middle of hind coxa (fig. 3, 8). Face black with yellow spots, narrowed downward.
- 4 (5). In the hind wing the cubital vein usually absent. Face weakly narrowed downward. Antenna very short, flagellum length 1.2 times as long as wide. 5–7. Ukraine (everywhere), Russia (European Part; Amur Region; South of Primorskiy Kray), West Europe, Pakistan. *A. anomelas* (Gravenhorst)
- 5 (4). Hind wing cubital vein well developed. Face strongly narrowed downward. The length of the segments in the flagellum is 1.5–1.6 times as long as wide. 6–9. Ukraine (Zakarpatska, Zhytomyr, Kyiv Regions, Crimea), Russia (European Territory, North Caucasus, Transbaikalia, Yakutia, Amur Region, South of Primorskiy Kray), middle and northern Europe, Central Asia, North-Western Mongolia....
- *A. delarvatum* (Gravenhorst)
- 6 (3). Fore wing CI \leq 0.3 (fig. 4, 2). Flagellum segments 1.8–2 times as long as wide (fig. 2, 1, 3). Propodeum elongate, its apex reaching middle of hind coxa (fig. 3, 9). Face, as a rule, completely yellow (except *A. flexoroides* Schnee), almost parallel-sided down.
- 7 (12). Flagellum with less than 40 segments.
- 8 (9). Fore wing with interstitial nervulus (fig. 3, 5). Anterior margin of mesoscutum medially with small concavity. Notaulus distinct. Male hind leg strongly thickened (fig. 3, 7). 5–6. Ukraine (Kyiv, Donets'k

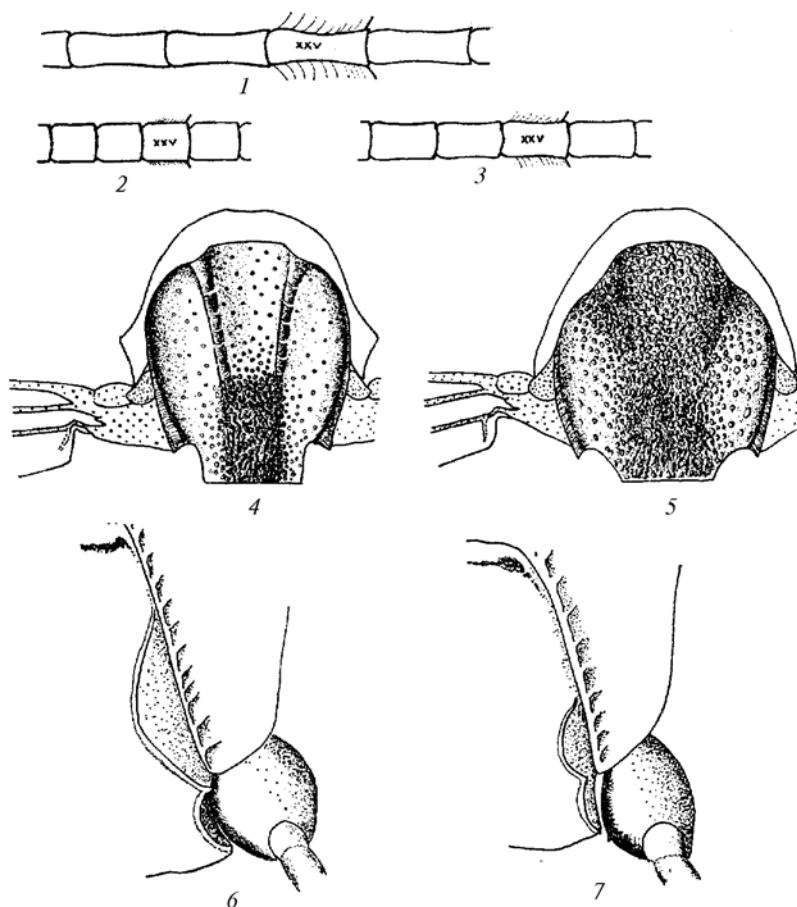


Fig. 2. Genus *Agrypon* (after Gauld, Mitchel, 1977): 1–3 — flagellar segments (1 — *Agrypon gracilipes*; 2 — *A. anomelas*; 3 — *A. anxiump*); 4–5 — mesonotum (4 — *A. clandestinum*; 5 — *A. anxiump*); 6–7 — prepectal carina of mesosternum (6 — *A. flexorium*; 7 — *A. gracilipes*).

Рис. 2. Род *Agrypon* (по: Gauld, Mitchel, 1977): 1–3 — членики жгутика усика (1 — *Agrypon gracilipes*; 2 — *A. anomelas*; 3 — *A. anxiump*); 4–5 — среднеспинка (4 — *A. clandestinum*; 5 — *A. anxiump*); 6–7 — пре-пектальный киль (6 — *A. flexorium*; 7 — *A. gracilipes*).

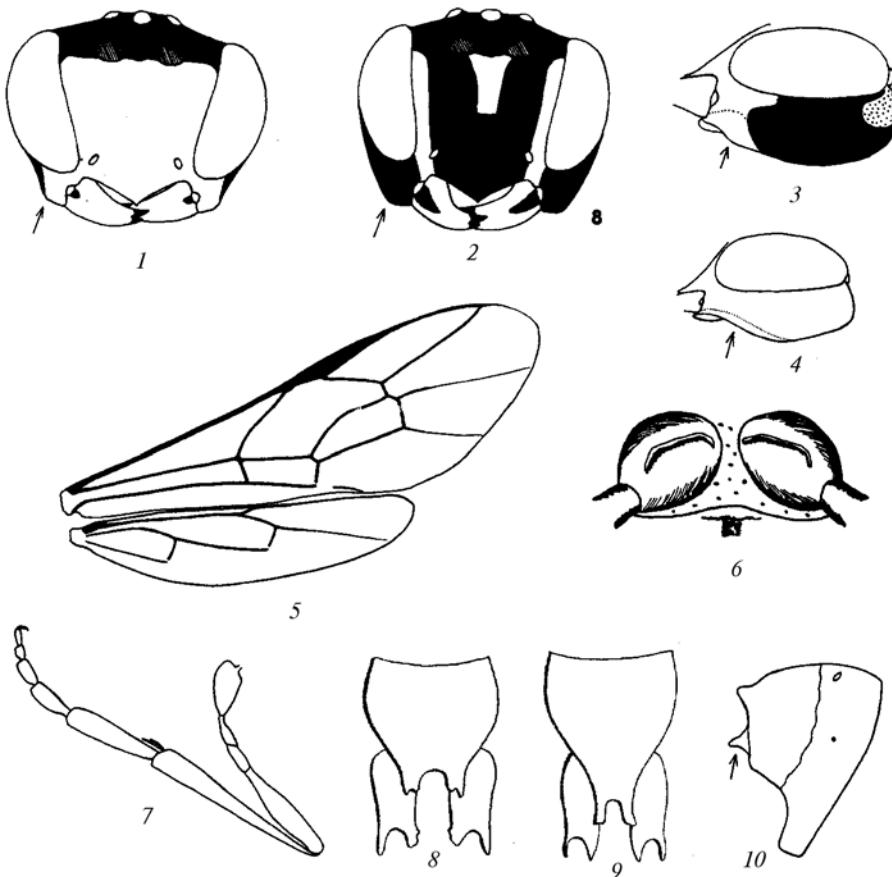
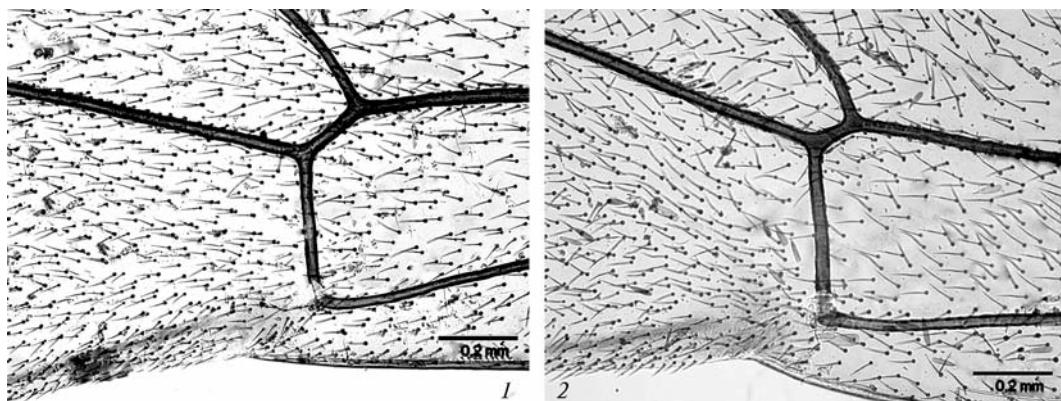


Fig. 3. Genus *Agrypon* (1–5, 7, 10 — after Schnee, 1989; 6 — after Gauld, 1976; 8–9 — after Gauld, Mitchel, 1977): 1–2 — *A. flexorioides*, head in anterior view (genal carina indicated by the arrow); 3–4 — head in lateral view: 3 — *A. flexorioides*, ♀; 4 — *A. flexorium*, ♀; 5, 7 — *A. interstitiale*: 5 — forewing and — hindwing; 7 — hind leg ♂; 6 — *A. anxium*, fore coxae. 8–9 — propodeum and hind coxae (dorsal view): 8 — *A. delarvatum*; 9 — *A. flexorium*. 10 — *A. flexorioides*, propodeum, lateral view (metasternal tooth indicated by the arrow).

Рис. 3. Род *Agrypon* (1–5, 7, 10 — по: Schnee, 1989; 6 — по: Gauld, 1976; 8–9 — по: Gauld, Mitchel, 1977): 1–2 — *A. flexorioides*, голова спереди (стрелкой указан щечный киль): 1 — ♀, 2 — ♂; 3–4 — голова сбоку: 3 — *A. flexorioides*, ♀; 4 — *A. flexorium*, ♀; 5, 7 — *A. interstitiale*: 5 — переднее и заднее крыло; 7 — задняя нога, ♂; 6 — *A. anxium*, передние тазики; 8–9 — проподеум и задние тазики (вид сверху): 8 — *A. delarvatum*; 9 — *A. flexorium*; 10 — *A. flexorioides*, проподеум, вид сбоку (стрелкой указан метастернальный зубец).

- Regions, Crimea) Belgium, Denmark, Germany, Hungary, Italy, the Netherlands, Poland, Sweden. *A. interstitiale* Schnee
 9 (8). Front wing with postfurcal nervellus. Anterior margin of mesoscutum without medial concavity. Notaulus distinct or poorly expressed.
 10 (11). Mesoscutum with fine and thin puncturing, with dense puncturing close to scutellum (fig. 2, 4). Notaulus clear. The cubital vein in the hind wing always developed. Temples with yellow spots. 4.1–6.4. Ukraine (everywhere), Russia (European Territory, Irkutsk Region, Eastern Siberia (Yakutia), Amur Region.), Caucasus, Kyrgyzstan, Kazakhstan (Trans-Ili Alatau), West Europe, North Africa *A. clandestinum* (Gravenhorst)
 11 (10). Mesoscutum with evenly dense puncturing (fig. 2, 5). Notaulus poorly expressed. Hind wing usually without cubital vein. Temples entirely black, sometimes with small yellow spots or completely yellow. 4.1–10.0. Ukraine (everywhere), Russia (European Territory, South of Siberia, Amur Region, Primorskiy Kray, Sakhalin), Armenia, Azerbaijan, Turkmenistan, Kazakhstan (Kustanay Region.), West Europe, Northeast China. *A. anxium* (Wesmael)
 12 (7). Flagellum with more than 40 segments.
 13 (14). Mesoscutum with fine and thin puncturing (the distance between two points greater than their diameter), glossy. Notaulus long and distinct. 5.5–7.8. Ukraine (everywhere), Russia (European Territory, North Caucasus, Transbaikalia, Amur Region., South of Primorskiy Kray), East of Kazakhstan, West

Fig. 4. The part of forewing: 1 — *A. anomelas*; 2 — *A. flexorium*.Рис. 4. Часть переднего крыла: 1 — *A. anomelas*; 2 — *A. flexorium*.

- Europe, Japan *A. varitarsum* (Wesmael)
 14 (13). Mesoscutum wrinkled or rugose punctured, slightly shiny or matt. Notaulus short and poorly expressed.
 15 (18). Propleuron yellow-red. Mesonotum, scutellum and mesopleura light brown or yellow-red. Hind wing always without cubital vein.
 16 (17). Mesopleura roughly wrinkled, anteroventrally with smooth field, limited by swelling. Scutellum flat, not adjacent to mesonotum, bordered with black or dark brown swelling. 7–8.4. Ukraine (Atanasov, 1981), Russia (European, South-East of Western Siberia, Southern Primorye), Central and Southern Europe. *A. rugifer* (Thomson)
 17 (16). Mesopleura with rugose puncturing, sometimes longitudinally wrinkled, smooth field over sternaulum absent. Scutellum not depressed, adjacent to the mesonotum, bordered usually with light swelling. Fore wing without cubital vein (fig. 5). 5.7–7.6. Ukraine (everywhere), Russia (European Territory, North Caucasus, Irkutsk Region, Amur Region, South of Primorsky Kray), Armenia, Turkmenistan, Uzbekistan, Northern Kazakhstan, and the midland of West Europe. *A. hilare* (Tosquinet)
 18 (15). Propleuron black. Mesonotum, scutellum and mesopleuron usually black, sometimes brown. Hind wing with cubital vein or without it.
 19 (20). Propodeum with strong metasternal tooth (fig. 3, 10). Genal carina very high, elevated (fig. 3, 1–3). Male face black with yellow pattern (fig. 3, 2). 6–7.5. Ukraine (Transcarpathian, Donetsk, Luhansk Regions, Crimea), Russia (Moscow Region), Kazakhstan (Kustanay Region), France, Austria, Germany, Romania, Spain, Hungary. *A. flexorioides* Schnee
 20 (19). Propodeum with weak metasternal tooth or without it. Genal carina not raised. Both males and females with completely yellow face.
 21 (22). Epicnemial carina long, ended above the mid of mesopleura, always curved toward the lower corner of pronotum as a tooth (fig. 2, 6). Genal carina strongly defined, lamellate (fig. 3, 4). 3.4–9.5. Transpalaearctic species. *A. flexorium* (Thunberg)

Fig. 5. The hindwing of *A. hilare*.Рис. 5. Заднее крыло *A. hilare*.

22 (21). Epicnemial carina short, not extended beyond middle of mesopleura, straight or curved as a small tooth (fig. 2, 7). Genal carina weakly expressed. 5–7.5. Ukraine (everywhere), Russia (European Territory, South-East of Western Siberia, Amur Region., South of Primorskiy Kray), midland and south of West Europe. *A. gracilipes* (Curtis)

Agrypon anomelas (Gravenhorst, 1829)

Material. Ukraine. Kyiv Region: Kyiv, Lysa Hora (50°39' N, 30°55' E), 18.07.1993, 1 ♀ (Kotenko); Odessa Region: environs of Lesnichevka (48°01' N, 29°51' E), 18.06.2012, 1 ♂ (Pljushtch); Chernihiv Region: 8 km W of Ichnya, 27.06.2008, 1 ♂ (Kotenko); Mykolaiv Region: RLP "Tiligulsky" (46°92' N, 31°12' E) 12.06.2010, 1 ♀ (Nuzhna); Crimea: Kazantip (45°46' N, 35°85' E), 15–16.06.2004, 2 ♂ (Kotenko); Karadag, slope, 23.04.1986, 1 ♀ (Budashkin); environs of Kurs'ke (45°03' N, 34°94' E), 6.06.2007, 1 ♂ (Pljushtch); Zaporizhia Region: Pidhirne (47°44' N, 35°34' E), 5.07.1980, 1 ♂, 4 ♀ (Tolkanitz); Lugansk Region: Provalskyi Step (48°8' N, 39°53' E), 21.06.1979, 1 ♂ (Kotenko).

Agrypon anxium (Wesmael, 1849)

Material. Ukraine. Rivne Region: environs of Bil'sk, (51°47' N, 27°27' E), forest, 12.06.2008, 1 ♀ (Nuzhna); Kyiv Region: Irpin', meadow, 3.06.1980, 1 ♀ (Kotenko); Kyiv, Feofania (50°34' N, 30°49' E), 18.05.1983, 1 ♀ (Tolkanitz); Crimea: Crimean Nature Reserve (44°67' N, 34°33' E), 15.07.1979, 1 ♂, 1 ♀ (Kotenko); Chernihiv Region: 8 km W of Ichnia, 27.06.2008, 1 ♂ (Kotenko); Kharkiv Region: Krasnokutsk (50°06' N, 35°15' E), apple trees, 12.06.1992, 2 ♀ (Sviridov).

Agrypon clandestinum (Gravenhorst, 1829)

Material. Ukraine. Volynia Region: environs of Samary (51°86' N, 24°61' E), 9.08.1998, 1 ♂ (Kotenko); Zhytomyr Region: Ozera (50°16' N, 29°32' E), 2.08.1980, 1 ♀ (Kotenko); Kyiv Region: environs of Kyiv, 10.05.1975, 1 ♀ (Petrenko); Irpin', meadow, 30.05.1979, 1 ♀ (Yermolenko); Odessa Region: environs of Savransk (40°13' N, 30°08' E), forest, 17.07.1988, 1 ♀ (Tolkanitz); Crimea: environs of Alushta, 10.08.1985, 1 ♀ (Narolskyi).

Agrypon delarvatum (Gravenhorst, 1829)

Material. Ukraine. Zhytomyr Region: environs of Korostyshev (50°32' N, 29°05' E), 7.06.1977, 1 ♂ (Odnosum); Kyiv Region: environs of Khodosivka, 4.06.1987, 1 ♂ (collector not indicated); environs of Kyiv, Krughlyk, 12.06.1979, 1 ♂ (Lelei); environs of Kyiv, Pyrohiv, 12.08.2000, 1 ♂ (Kotenko); Crimea: Belaia Skala (45°09' N, 34°62' E), 1 ♂ (Nesterov).

Agrypon flaveolatum (Gravenhorst, 1807)

Material. Ukraine. Khmelnytsky Region: environs of Shydliwtsy, (49°02' N, 26°23' E), 28.07.1988, 1 ♂ (Tolkanitz); Kyiv Region: Kyiv, Feofania (50°34' N, 30°49' E), 18.05.1983, 1 ♂, 3 ♀ (Tolkanitz); Kyiv, Teremky (50°36' N, 30°45' ?), 14.05.1985, 2 ♀ (Kotenko); environs of Kyiv, 10.05.1975, 2 ♀ (Petrenko); Kirovograd Region: environs of Golovanovo (48°38' N, 30° 44' E), forest, 20.05.1955, 1 ♂, 1 ♀ (Honcharenko); Mykolaiv Region: Kuripchino, 1 ♂, 5 ♀ (48°02' N, 31.01' E), 23.05.1980 (Nesterov); Poltava Region: Myrghorod, 19.05.1984, 1 ♀ (Kotenko); Kherson Region: Black Sea Nature Reserve (47°17' N, 31°55' E), Ivano-Rybal'chanskyi Section, 26.05.1982, 1 ♂ (Tolkanitz); Kharkiv Region: environs of Protopopovka (50°02' N, 35°84' E), 7.06.1980, 1 ♂, 1 ♀ (Kotenko); Donetsk Region: Novobakhmutivka (48°24' N, 37°79' E), 9.05.1997, 3 ♀ (Perepechayenko).

Agrypon flexorioides Schnee, 1989

Material. Ukraine. Transcarpathian Region: Podpoloz', grass, 14.07.1954, 1 ♂ (collection of Telenga); Crimea: Tankove (45°95' N, 33°82' E), 18.07.1979, 1 ♀ (Tolkanitz); Donetsk Region: Khomutovskyi Step Nature Reserve (47°17' N, 38°10' E), 24.06.1979, 1 ♂, 2 ♀ (Tolkanitz); Lugansk Region: environs of Belovodie, 23.06.1983, 1 ♀ (Odnosum).

Agrypon flexorium (Thunberg, 1822)

Material. Ukraine. Transcarpathian Region: environs of Rakhiv, 2.08.1994, 1 ♂; environs of Polyana (48°62' N, 29°97' E), 5–9.07.1986, 2 ♂ (Kotenko); Rivne Region: environs of Bil'sk, (51°47' N, 27°27' E), forest, 12.06.2008, 2 ♀ (Nuzhna); Khmelnytsky Region: environs of Shydliwtsy (49°02' N, 26°23' E), 28.07.1988, 4 ♀ (Tolkanitz); Kyiv Region: Irpin', meadow, 30.06.1979, 1 ♀ (Yermolenko); Feofania (50°34' N, 30°49' E), 16.06.1979, 1 ♂, 1 ♀ (Kotenko); Odessa Region: environs of Vilkovo, 31.05.1980, 1 ♀ (Nesterov); Primors'ke,

14.09.1995, 1 ♀ (Kotenko); Mykolaiv Region: environs of Myghia (48°04' N, 30°94' E), 19.07.1988, 1 ♂ (Tolkanitz); Novoserhiivka (47°46' N, 32°69' E), 1.07.1976, 1 ♀ (Berest); Kherson Region: Black Sea Nature Reserve (47°17' N, 31°55' E): Ivano-Rybal'chanskiy Section, 14.06.1989, 2 ♂, 3 ♀; Potievskiy Section, 14–16.06.1989, 4 ♂, 2 ♀ (Kotenko); Crimea: Tarkhankut, 25.05.1979, 1 ♂ (Kotenko); Kharkiv Region: Krasnokutsk, 15.05.1993, 1 ♂ (Sviridov); Zaporizhzhya Region: environs of Vasylivka: 24.08.1972, 1 ♂, 3 ♀, 10.06.1976, 6 ♂, 5 ♀ (Tolkanitz); Donetsk Region: Kryva Luka (48°87' N, 37°9' E), 21.06.1993, 1 ♀ (Kotenko); Sloviansk, ex Loxostege sticticalis, 1.05.1977, 1 ♀ (Nadvorna); Lugansk Region: Provalskyi Step (48°8' N, 39°53' E), 21.06.1979, 1 ♂ (Kotenko); Stril'tsivskyi Step (49°3' N, 40°09' E), 27.07.2002, 1 ♀ (Sheshurak).

Agrypon gracilipes (Curtis, 1839)

Material. Ukraine. Transcarpathian Region: environs of Khust, 17.07.1963, 6 ♂, 11 ♀ (Boganiich); Kyiv Region: Irpin', meadow, 30.08.1980, 1 ♀ (Kotenko); Odessa Region: environs of Vilkovo, 11.05.1995, 1 ♀ (Kotenko); Kherson Region: environs of Hola Prystan', 31.05.1978, 1 ♂; Black Sea Nature Reserve (47°17' N, 31°55' E): Ivano-Rybal'chanskiy Section, 14.06.1989, 1 ♀; Potievskiy Section, 15.06.1989, 1 ♀; Solonozernyi Section, 11.06.1989, 1 ♀ (Kotenko); Kharkiv Region: Yefremovka (49°45' N, 36°05' E), 15.07.1985, 1 ♂ (Pljushtsh); Zaporizhzhya Region: environs of Vasylivka, 28.08.1972, 1 ♀ (Tolkanitz).

Agrypon hilare (Tosquinet, 1889)

Material. Ukraine. Vinnytsia Region: environs of Oksanivka (48°23' N 28°19'E), 21.07.1988, 1 ♂, 3 ♀ (Tolkanitz); Odessa Region: Vylkove (45°4' N, 29°58' E), 11.09.1995, 3 ♀ (Kotenko); Kirovograd Region: environs of Lisne (48°64' N, 32°07' E), 9.07.1978, 1 ♀ (Kotenko); Cherkasy Region: Uman', 29.07.1979, 1 ♂ (Tolkanitz); Mykolaiv Region: RLP "Tiligulsky" (46°92' N, 31°12' E), 12.06.2010, 1 ♂ (Nuzhna); Poltava Region: environs of Kuibyshevo (50°02'N 32°63'E), 8.07.1983, 1 ♀ (Kotenko); Kherson Region: Black Sea Nature Reserve (47°17' N, 31°55' E), Potievskiy Section, 15.06.1989, 1 ♀ (Kotenko); Kharkiv Region: Yefremovka (49°45' N, 36°05' E), 15.07.1985, 2 ♀ (Narolskyi); Donetsk Region: Kryva Luka (48°87' N, 37°9' E), 21.06.1983, 2 ♂ (Kotenko); Kamiani Mohyly Reserve (47°34' N, 37°08' E), 16.08.1997, 1 ♀ (Perepechaenko); Lugansk Region: Stanichno-Lugansky Distr., environs of Station Novaia Ilienko, flood plain of Derkul river, 26.06.1983, 1 ♀ (Kotenko).

Agrypon interstitiale Schnee, 1989

Material. Ukraine. Kyiv Region: Kyiv, Pheophania (50°34' N, 30°49' E), 5.06.1979, 1 ♀ (A. Kotenko); Crimea: 6 km N of Alushta, 12.07.1979, 1 ♂ (Kotenko); Donetsk Region: Khomutovskyi Step Nature Reserve (47°17' N, 38°10' E), 24.06.1979, 1 ♀ (Tolkanitz).

Agrypon varitarsum (Wesmael, 1849)

Material. Ukraine. Transcarpathian Region: environs of Khust, 17.07.1963, 1 ♂ 3 ♀ (Boganiich); Kyiv Region: Khotiv (50°33' N, 29°32' E), 3.06.1977, 1 ♂ (Nesterov); Kherson Region: Black Sea Nature Reserve (47°17' N, 31°55' E), Potievskiy Section, 15.06.1989, 1 ♂ (Kotenko); Crimea: Karadag, slope, 23.04.1986, 1 ♂ (Budashkin).

References

- Atanasov A. Z. A new species and a key to Palaearctic Ichneumon-flies from the genus *Trichionotus* (Hymenoptera, Ichneumonidae) // Zoologicheskiy Zhurnal. — 1975. — 54. — P. 240–243. — Russian : Атанасов А. З. Новый вид и определительная таблица палеарктических наездников рода *Trichionotus* (Hymenoptera, Ichneumonidae) // Зоологический журнал.
- Atanasov A. Z. Subfamily Anomaloninae // Key to insects of European Territory of the USSR. Vol. 5. Hymenoptera. Part 3. — L. : Nauka, 1981. — P. 432–451. — Russian : Атанасов А. З. Подсемейство Anomaloninae //
- Förster A. Die zweite Centurie neuer Hymenopteren // Verhandlungen des Naturhistorischen Vereins der Preussischen Rheinlande und Westfalens — 1860. — 19. — S. 225–288.
- Förster A. Synopsis der Familien und Gattungen der Ichneumonen // Verhandlungen des Naturhistorischen Vereins der Preussischen Rheinlande und Westfalens. — 1869 (1868). — 25 — S. 135–221.
- Gauld I. D. The classification of the Anomaloninae (Hymenoptera, Ichneumonidae) // Bulletin of the British Museum (Natural History). Entomology. — 1976. — 33, N 1. — P. 1–135.
- Gauld I. D., Mitchell P. A. Ichneumonidae: Ortopelmatinae and Anomaloninae // Hdb. Ident. Brit. Ins. — London : Roy. Ent. Soc., 1977. — Vol. 7, Part 2 (6). — P. 1–29.
- Gauld I. D. A revision of the Anomaloninae (Hymenoptera: Ichneumonidae) of Melanesia. II. The genera Perisphegaster Townes and Agrypon Förster // Bulletin of Entomological Research. — 1978. — 68, N 4. — P. 543–557.

- Meyer N. F.* Parasitic Hymenoptera of the fam. Ichneumonidae of the USSR and adjoining countries. — L. : Izd. Akademii nauk SSSR, 1935. — Vol. 4. — 535 p. — Russian : *Мейер Н. Ф.* Паразитические перепончатокрылые СССР и сопредельных стран.
- Morley C.* The fauna of British India, including Ceylon and Burma. Hymenoptera. Vol. 3. Ichneumonidae. — London : British Museum, 1913. — 531 p., 1 pl.
- Morley C.* Ichneumonologia Britannica. Vol. 5. Ichneumons of Great Britain. Ophioninae. — London : H. and W. Brown, 1914. — 400 p.
- Schmiedeknecht O.* Die Ichneumonidentribus der Anomalinen (Hym.). Eine Uebersicht sämtlicher Gattungen sowie der paläarktischen Arten // Zeitschrift für Systematische Hymenopterologie und Dipterologie. — 1902. — N 2. — S. 356–368.
- Schmiedeknecht O.* Die Ichneumonidentribus der Anomalinen (Hym.) // Zeitschrift für Systematische Hymenopterologie und Dipterologie. — 1903. — N 3. — S. 1–8; 73–80; 171–176.
- Schnee H.* Revision der von Gravenhorst beschriebenen und redescribierten Anomaloninae mit Beschreibung zweier neuer Arten (Hymenoptera, Ichneumonidae) // Deutsche Entomologische Zeitschrift. — 1989. — 36 (4–5). — S. 211–266.
- Townes H.* The genera of Ichneumonidae. Part 4 // Memoirs of the American Entomological Institute. — 1971. — N 17. — P. 122–158.
- Townes H. K., Momoi S., Townes M.* A catalogue and reclassification of the eastern Palearctic Ichneumonidae // Memoirs of the American Entomological Institute. — 1965. — 5. — P. 1–661.
- Yu D. S., Horstmann K. A.* Catalogue of World Ichneumonidae (Hymenoptera). — Gainesville : The American Entomological Institute, 1997. — 763 p.

Received 10 January 2012

Accepted 21 March 2013