

UDC 595.792(477)

## FIRST RECORDS OF *ERIGORGUS* SPECIES (HYMENOPTERA, ICHNEUMONIDAE, ANOMALONINAE) FROM UKRAINE

A. D. Nuzhna

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

Received 4 October 2011

Accepted 14 September 2012

**First Records of *Erigorgus* Species (Hymenoptera, Ichneumonidae, Anomaloninae) from Ukraine.** Nuzhna A. D. — Five species of the genus *Erigorgus* Förster: *E. romani* (Hellén), *E. borealis* (Hellén), *E. femorator* Aubert, *E. villosus* (Gravenhorst), *E. lacertosus* Atanasov are recorded from Ukraine for the first time. Previously unknown male of *E. lacertosus* Atanasov is described. *E. villosus* (Gravenhorst) is redescribed basing on additional characters not mentioned in original description.

Key words: Hymenoptera, Ichneumonidae, Anomaloninae, *Erigorgus*, Ukraine.

**Новые находки видов рода *Erigorgus* (Hymenoptera, Ichneumonidae, Anomaloninae) в Украине.** Нужна А. Д. — Приведены данные о 5 видах рода *Erigorgus* Förster: *E. romani* (Hellén), *E. borealis* (Hellén), *E. femorator* Aubert, *E. villosus* (Gravenhorst), *E. lacertosus* Atanasov, впервые обнаруженных в Украине. Для *E. lacertosus* Atanasov, описанного по самке, впервые приведено описание самца. *E. villosus* (Gravenhorst) переописан с использованием ряда признаков, не отмеченных в первоописании, но характерных для данного вида.

Ключевые слова: Hymenoptera, Ichneumonidae, Anomaloninae, *Erigorgus*, Украина.

### Introduction

*Erigorgus* Förster is one of the largest genera of the subfamily Anomaloninae with more than 20 species in the Palaearctic Region (Schnee, 1986; Yu, Horstmann, 1997). All species of this genus like the majority of Anomaloninae parasitize the larvae of Lepidoptera. The female oviposits into the host larva; the adult emerges from the host pupa by biting a circular hole at its anterior end (O'Connor et al., 2007).

N. Meyer (1935) and A. Atanasov (1975) recorded 17 species of the genus *Erigorgus* Förster from the European territory of the USSR, including 8 species from Ukraine. While studying the Anomaloninae specimens deposited in the collection of Schmalhausen Institute of Zoology (Kyiv), five species previously unknown from Ukraine were found: *E. romani* (Hellén), *E. borealis* (Hellén), *E. femorator* Aubert, *E. villosus* (Gravenhorst), *E. lacertosus* Atanasov.

Morphological terminology of Anomaloninae follows I. Gauld (1976).

### Review of species

#### *E. borealis* (Hellén, 1926)

Material examined: ♀ [Ukraine], Crimea, Karadag, slope, 23.04.1986 (Budashkin).

Comparative notes. Morphologically *E. borealis* is similar to *E. romani* (Hellén) from which it differs mainly in the rugosely punctated propodeum and in length of the second segment of the hind tarsi which is about 3 times as long as the third segment.

Distribution: Finland (Hellén, 1926), first record for Ukraine.

#### *E. femorator* Aubert, 1960

Material examined: ♂ [Ukraine], Crimea, Karadag, northwest slope, 22.04.1964 (Osychniyk).

Comparative notes. Morphologically *E. femorator* is similar to *E. cubitator* Aubert (both species have shortened segments of abdomen) from which it differs in convex scutellum, bordered with weak carina, and in not interrupted discoidella vein of the hind wing.

Distribution: South of Europe, North Africa (Atanasov, 1981), first record for Ukraine.

***E. romani* (Hellén, 1926)**

Material examined: 2 ♀ [Ukraine] Kherson Region, Black Sea Nature Reserve (47°17' N 31°55' E), Ivano-Rybal'chanskiy Section, 11.04.1974 and 06.05.1982 (Kotenko).

Comparative notes. Morphologically *E. romani* is similar to *E. borealis* (Hellén) from which it differs in rugosely reticulate propodeum and in the length of the second segment of hind tarsus which is about 2.3 times longer than the third tarsal segment.

Distribution: central and northern part of Europe (Atanasov, 1981), first record for Ukraine.

***Erigorgus lacertosus* Atanasov, 1975 (fig. 1)**

Atanasov, 1975: 1485.

Material examined: Holotype ♀: «40 км восточнее Шемахи, Азербайджан, Каспарян, 22.05.1972, полынь, степь» [40 km to the east of Shemakha, Azerbaijan, Kasparyan, 22.05.1972, wormwood, steppe] (Zoological Institute, Academy of Sciences, St. Petersburg, Russia). ♂ Ukraine, Donetsk Region, Khomutovskiy Step Nature Reserve (47°17' N 38°10' E), 27.04.1978 (Kotenko).

The female of *E. lacertosus* Atanasov was described from Azerbaijan (Atanasov, 1975), the male of this species was previously unknown. Males description is given below.

Male. Generally similar to the female and differs in the following features. Flagellum short with 26 segments. Scutellum flat, bordered with the carina. Second segment of hind tarsus about 2.2 times shorter than the first segment (fig. 1, 2). Hind coxa smooth, slightly punctate.

Shared characters. Both male and female have rounded apex of clypeus without an apical median tooth, and slightly shortened abdomen (1.7 times longer than head and thorax together).

Comparative notes. *E. lacertosus* differs from another Palaearctic species of *Erigorgus* in rounded clypeus without an apical median tooth (fig. 1, 1), and in shortened abdomen, second segment of female's hind tarsus 4 times shorter than the first.

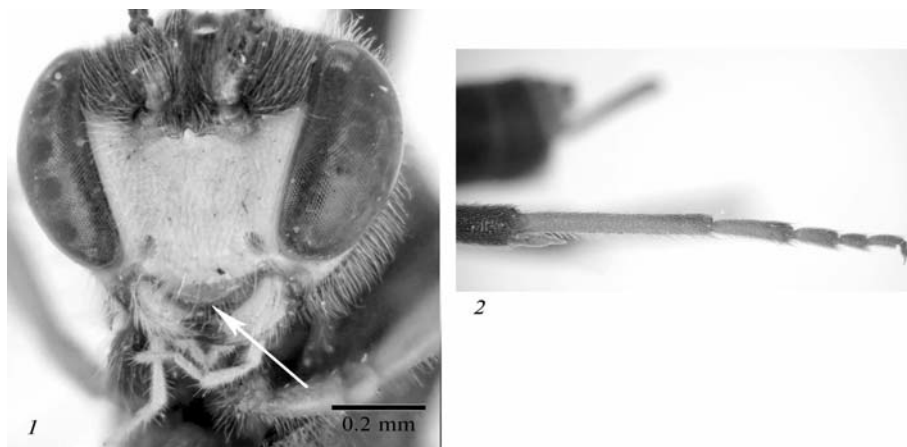


Fig. 1. *E. lacertosus* ♂: 1 — head in anterior view (apex of clypeus indicated by an arrow); 2 — hind tarsi.

Рис. 1. *E. lacertosus* ♂, 1 — голова спереди (вершина наличника указана стрелкой); 2 — задняя лапка.

Morphologically *E. lacertosus* is similar to *E. procerus* (Gravenhorst) from which it differs mainly by rounded clypeus and head not narrowed posteriorly.

Distribution: Azerbaijan (Atanasov, 1981), first record for Ukraine.

***Erigorgus villosus* Gravenhorst, 1829 (fig. 2)**

Material examined: ♀ [Ukraine] Kherson Region, Black Sea Nature Reserve (47°17' N 31°55' E), Solonoozernyi Section, 27.04.1966 (collector not indicated); ♂ [Ukraine] Crimea, Opuk, 16.04.1999 (Rutyanyan); ♀ [Ukraine] Kyiv. distr., Hodosiivka, 17.05.2004 (M. Nesterov).

**Redescription.** Female. Head not widened posteriorly, densely pubescent. Frons rugosely punctate with a short longitudinal carina between antennal sockets. Antenna moderately short, with 30–31 flagellar segments. Face weakly narrowed downward. Anterior margin of clypeus rounded, with slightly developed median tooth (fig. 2).

Pronotum and mesonotum with dense pubescence. Lower corner of pronotum rounded, its anterior margin without a distinct tooth above fore coxa. Mesoscutum deeply rugosely punctate, almost matt. Notaulus not distinct. Prepectal carina short, not clear, ended about on the level of the lower corner of pronotum and distant from the front edge of mesopleuron. Mesopleuron deeply punctate. Scutellum convex, bordered with the weak carina. Propodeum strongly rugose.

The first segment of hind tarsus about 3 times as long as second. Hind tarsal claws weakly curved, pectinate basally.

Fore wing: 8.6–10.5 mm. *rm* basad of second recurrent vein. Discoidella vein of the hind wing always present, nervellus intercepted below middle.

Abdomen not shortened (usually about 2 times longer than head and thorax together), first abdominal tergite is longer than the first segment of hind tarsi.

Head and thorax completely black with light brown pubescence. Face black, eyes orbits sometimes reddish, clypeus dark brown or black, mandibles and labial palpi yellowish. Antenna dark brown. Legs as a rule reddish-brown or yellowish-brown, fore and mid coxae and trochanters blackish-brown, hind coxa and trochanter black. Fore and middle tarsi light reddish-yellow, hind tarsus blackish-yellow. Abdomen reddish, first tergite often with black base, second tergite often with black dorsal stripe, apical segments entirely black, fifth tergite sometimes with reddish lateral stripes.

Male is similar to female, differing in yellowish tibia and tarsi.

**Comparative notes.** The characteristic feature of *E. villosus* is the dense light brown pubescence on head and thorax. This species is morphologically similar to *E. cerinops*



Fig. 2. *E. villosus*, head in anterior view (apex of clypeus indicated by an arrow).

Рис. 2. *E. villosus*, голова спереди (вершина наличника указана стрелкой).

(Gravenhorst), differing in almost entirely black face and clypeus and denser light brown pubescence of head and thorax.

**Distribution:** Central Europe (Schnee, 2008), first record for Ukraine.

I sincerely grateful to A. Prokhorov for taking photos of specimens and to M. Kaliuzhna for assistance with English translation of this work. My special thanks are due to V. I. Tolkanitz, M. D. Zerova and A. V. Gumovsky for their valuable comments during the preparation of this paper.

- Atanasov A. Z.* New representatives and key to Palearctic species of the genus *Erigorgus* (Hymenoptera, Ichneumonidae) // *Zool. zhurn.* — 1975. — **54**, fasc. 10. — P. 1480–1487. — Russian : *Атанасов А. З.* Новые представители и определительная таблица палеарктических видов рода *Erigorgus* (Hymenoptera, Ichneumonidae).
- Atanasov A. Z.* Subfamily Anomaloninae // A guide to the insects of the European part of the USSR Hymenoptera, Ichneumonidae. — Leningrad : Nauka, 1981. — Vol. 3, part 3. — P. 432–451. — Russian : *Атанасов А. З.* Подсемейство Anomaloninae // *Определитель насекомых европейской части СССР. Перепончатокрылые.*
- Gauld I. D.* The classification of the Anomaloninae (Hymenoptera: Ichneumonidae) // *Bulletin of the British Museum (Natural History).* — 1976. — **33**, 1. — P. 4–92.
- Gravenhorst J. L. C.* *Ichneumonologia Europaea.* Pars 3. — Breslau, 1829. — 1097 p.
- Hellén W.* Beitrage zur Kenntnis der Ichneumoniden Finlands. II. Subfam. Ophioninae und Anomaloninae // *Acta Societatis pro Fauna et Flora Fennica.* — 1926. — **56** (6). — S. 1–27.
- Meyer N. F.* Parasitic Hymenoptera of the family Ichneumonidae of the USSR and adjacent countries. Part 4. Ophioninae. — Leningrad : Izdatelstvo Akadem. Nauk SSSR, 1935. — (*Определители по фауне СССР; fasc. 16*). — P. 56–115. — Russian : *Мейер Н. Ф.* Паразитические перепончатокрылые СССР и сопредельных стран. Часть 4. Ophioninae.
- O'Connor J. P., Nash R., Fitton M. G.* A catalogue of the Irish Ichneumonidae (Hymenoptera, Ichneumonidae) // *Occ. Publ. Ir. biolog. Soc.* — 2007. — **10**. — P. 21–24.
- Schnee H.* Zur Kenntnis der Biologie einiger *Erigorgus* Arten (Hymenoptera, Ichneumonidae) // *Entomologische Nachrichten und Berichte.* — 1986. — **30**. — S. 280–281.
- Schnee H.* Die Anomaloninae der Sammlung Arnold Förster — Typenrevision und faunistische Anmerkungen (Hymenoptera, Ichneumonidae) // *Beiträge zur Entomologie.* — 2008. — **58**. — S. 249–256.
- Yu D. S., Horstmann K.* A Catalogue of World Ichneumonidae (Hymenoptera) *Memoirs of the American Entomological Institute.* Gainesville, Florida. — 1997. — **58** (1) — P. 41–44.