

## Fauna of the Subfamily Ichneumoninae (Hymenoptera, Ichneumonidae) of Azerbaijan With New Records

Azer Abulfaz Oghlu ALIYEV

Laboratory of Entomophaga and Theoretical Bases of Biological Protection of Plants, Institute of Zoology, Academy of Sciences of The Republic of Azerbaijan, Passage 1128, Block 504, 370602, Baku-AZERBAIJAN

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**Abstract:** This paper presents information about 103 species of the subfamily Ichneumoninae. 10 species of them were included in the Azerbaijan fauna, 25 in the Caucasian fauna and 65 in the Transcaucasian fauna for the first time. They belong to 6 tribes and 36 genera. Their distribution, hosts and biotopes were noted.

**Key Words:** Ichneumoninae, Ichneumonidae, Hymenoptera, tribe, Azerbaijan, new records.

### Azərbaycan'ın Ichneumoninae (Hymenoptera, Ichneumonidae) Faunası Yeni Tespitlerle

**Özet:** Azərbaycan'da ichneumoninae altfamilyasından 6 tribüs ve 36 cinse ait 103 tür tespit edilmiştir. Bunlardan, 10 tür Azərbaycan, 25 tür Kafkasya ve 65 Transkafkasya faunası için yeni kayıttır. Saptanan türlerin biyotopları, konukçuları ve dağılışları belirlenmiştir.

**Anahtar Sözcükler:** Ichneumoninae, Ichneumonidae, Hymenoptera, New records, Azərbaycan.

### Introduction

Studies on the fauna of parasitic hymenopters of different regions are of great significance for effective pest control. In this respect, members of the subfamily Ichneumoninae are of great practical scientific interest. There have been very few studies on the fauna of ichneumonids in Azerbaijan (1–5).

This paper presents information on Ichneumoninae. Representatives of this subfamily are endoparasites on Lepidoptera (noctuids, geometrids and other moths). Although they are of average size, large and small samples have also been obtained (6).

Species of the tribe Phaeogenini are known to parasitize mainly Microlepidoptera, the others parasitize Macrolepidoptera. Most of the species of the given group overwinter in preimaginal stages whilst the females overwinter in tribe Phaeogenini and Ichneumonini. Adults fly out from the host pupae after completion of development (7).

Specimens were collected from different regions of the country in order to determine the fauna of Ichneumoninae of Azerbaijan.

### Material and Methods

Mounted collections of the material and observations on the bioecological peculiarities of ichneumonids were

made in different regions of Azerbaijan over the last 20 years (1970–1990).

Material collections and census of ichneumonids were carried out using widely accepted methods (8). Adult ichneumonids were collected with an insect net from various biotopes and stages of development of the hosts.

A number of keys (9, 6, 10, 11, 7, 12, 13) were used for the identification of species.

The cameral treatment of the collected material was carried out in the laboratory of the entomophaga and theoretical basis of the biological methods of plant protection of the Institute of Zoology, Academy of Sciences of Azerbaijan. Part from the examined samples of private collections and the ichneumonid collection of Institute of Zoology at the Academy of Sciences of Azerbaijan, the collection of Zoological Institute of Academy of Sciences of Russia were also analyzed.

### Results

#### Subfamily ICHNEUMONINAE

#### Tribe PHAEOGENINI

#### Genus RHEXIDERMUS FÖRSTER

#### 1. *Rhexidermus truncator* Först., 1889

Zakatala, 19.06.1961, 2 ♀♀, Goy-Chay, v. Poty,  
18.04.1964, 1, cotton field; Goy-Chay, v. Poty,

- 18.05.1964, 1 ♀, motley grass; v. Bay, 17.07.1964, 1 ♀; G. Ch. 1, 1, v. Dig. 07.1974, 2 ♀, motley grass, fruit garden.
- 05.09.1974, 1 ♀, v. Ch. v. Po. Host: *Pennisetia hylaeiformis* Laspeyres (Sessidae).  
26.09.1964, 1 ♀, cotton field; Ag. 1974, 2 ♀, cotton field. Host: *Archanara geminipuncta* Haworth (Noctuidae).  
Host: *Laspeyresia stratiella* Linnaeus (Tortricidae).  
*Hyphantidium terebellum* Linnaeus (Phycitidae), *Hyphantidium fanestris* Linnaeus (Lasiocampidae), *Eucoma* s. str. Linnaeus (Lymantidae).  
Distribution: Middle Asia (Fergana), Europe, the Canary Islands (13).  
2. *Rhexidermus nigricollis* Wesmael. V. Gachresh, Kuba, 18.09.1969, 1 ♀; v. Hadjialibekly, Schmaz, 11.09.1962, 1 ♀; Kuba, 06.07.1974, 1 ♀, 1 ♂, fruit garden.  
Host: *Alucita galactyla* Hübner (Prodoxidae).  
Distribution: The whole of the European part of the former USSR, South-west Siberia, North Africa, Europe, Romania (13).  
3. *Rhexidermus tineidarius* Giraud, 1871. V. Vladimirovka, Kuba, 17.1978, 2 ♀, motley grass, 2 ♂; Kusar, 20.07.1973, 2 ♀, fruit garden.  
Host: *Pseudotemelia spanzeri* Stephens (Decopharidae), *Talaeporia palitella* Senenbeimer, *Talaeporia tubulosa* Ratzeburg (Psychidae), *Yponomeuta malinellus* Linnaeus (Yponomeutidae).  
Distribution: Sankt-Peterburg, Central Europe, Italy, Romania (13).  
Genus *COLPOGNATHUS* WESMAEL  
4. *Colpognathus celerator* Gravenhorst, 1829. Gachresh, Kuba, 18.08.1972, 1 ♀, motley grass; Karvan, Yardimly, 14.09.1971, 1 ♀, fruit garden; Nakhicevan, centre, 31.06.1975, 1 ♀, motley grass.  
Host: *Pennisetia hylaeiformis* Laspeyres (Sessidae), *Ostrinia nubilalis* Hübner (Pyraustidae).  
Distribution: The whole of the European part of the former USSR, Western Europe (13).  
Genus *CENTETERUS* WESMAEL  
5. *Centeterus confector* Gravenhorst, 1859. Kusar, 14.07.1974, 1 ♀, motley grass.  
Host: *Archanara geminipuncta* Haworth (Noctuidae).  
Distribution: From Baltic to Preurals, Caucasus, Western Europe, Northern China (13).  
*Centeterus major* Wesmael, 1844. V. Dig. 07.1974, 2 ♀, motley grass, fruit garden.  
Host: *Pennisetia hylaeiformis* Laspeyres (Sessidae).  
Distribution: Western Europe (13).  
6. *Ceetetus opprimator* Gravenhorst, 1844. V. Dig. 07.1974, 2 ♀, motley grass.  
Host: *Blastobes bergiella* Ratzeburg (Argyresthiidae).  
Distribution: Western Europe (13).  
7. *Centeterus tomarridens* Gravenhorst, 1844. Kusar, 07.1972, 2 ♀, motley grass.  
Distribution: Transcaucasus, Western Europe (13).  
8. *Centeterus brunnicornis* Gravenhorst, 1844. V. Vladimirovka, Kuba, 24.06.1969, 1 ♀, fruit garden; v. Vladimirovka, 24.06.1974, 4 ♀, raised from *Yponomeuta malinella* Zeller; Kusar, 26.06.1974, 8 ♀, fruit garden. Host: *Yponomeuta padellus* Linnaeus, *Yponomeuta cognata* Hübner, *Yponomeuta malinella* Zeller (Yponomeutidae), *Plutella maculipennis* Curtis (Plutellidae).  
Distribution: The whole of the European part of the former USSR, Khabarovsk, Western Europe (13).  
9. *Diadromus subtilicornis* Gravenhorst, 1829. Kuba, 11.06.1974, 2 ♀, fruit garden, mustard.  
Host: *Laspeyresia corollana* Zeller (Tortricidae), *Plutella maculipennis* Curtis (Plutellidae).  
Distribution: The whole of the European part of the former USSR, Southwest Siberia, Western Europe, North America (13).  
10. *Diadromus quadriguttatus* Gravenhorst, 1889. Kusar, 27.07.1974, 1 ♀, motley grass, fruit garden.  
Host: *Yponomeuta cognata* Hübner (Yponomeutidae).  
Distribution: Khabarovsk territory, Kamchatka, Northern and Central Europe, Romania (13).  
11. *Diadromus ustalatus* Holmgren, 1839. Kusar, 24.06.1974, 1 ♀, fruit garden.

- Distribution: Western Caucasus, Northern and Central Europe (13).  
 Europe, Romania (13). Parasite of Geometridae, sometimes of Drepanidae, 13. *Diadromus varicolor* Wesm. (1836) as an exception of Geometridae (caterpillars are parasitized).  
 Kuba, 14.06.1974, 1 ♀, fruit garden. Overwinters in pupal stage.  
 Distribution: Caucasus, Northern and Central Europe (13). Distribution: Holarctic, Oriental and Ethiopian territory (13).  
 England, Romania (13). Genus *THYRAEELLA* H. GREN Genus *ECTONIA* WESMAEL  
 14. *Thyraeella collaris* (Gnathorhynchus) (1859) *Ectonia rubellus* Gmelin, 1824  
 Gachresh, 14.06.1974, 2 ♀♀, v. Gachresh, 12.07.1975, 1 ♀, motley grass, fruit garden.  
 Kuba, 02.04.1960, 1 ♀; v. Gachresh, Kuba, 15.05.1973, 1 ♀; *Parizoma bifasciata* Hübn. (Geometridae).  
 1 ♀; v. Gachresh, Kuba, 15.05.1973, 1 ♀; Distribution: Central Caucasus, Kamchatka, Western Europe (13).  
 05.07.1974, 2 ♀♀. Host: *Acrolepis assectella* Zincken (Cecropiidae). Genus *CYCLOLABUS* HEINRICHS  
*Plutella maculipennis* Curtis (Plutellidae). Distributed in Holarctic and mountains of Oriental Asia, West Europe, the Canary Islands (13). There are 3 species in Europe.  
 Genus *PHAEOGENES* WESMAEL \* 20. *Cyclolabus pactor* Wesm., 1844  
 15. *Phaeogenes heterogonus* Holmgr. (1889) V. P. Kusar, Astara, 21.04.1972, 1 ♀, motley grass.  
 V. Khil, Kusar, 27.07.1978, 1 ♀, motley grass, fruit garden. Distribution: Southwestern Europe (13).  
 v. Gachresh, Kuba, 26.07.1978, 1 ♀, motley grass, fruit garden. 21. *Cyclolabus nigricollis* Wesm., 1844  
 Host: *Pandemis cerasana* Hübn. (Tortricidae). Kazakh, 26.07.1972, 1 ♀.  
 Distribution: Northern Caucasus, Stavropol territory (Tiberia forest reserve); Northern and Central Europe (13). Host: *Lucita pentadaetyla* Linnaeus (Pterophoridae).  
 Distribution: Western Europe, Caucasus (13). Genus *PLATYLABUS* WESMAEL  
 16. *Phaeogenes melanogonus* Gmelin, 1829 Distributed mainly in Holarctic and mountains of Oriental Asia (28 species).  
 Kazakh region, 24.07.1975, 1 ♀, motley grass. 22. *Platylabus rufus* Wesm., 1844  
 Host: *Depressaria abla* Den. et Schiff. (Tortricidae). Kazakh, 26.07.1974, 1 ♀, motley grass.  
 (Decophoridae), *Sparganothis heriana* (Lepidoptera: Tortricidae). Host: *Cabera pusaria* Linnaeus (Geometridae).  
 Schiffenmüller (Tortricidae). Distribution: Caucasus, Western Europe, Japan (13).  
 17. *Phaeogenes invisor* Thunberg, 1844. Kazakh, 17.08.1974, 2 ♀♀, meadow grass.  
 Distribution: The whole of the European part of the former USSR, Armenia, Northern and Central Europe, Romania (2). 23. *Platylabus tricingulatus* Gnathorhynchus (1820) (= *Platylabus Bertoumieu*)  
 Raised from *Tortrix viridana* Linnaeus (Tortricidae), *Yponomeuta pabens* Linnaeus, *Yponomeuta ephymella* Linnaeus (Yponomeutidae), *Hylana fasciaria* Linnaeus (Geometridae). Kusar, 24.06.1974, 1 ♀, fruit garden.  
 18. *Phaeogenes ophthalmicus* Wesm., 1836 Kusar, 17.09.1973, 2 ♀♀; Lenkoran, 16.07.1972, 1 ♀.  
 Distribution: Caucasus, Central Asia, Western Europe (13).  
 24. *Platylabus pedatorius* Fabricius, 1844  
 Kazakh, 24.07.1974, 1 ♀, motley grass.  
 Host: *Erannis defoliaria* Clerck, *Eupithecia* spp. (Geometridae).  
 Distribution: Caucasus, Eastern and Western Europe (13).

\* Species with asterisk were noted early.

Genus *HYPOMECUS* WESMAEL

Tribe ICHNEUMONINI

25. *Hypomecus quadriannulatus* Gravenhorst, 1891

Masally, 26.06.1965, 3

Host: *Larentia, Cyclophora, Scopula* (Geometridae).

Distribution: Kuril Islands, Western Europe, Burma, North America (13).

Tribe EURYLABINI

Genus *EURYLABUS* WESMAEL

Parasite great part of Noctuidae, Notodontidae, Lithosiidae. Parasitize caterpillars.

Distribution in Palearctic and Mountain Oriental Oblasts and South Africa (13).

In Europe 3 species.

26. *Eurylabus torvus* Wesmael, 1844

Kuba, 27.07.1968, 2, motley grass in the forest.

Host: *Atolmis rubricollis* Linnaeus (Noctuidae).

27. *Eurylabus tristis* Gravenhorst, 1844

Kuba, 27.07.1979, 1, motley grass; Agdam, 12.07.1971, 1, motley grass.

Host: *Panolis flammea* Den. et Schifferrmüller, *Hadena bicruris* Hufnagel, *Hadena porlexa* Den. et Schifferrmüller (Noctuidae).

Distribution: Kazakhstan, Central Asia, Western Europe (13).

Genus *PROBOLUS* WESMAEL

Parasite Noctuidae. Distribution in Holarctic and Mountains of Burma. In Europe 3 species.

28. *Probolus concinnus* Wesmael, 1844

Kusar, 17.06.1968, 2, fruit garden, grass; Shambir, 17.07.1974, 1, motley grass.

Distribution: Caucasus, Central Asia, Siberia, Western Europe (13).

Tribe LISTRODROMINI

Genus *ANISOBAS* WESMAEL

29. *Anisobas cingulatorius* Gravenhorst, 1844

V. Hadjialibekly, Khachmaz, 01.08.1962, 3, motley grass; Kuba, 11.08.1962, 2, fruit garden, motley grass.

Host: *Callophrys rubi* Linnaeus (Lycaenidae).

Distribution: Southern Caucasus, Central Asia, Kazakhstan, Primorie, Iran (13).

The biggest and most varied group of the subfamily Ichneumoninae with worldwide distribution. Parasite of different macrolepidoptera, mainly Geometridae, Tortricidae, Archiidae, Luperidae etc. Sometimes Ichneumonidae, Sutinidae.

Genus *CRATICHNEUMON* THOMSON

30. *Cratichneumon abiseta* Thomson, 1895

Parasite of *Apparitor orthoceras*, *Myiodes* Haldermann (Lepidoptera).

Leikoran, 22.06.1978, 1, motley grass; Kuba, 20.07.1978, 1, motley grass, fruit garden.

Distribution: Southwestern Caucasus, Primorie, Western Europe (13).

31. *Cratichneumon coruscator* Thomson, 1893

(= *corruptor* Linnaeus)

Kusar, 26.06.1972, 1, motley grass; Kuba, 26.06.1972, 1, motley grass.

32. *Cratichneumon fabricator* Fabricius, 1793

Host: *Semiothisa liturata* Cresson, *Bupalus pinarius* Linnaeus (Geometridae), *Tethea* Den. et Schifferrmüller (Tortricidae), *Notodonta dromedarius* Linnaeus (Notodontidae), *Dasychira pubunda* Linnaeus (Lithosiidae), *Panolis flammea* Den. et Schifferrmüller (Noctuidae).

Distribution: Caucasus, Siberia as far as Primorie, Western Europe (13).

33. *Cratichneumon culex* Thomson, 1895

(= *annulator* Fabricius)

Goycha, 27.07.1977, 1, motley grass; Kuba, 27.07.1979, 1, motley grass; Agdam, 12.07.1971, 1, motley grass.

Host: *Semiothisa liturata* Cresson, *Bupalus pinarius* Linnaeus (Geometridae), *Panolis flammea* Den. et Schifferrmüller (Noctuidae).

Distribution: Southern Caucasus, Western Europe (13).

34. *Cratichneumon rufficornis* Gravenhorst, 1844

Agdam, 26.07.1974, 1, motley grass; Kuba, 27.07.1979, 1, motley grass; Agdam, 12.07.1971, 1, motley grass.

Host: *Atolmis rubicollis* Linnaeus (Noctuidae), *Electroprota coryata* Thunberg (Geometridae).

Distribution: Caucasus, Siberia as far as Primorie, Western Europe (13).

35. *Cratichneumon semirufus* Gravenhorst, 1844

Kazakh, 24.07.1974, 1, motley grass.

- Distribution: Caucasus, Siberia, Western Europe (13).  
 Genus *PLATYLABOPS* HEINRICH  
 Parasites of Geometridae parasitizing pupae.  
 Distribution in Holarctica and mountains of the Oriental oblast.
36. *Platylabops corniculus* Wesmael, 1893  
 V. Digah, Kuba, 24.06.1969, 1 ♀, fruit garden; Zakatala, 24.07.1968, 1 ♂, motley grass; forest.
- Distribution: Caucasus, Central Asia, Western Europe (13).  
 Genus *MELANICHNEUMON* THOMSON  
 6 species in Europe. Hosts are unknown.
37. *Melanichneumon glaucator* Thomson, 1930  
 Kusar, 26.07.1976, 1 ♀, motley grass.
- Distribution: Caucasus, Western Europe (13).  
 Genus *VRGICHNEUMON* RICH  
 Mainly parasites of Noctuidae (parasitizing pupae of 13 species).
38. *Virgichneumon morostagon* Gravenhorst, 1893  
 Goychay, 26.07.1965, 1 ♀; Shamkir, 21.06.1974, 1 ♀, 1 ♂.  
 Host: *Archanara sparganii* (Archanara) *Archanara gemini-puncta* Haworth (Noctuidae), *Spilosoma lubricipeda* Linnaeus (Arctiidae).
- Distribution: Southern Caucasus, Western Europe (13).
39. *Virgichneumon mallicauda* Berkus, 1930  
 (= *perscrutator* Wesmael)  
 Goychay, 26.07.1967, 1 ♀.  
 Host: *Hypocrita jacobae* Linnaeus (Noctuidae).
- Distribution: Southwestern Caucasus, Central Asia, Western Europe (13).
40. *Virgichneumon albognatus* Gravenhorst, 1893  
 Kazakh, 26.07.1974, 1 ♀, motley grass; Kusar, 02.06.1974, 1 ♀, 1 ♂.  
 Host: *Abraxas grassollarita* Linnaeus (Geometridae).
- Distribution: Caucasus, Central Asia, Western Europe, Kazakhstan (13).
41. *Virgichneumon digrammus* Gravenhorst, 1893  
 (*nedicoxa* Thomson, *balearicus* Kriechbaumer)  
 Ismailly, 26.07.1975, 1 ♀.
- Distribution: Caucasus, Kazakhstan, Siberia, Western Europe (13).  
 42. *Virgichneumon callicerus* Gravenhorst, 1893  
 Terter, 25.08.1974, 1 ♀, forest; Agsu, 25.08.1974, 1 ♀, forest; Astara, 25.08.1974, 1 ♀, forest.  
 Host: *Calophrys rubi* Linnaeus (Lymenidae).
- Distribution: Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe (13).  
 Genus *BARICHNEUMON* THOMSON  
 Mainly parasites of Geometridae. The most species in Holarctic—17 species.
43. *Barichneumon peregrinator* Wesmael, 1903  
 Shamkir, 26.09.1974, 1 ♀, motley grass.
- Distribution: Caucasus, Western Europe (13).  
 44. *Barichneumon bilunulatus* Gravenhorst, 1893  
 Zakatala, 24.07.1968, 1 ♀, tea plantation.  
 Common parasite of Geometridae and Noctuidae in conifers.
- Distribution: Kazakhstan, Siberia, Western Europe (13).  
 45. *Barichneumon ambicaudatus* Fonscolombe, 1903  
 (*ambicaudatus* Wesmael)  
 Zakatala, 24.05.1974, 1 ♀; Agsu, 25.08.1974, 1 ♀.
- Distribution: Southeastern Caucasus, Central Asia, Kazakhstan, Western Europe (13).  
 46. *Barichneumon incubitor* Fonscolombe, 1903  
 (= *incubitor* Wesmael)  
 Kuba, 24.06.1969, 1 ♀, orange.
- Genus *STENOBARICHNEUMON* HEINRICH  
 Parasites of Geometridae parasitizing pupae. Holarctic in Europe—6 species.
47. *Stenobarichneumon basiglyptus* Kriechbaumer, 1930  
 Kuba, 25.07.1961, 2 ♀, orange; Khankendi, 16.07.1961, 1 ♀, forest; Kuba, 02.06.1974, 2 ♀, 1 ♂, motley grass; Shamkhor, 06.08.1974, 2 ♀, fruit garden.
- Distribution: Western Europe (13).  
 Genus *CRYTEA* CAMERON  
 Biology unknown. Ethiopia and Oriental oblasts. 2 species in Europe.

48. *Crytea sanguinator* Ros. 1905 Distribution: Caucasus, Central Asia, Siberia as far as Primoria, Western Europe, China, Korea, Japan (13).  
 Ismailly, 25.10.1960, 1 ♀, motley grass  
 Host: *Agonopterix umbellana* Stephens (Pterocoridae).  
 Genus *ICHNEUMON* LINNAEUS  
 Distribution: Western Europe (15). Mainly parasites of Noctuidae, sometimes the other Lepidoptera. The most species parasitize pupae.  
 Genus *VULGICHNEUMON* HEINRICH  
 Parasites of Noctuidae. Parasitize pupae. Holarctica, Oriental, Ethiopia oblast. In Europe 5 species.  
 49. *Vulgichneumon bimaculatus* Schrank, 1795  
 Kusal, 26.06.1968, 1 ♀, motley grass, fruit garden.  
 Host: *Notua fimbriata* Schreber (Noctuidae).  
 Distribution: Caucasus, Kazakhstan, Central Asia, Primoria, Western Europe, Iran, Mongolia (13).  
 50. *Vulgichneumon suavis* Gravenhorst, 1895  
 (lepidus Gravenhorst)  
 V. Kosmolian, Leric, 17.0.1978, 1 ♀, motley grass; Lenkoran, 10.06.1980, 1 ♀, motley grass, near the forest.  
 Host: *Hoplodrina antiqua* Pan. et Schiff. (Noctuidae).  
 Distribution: Caucasus, Central Asia, Western Europe (13).  
 Genus *SYSPASIS* TOWNES (*Stenichneumon*, part, *Ichneumon*, part).  
 Parasites of various Heteroceridae. Parasitize larvae. Holarctic and Oriental oblast. In Europe 11 species.  
 51. *Sypsis rufinus* Gravenhorst, 1893  
 V. Boradigah, Masally, 18.06.1980, 1 ♀, motley grass, near a forest.  
 Host: *Thalera fimbrialis* Scopoli, *Hemithysa* Hübner, *Selenia bilunaria* Esper (Geometridae).  
 Distribution: Kazakhstan, Central Asia, Western Europe (13).  
 52. *Sypsis scutellator* Gravenhorst, 1895  
 Kazakh, 12.07.1974, 1 ♀, motley grass, near a forest.  
 Host: *Euproctis chrysoorhoea* Linnaeus (Lymantriidae), *Abraxas grossularia* Linnaeus (Geometridae), *Panolis flammea* Den. et Schiffermüller (Noctuidae).  
 Distribution: Sankt-Peterburg, Perm, Central Asia (13).  
 Genus *LYMANTRICHNEUMON* HEINRICH  
 53. *Lymantrichneumon disparis* Poda, 1761  
 Kuba, 26.06.1974, 1 ♀.  
 Host: *Lymantria dispar* Linnaeus, *Orgyia antigra* Linnaeus.  
 Distribution: Caucasus, Kazakhstan, Central Asia, Siberia as far as Primoria, Western Europe, Iran, Mongolia (13).  
 54. *Ichneumon xanthopus* Förster, 1771  
 Lenkoran, 27.06.1978, 1 ♀, motley grass, forest.  
 Host: *Polyphaemis sericea* Esper (Hufnagel, Noctuidae).  
 Distribution: Caucasus, Kazakhstan, Central Asia, Primoria, Western Europe, Iran, Mongolia (13).  
 55. *Ichneumon illumatorius* Grav. Först, 1825  
 (zonalis Gravenhorst):  
 Masally, 19.06.1971, 1 ♀, motley grass; Lenkoran, 12.06.1974, 1 ♀, motley grass, near the forest.  
 Host: *Hoplodrina antiqua* Pan. et Schiff. (Noctuidae).  
 Distribution: Caucasus, Central Asia, Western Europe (13).  
 56. *Ichneumon bucculentus* Wesm. 1799  
 Masally, 26.06.1974, 1 ♀, motley grass; Lenkoran, 17.07.1961, 1 ♀, 1 ♂.  
 Host: *Cerapteryx graminis* Linnaeus (Lepidoptera).  
 Distribution: Caucasus, Kazakhstan, Siberia, Western Europe (13).  
 57. *Ichneumon sarcitorus* Fabricius, 1794  
 Shusha, 05.10.1978, 1 ♀, fruit garden; Kusal, 20.06.1964, 1 ♀, motley grass; Kubatly, 20.06.1964, 1 ♀, motley grass; Baku, 24.07.1968, 1 ♀, forest; Baku, 13.07.1962, 8 ♀, cotton field; Masally, 13.07.1962, 8 ♀, fruit garden; Kusal, 17.07.1961, 14 ♀; fruit garden; Kusal, 06.04.1964, 14 ♀, corn field.  
 Host: *Agrotis segetum* Den. et Schiffermüller (Noctuidae).  
 Distribution: Sankt-Peterburg, Caucasus, Kazakhstan, Central Asia, Siberia as far as Primoria, Western Europe, Iran (13).  
 58. *Ichneumon caedator* Gravenhorst, 1895  
 Kuba, 21.05.1973, 3 ♀; motley grass  
 Distribution: Kazakhstan, Siberia, Western Europe, Mongolia (13).

- \* 59. *Ichneumon tuberculipes* Wesm., 1844. Distribution: Caucasus, Central Asia, Kazakhstan, Kuba, 10.06.1971, 1, motley grass; Masally, 10.06.1965, 5, 5, motley grass. Distribution: Western Europe (13). Lenkoran, 16.05.1974, 1, fruit garden; v. 17.05.1974, 1, motley grass.
- \* 60. *Ichneumon barbutus* Wesm., 1844. Kuba, 10.06.1971, 1, motley grass, Host: *Dasychira pudibunda* Linnaeus (Lepidoptera: Pieridae). Distribution: Western Europe (13). *Melitaea cinxia* Linnaeus (Lepidoptera: Pieridae). Host: *Ichneumon grahes* Wesm., 1844. Masally, 17.02.1968, 2, was raised
- \* 61. *Ichneumon ligatorius* Thomson, 1877. Kuba, 17.08.1971, 2, fruit garden; Agdam, 17.07.1965, 3, forest. Distribution: Caucasus, Northern Siberia, Western Europe (13). Host: *Cerapteryx graminis* Linnaeus (Noctuidae). 7. *Ichneumon gracilicornis* Wesm., 1844. Distribution: Western Europe (13). Masally, 27.08.1974, 1, motley grass.
- 62. *Ichneumon proletarius* Wesm., 1844. Masally, 10.06.1965, 1, forest; Agdam, 27.08.1965, 1, forest. Distribution: Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe (13).
- 63. *Ichneumon albicollis* Wesm., 1844. Kusar, 27.06.1968, 2, fruit garden; Kosmolian, Lik, 12.06.1980, 1, motley grass. Distribution: Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe, Iran (13).
- \* 65. *Ichneumon molitorius* Linnaeus, 1758. Masally, 17.08.1965, 17, on d; Shamkir, 09.07.1965, 1, K; Goychay, 10.07.1965, 1. Host: *Diarsia brunnea* Den. et Schifferrmüller, *Panolis flammea* Den. et Schifferrmüller, *Cerapteryx graminis* Linnaeus (Noctuidae).
- 66. *Ichneumon rogenhoferi* Krieger, 1888. Lenkoran, 25.06.1972, forest. Host: *Parasemia plantaginis* Linnaeus (Arctidae), *Syngraphe devergens* Hübner (Noctuidae). Distribution: Western Europe, Iran (13).
- 67. *Ichneumon cessator* Müller, 1776. Lenkoran, 26.05.1979, 1, motley grass. Host: *Nymphalis polychloros* Linnaeus, *Nymphalis xanthomelas* Esper, *Nymphalis urtucea* Linnaeus (Nymphalidae).

**SPILOTHYRATELES HEINRICH**

Parasites of Noctuidae. Females overwinter in Palearctic and Ethiopic oblasts. 2 species in Palearctic.

73. *Spilothyrateles* Gravenhorst, 1829. Lenkoran, 26.05.1972, 2, motley grass. Distribution: Caucasus (13). Genus of **ENICHNEUMON** THOMSON. Parasites of Noctuidae, particularly Plusiinae—parasitize pupae.

74. *Stenichneumon culinator* Schrank, 1802. Khachmaz, 06.06.1963, 1, motley grass; Zakatala, 20.08.1963, 4, forest; Guba, 23.07.1963, 1, motley grass; Ordubad, 06.07.1967, 1, fruit garden.

- Host: *Plasia festucae* Linnaeus, *Ctenoplosiani* Hübner (Noctuidae).  
 Distribution: Sankt-Peterburg, Permsk oblast; Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe, Mongolia (13).
- Distribution: Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe, Iran, North America (13).  
 80. *Diphyus luctatorius* Linnaeus, 1813  
 (= *clavatorius* Szepiela)  
 1344. Shemakha, 12.08.1974, 1, motley grass.  
 (= *uniguttatus* Kriegerbaumer, 1891)  
 10.1972, 1, motley grass.  
 Host: *Acrotis clavis* Hufnagel (Noctuidae).  
 Distribution: Caucasus, Eastern Siberia as well as Egypt and Primoria, Western Europe (13).  
 81. *Diphyus palliatus* Gravenhorst  
 09.1971, 1, motley grass.  
 Parasite of *Chrysolina* spp. (Chrysomelidae).  
 Distribution: Kazakhstan, Siberia, Western Europe, Iran (13).  
 Genus *AMEPHANES* WESMAEL  
 Mainly parasites of Noctuidae (parasitize pupae).  
 Palearctics and mountains Oriental and Ethiopia clasts.  
 24 species.
76. *Diphyus septemguttus* Gravenhorst  
 Kuba, 26.06.1983, 1, motley grass; 20.07.1974, 1; Kusar, 22.06.1974, 1, motley grass.  
 Distribution: Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe, Iran (13).  
 82. *Amblytes armatus* Förster  
 Shemakha, 20.09.1975, 1, motley grass; Shemakha, 20.09.1975, 1, motley grass; Zaqatala, 23.06.1973, 1, motley grass; Kuba, 08.06.1973, 1, motley grass; Goychay, 06.07.1964, 1, motley grass; Lenkoran, 14.06.1971, 1, motley grass.  
 Distribution: Caucasus, Primoria, Western Europe, Iran, Japan (13).  
 Genus *CTEUCHUMON* HFG (Amblytes part)  
 Parasites of Noctuidae. Parasitize pupae. Holarctic and Oriental clasts – 10 species.
77. *Diphyus raptorius* Linnaeus, 1829  
 (= *quadriguttatorius* Gravenhorst)  
 Goychay, 26.06.1964, 1, motley grass.  
 Host: *Mythmina vitellina* Hübner, *Mythmima* Esper (Noctuidae).  
 Distribution: Caucasus, Central Asia, Siberia, Western Europe, Iran (13).  
 83. *Ctenepheumon panzeri* Wesmael,  
 (= *flavicornis* Desvignes)  
 Shemakha, 20.07.1937, 1, motley grass; Aghajari, 13.05.1937, 1, motley grass; Zaqatala, Zakatala, 25.10.1969, 3, in cotton; Saatli, 1968, 1, cotton.  
 Jafarkhan, Saatli, 06.10.1969, 1, cotton; v. Marjanli, Jabrail, 27.07.1969, was raised form *Agrotis segetum* Den. et Schiffermüller.  
 Common parasite of *Agrotis segetum* Den. et Schiffermüller (Noctuidae), as well as *Helicoverpa armigera* Hübner, *Spodoptera exigua* Hübner (Noctuidae).
78. *Diphyus quadripunctorius* Muesebeck, 1910  
 Kusar, 27.06.1974, 2, motley grass; Saatli, 19.06.1971, 1, motley grass.  
 Host: *Noctua interjecta* Hübner, *Noctua picea* Linnaeus, *Noctua orbana* Hufnagel, *Noctua comes* Hübner, *Polymixis polymorpha* Linnaeus (Noctuidae).  
 Distribution: Caucasus, Central Asia, Primoria, Western Europe, Iran, Mongolia (13).
79. *Diphyus ochromelas* Gmelin, 1893 (= *pulsatorius* Chirst, *negatorius* Fabricius)  
 Lenkoran, 12.05.1978, 1, motley grass; Saatli, 16.06.1978, 1, motley grass.  
 Host: *Diarsia brunnea* Den. et Schiffermüller, *Agrotis segetum* Den. et Schiffermüller, *Mamestra brassicae* Linnaeus, *Mamestra persicariae* Linnaeus (Noctuidae).



Distribution: Caucasus, Central Asia, Western Europe, Iran, China, Indonesia (13).

84. *Ctenichneumon castigator* Fabricius, 1844

Lenkoran, 26.07.1972, 1, motley grass.

Host: *Cirrhia togata* Esper, *Cucullia psinthii* Linnaeus, *Hadena parplesa* Den. et Schiffermüller, *Mometes oleracea* Linnaeus, *Archamia spananii* Esper, *stabilis* Den. et Schiffermüller (Noctuidae).

Distribution: Central Asia, Siberia, Western Europe, Iran (13).

85. *Ctenichneumon divisius* Gravenhorst, 1895

Lenkoran, 17.07.1978, 1, motley grass; Lerik, 19.07.1978, 1, 1, forest, motley grass.

Distribution: Caucasus, Siberia, Western Europe (13).

86. *Ctenichneumon repentinus* Gravenhorst, 1895 (*melanocastanus* auct.)

Lenkoran, 17.07.1978, 2, forest, motley grass; Lerik, 19.07.1978, 1, forest, motley grass.

Host: *Orthosia munda* Den. et Schiffermüller, *Cucullia chamomillae* Den. et Schiffermüller, *Hadena rivularis* Fabricius (Noctuidae), *Zerynthia polyxena* Den. et Schiffermüller (Papilionidae).

Distribution: Caucasus, Central Asia, Siberia, Western Europe, Iran (13).

Genus *SPILICHNEUMON* THOMSON (Amblyteles, part)

The parasites of Noctuidae, developing in cereals stem or roots (parasitize caterpillars). Holarctic and mountains of Oriental oblasts.

87. *Spilichneumon occisor* Fabricius, 1844 (= *occisarius* Fabricius)

Zakatala, 19.06.1969, 1, motley grass; Lenkoran, 25.07.1972, motley grass.

Host: *Cirrhia togata* Esper (Noctuidae).

Distribution: The Crimea, Caucasus, Central Asia, Western Europe (13).

Genus *EUTANYACRA* CAMERON (Amblyteles)

Parasite of Noctuidae, mainly parasitize caterpillars. Holarctic and Mountains of Oriental oblast, 5 species.

88. *Eutanyacra picta* S. Frank, 1901 (*vadati* Illiger, 1844)

Lerik, 19.06.1978, 1, 1, motley grass; 18.06.1974, 1, motley grass. Co-parasite of *Agrotis segetum* Den. et Schiffermüller (Noctuidae).

Distribution: Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe, Iran (13).

89. *Eutanyacra glaucator* Fabricius, 1844

Kubinka, 17.08.1971, 1, motley grass.

Distribution: Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe, Iran (13).

Genus *HOPICHNEUMON* GRAY (Hornhorst)

Parasites of various Nymphalidae. Distributed in temperate zone of Holarctic, Mountains of Oriental and Neotropical oblasts.

\* 90. *Hopichneumon bispinatorius* Thunberg, 1794

Zos, Lenkoran, 29.07.1974, 2, motley grass.

Distribution: Siberia as far as Sakhaline, Western Europe (13).

Genus *PROTOICHNEUMON* MONINI

Parasites of various Heterocerinae. Mainly Holarctic. Genus *MON THOMSON* (Thomson, 1899 *sensu* Townes).

Parasites of various Heterocerinae, mainly Holarctic. Arctiidae etc. parasitize pupae. Holarctic and particularly Oriental oblast.

91. *Coelichneumon teneator* Thomson, 1899 (*fusipes* auct.);

Agdam, 17.07.1974, 1, motley grass; Lenkoran, 19.06.1973, 2, motley grass.

Host: *Acronicta euphrobiae* Den. et Schiffermüller (Noctuidae).

Distribution: Caucasus, Western Europe (13).

92. *Coelichneumon falsificus* Wesmaler, 1891

Lerik, 19.07.1978, 1, motley grass; Kubinka, 25.08.1971, 1, motley grass.

Host: *Acronicta rubricus* Linnaeus (Noctuidae).

Distribution: Caucasus; Central Asia, Kazakhstan, Siberia, Western Europe, Japan (13).

93. *Coelichneumon leucocerus* Gravenhorst, 1893

V. Alekseyevka, Kuba, 19.07.1961, 1, motley grass.

Host: *Acronicta megacephala* Den. et Schiffermüller, *Arctico nigricans* Linnaeus, *Mamestra percariiae* Linnaeus (Noctuidae).

Distribution: Caucasus, Siberia as far as Kamchatka, Western Europe (13).

No.	Species Name	Author	Year	Locality	Host	Subfamily	Quantity of species
94.	<i>Coelichneumon biguttulatus</i>	Linnaeus	1875	Kazakh, 26.07.1976, 1 ♀, meadow grass.			
				Distribution: Caucasus, Western Europe (13).			
95.	<i>Coelichneumon fasciatus</i>	Chelini	1824	Goychay, 26.07.1965, 1 ♀.			
				Host: <i>Panolis flammea</i> Den. et Schiffmüller, <i>Panolis</i> spp. (Noctuidae), <i>Fagivorina arenaria</i> Hufsch., <i>Panolis pinarius</i> Linnaeus, <i>Abraxas grossulariata</i> Linnaeus (Geometridae).			
				Distribution: Caucasus, Western Europe (13).			
96.	<i>Coelichneumon singularis</i>	Berthoumieu	1921	Kazakh, 26.07.1974, 1 ♀, meadow grass.			
				Distribution: Caucasus, Central Asia, Kazakhstan (13).			
97.	<i>Coelichneumon orbitator</i>	Thunberg	1802	Kazakh, 26.07.1974, 1 ♀, meadow grass.			
				Host: <i>Enargia ypsilon</i> Den. et Schiffmüller (Noctuidae).			
				Distribution: Caucasus, Western Europe (13).			
98.	<i>Coelichneumon comator</i>	Linnaeus	1803	Kuba, 26.07.1968, 1 ♀, meadow grass.			
				Host: <i>Autographa gamma</i> Linnaeus (Noctuidae), <i>Abraxas grossulariata</i> Linnaeus, <i>Panolis pinarius</i> Linnaeus (Geometridae).			
				Distribution: Caucasus, Central Asia, Siberia, Western Europe, Iran (13).			
99.	<i>Coelichneumon nigerrimus</i>	Stephens		Kuba, 26.07.1968, 1 ♀.			
	(= <i>derasus</i> Wesmäl)			Host: <i>Enargia ypsilon</i> Den. et Schiffmüller (Noctuidae).			
				Distribution: Caucasus, Central Asia, Western Europe, Iran (13).			
100.	<i>Coelichneumon dorsosignatus</i>	Berthoumieu	1894	Kuba, 26.07.1968, 1 ♀.			
	(= <i>commenticius</i> Kolyjev)			Distribution: Caucasus, Central Asia, Kazakhstan, Western Europe (13).			
				Genus <i>PROTICHNEUMON</i> THOMSON			
				Parasite of Spingidae, parasitize pupae. Holarctic and Mountains of Oriental oblasts. In former USSR—6 species.			
101.	<i>Protichneumon pisorius</i>	Linnaeus	1901	Khachmaz, 09.06.1971, 1 ♀, forest.			
	(= <i>fusorius</i> )			Host: <i>Spix piniatri</i> Linnaeus, <i>Spix ligustri</i> Linnaeus, <i>Laothoe popali</i> Linnaeus, <i>Smerinthus ocellatus</i> Linnaeus.			

Distribution: Kazakhstan, Siberia, Western Europe, Turkey, Iran, Afghanistan (3).

102. *Protichneumon pisorius* Linnaeus, 1758 (Pisorius auct.)

Khachmaz, 09.07.1961, 1 forest; Kuba, 09.05.1964, 1, motley grass.

Host: *Sphinx pinastri* Linnaeus, *Smerinthus ocellatus* Linnaeus.

Distribution: Caucasus, Central Asia, Kazakhstan, Siberia, Western Europe, Iran, Japan (13).

Genus *AMBLYJOPPA* CAMERON

Parasite of Spingidae. Holarctic. In Europe 2, In former USSR 4 species.

103. *Amblyjoppa fuscipennis* Wesm., 1803

Kuba, 26.07.1972, 1, motley grass.

Host: *Deilephila elpenor* Linnaeus, *Deilephila procellus* Linnaeus, *Sphinx ligustri* Linnaeus, *Herse convolvuli* Linnaeus, *Macroglossum stellatarum* Linnaeus, *Hemarius fuciformis* Linnaeus.

Distribution: Caucasus, Central Asia, Kazakhstan, Siberia as far as Sakhalin, Western Europe (13).

## Discussion and Conclusion

Thus, the subfamily Ichneumoninae is represented by 103 species which unite with 6 tribes belonging to 36 genera (2). 7 genera belong the tribe Phaeogenini and 3 species belong to Rhexedermus. 3 to *Phaeogenes*, 3 to *Centeterus*, 4 to *Diadromus*, 2 to *Herpestomus*, but the

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genera *Colpogastus* and *Tryaella* include 1 species. 4 genera belong to the tribe Platolabini, 3 species belong to the genus *Phylabus*, *Cyclolabus* has 2 species, but genera *Ectopius* and *Ichneumon* have 1 species. 2 genera belong to the tribe Eurylabi, *Eurylabus* with 2 species and *Probolus* with 1 species. The tribe Listrodromini includes one genus *Anisobas* with a single species. 20 genera belong to the tribe Ichneumonini. The genus with the most species is *Ichneumon* (18 species), *Cratichneumon* includes 6 species, *Diphyus* 6 species, *Virgichneumon* 5 species, *Barichneumon* 4 species, *Ctenichneumon* 4 species. The other genera have 1 or 2 species. 3 genera with 1 species belong to Protoichneumonini: 10 species to *Celichneumon*, 2 to *Protichneumon*, 1 to *Amblyjoppa*.

In the Ichneumoninae subfamily, as given in table No 1 10 species are new records for Azerbaijan and 25 species for Caucasian fauna. Furthermore, 65 species are new records for Transcaucasian fauna.

Most Ichneumoninae samples were obtained in fruit gardens, forest tracts and some of them in cotton plantations. Flights of ichneumonids were noted from the beginning of April to the end of October. Some of them are effective parasites and they were raised from the larvae and pupae of ermine moth, cabbage moth, turnip moth, geometrids and some other Lepidoptera.

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