

ISSN No: 2349-2864

Entomology and Applied Science Letters, 2015, 2, 4:26-27

## Of the myrmecophilous beetles of the fauna Central Caucasia

Sergey Viktorovich Pushkin

North Caucasian Federal University, chair of botany, zoology and general biology, 355009 Russia. E-mail: sergey-pushkin-st@yandex.ru

## ABSTRACT

The article contains information about myrmecophilous beetles of Central Caucasia region. 12 of them are noted on the territory of researched region for the first time. The article includes a summary of ecological characteristic about founded species.

Keywords: myrmecophilous beetles, Coleoptera, Central Caucasia.

## INTRODUCTION

He most complete summary of beetles-myrmecophily region is a monumental work by G.G. Jacobson "Beetles of Russia and Western Europe" [5], however, due to the lack of precise geographical data and changes in the dministrative boundaries of the Central Caucasia, the real work is applicable for small fauna review survey area. As a result, data on beetles, myrmecophily catalog G.G. Jacobson fragmented and targeted research myrmecophilous Coleoptera Central Caucasia was not carried out. In our monographs and articles are not listed [1-4].

Material collected by sifting the substrate from the nests of *Formica rufa* Linnaeus, 1761. *Camponotus herculeanus* (L., 1761), *Tetramorium caespitum* (L., 1761), *Formicoxenus nitidulus* Nyl., 1846, *Myrmica laevinoidis* (Nyl., 1846), *Lasius niger* (L., 1761).

The samples were taken in the triple repetition of different layers of the outer dome anthill (upper, middle and lower). Selected bugs were fixed in 70% alcohol or ethyl acetate and were on cotton mattresses. Office processing carried out with the aid of a microscope MBS-9 to individual instances of dissection and preparation of temporary agents' imago sex aids.

During the period studies identified 6 species: *Camponotus herculeanus* (L.), *Formica rufa* L., *Tetramorium caespitum* (L.), *Formicoxenus nitidulus* Nyl., *Myrmica laevinoidis* (Nyl.), *Lasius niger* (L.).

Thus, based on the submissions received, it is possible to characterize the fauna of ants Central Caucasia: *Camponotus herculeanus* (L.) - dendrobionts, zoonekrofag; It occurs in areas of sparse forests, glades. *Formica rufa* L. - gerpetobiont, zoonekrofag; identified in the meadow, meadows, mesophytic prefers open habitats. *Tetramorium caespitum* (L.) - gerpetobiont, carpophages; found in dry open areas. *Formicoxenus nitidulus* Nyl. - Geobiont, zoonekrofag; It inhabits moderately moist habitats. *Myrmica laevinoidis* (Nyl.) - Gerpetobiont, zoonekrofag. We met in the forest and neighboring ecotones. *Lasius niger* (L.) - gerpetobiont, zoonekrofag; It inhabits the clearing.

List of species Family Scydmaenidae 1. Scydmaenus (Cholerus) hellwigii (Herbst, 1792).

*Family Staphylinidae*2. Dinarda dentata (Gravenhorst, 1806).

3. Dinarda maerkelii Kiesenwetter, 1843

- 4. Lyprocorrhe anceps (Erichson, 1837)
- 5. Notothecta flavipes (Gravenhorst, 1806)
- 6. Oxypoda (Bessopora) haemorrhoa (Mannerheim, 1830)
- 7. Thiasophila angulata (Erichson, 1837)

Family Monotomidae8. Monotoma (Gyrocecis) angusticollis (Gyllenhal, 1827)

9. Monotoma (Gyrocecis) conicicollis Aube, 1837

*Family Cryptophagidae* 10. Spavius glaber (Gyllenhal, 1808)

Latridiidae Corticaria longicollis (Zetterstedt, 1838)

*Family Mycetophagidae* 12. Mycetophagus (Parilendus) quadriguttatus Müller, 1821

The most numerous in the training camp proved to obligate mirmekophylum *Scydmaenus hellwigii* and *Monotoma angusticollis*. As an additional material in the nests of *Formica rufa* in the area of the clearing we observed *Clytra* (s. str.) *quadripunctata* (Linnaeus, 1758) and larvae *Protaetia* (s. str.) *metallica* (Herbst, 1782).

According to conventional classification groups myrmecophilous invertebrates, discovered in the district of species of Coleoptera studies were divided into the following categories: 1) sinoyki neutral (indifferent to the ants and their young, are powered food waste, biodegradable socket material or mites): most of the species in collections; 2) mimetic sinoyki (any color, and sometimes all of its appearance, similar to ants, with which they live): *Dinarda dentata*, *D. maerkeli*.

In these groups showed a significant prevalence of neutral sinoykov all charges. This is probably due to that special microclimate - anthills, Coleoptera providing food resources, shelter and a place for the winter.

## REFERENCES

[1] S.V. Pushkin, Eurasian Entomological Journal, 2004, 3, 3, 195-202 (in Russian).

[2] S.V. Pushkin, World Applied Sciences Journal, 2014, 32, 4, 618-625.

[3] S.V. Pushkin, Inventory of Coleoptera (Insecta: Coleoptera) Pre-Caucasus and adjacent territories, Moscow, **2015**, 146 (in Russian).

[4] S.V. Pushkin, Nekrobiontnye beetles (Insecta; Coleoptera) south Russia, Moscow, **2015** (2nd edition), 186. (in Russian).

[5] G.G. Yakobson, Beetles Russia and Western Europe. S-Pb, 1910, VIII, 596-624 (in Russian).