New provincial records of the cave cricket *Dolichopoda euxina* Semenov, 1901 (Orthoptera) from Republic of Adygea (Russia) with notes on its conservation status

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Abstract. New Caucasian records of the cave cricket *Dolichopoda euxina* Semenov, 1901 from the territory of Republic of Adygea are given, it is recorded for Adygea for the first time. Sozological status of the cricket is discussed.

Новые региональные находки пещерника кавказского *Dolichopoda euxina* Semenov, 1901 (Orthoptera) из Республики Адыгея (Россия) с замечаниями о его природоохранном статусе

The Caucasian cave cricket *Dolichopoda euxina* Semenov, 1901 has been hitherto recorded from the Caucasus and the North-East Turkey only, all known Caucasian populations being located at the Black Sea Coast and adjacent territories within the limits of Georgia (including Abkhazia and South Ossetia) and Krasnodar Region of Russia [Stolyarov, 1994, 2005]. Still no definite records of the cricket have been given for the territory of Adygea [Shchurov, 2012], even numerous finds already listed for the neighboring regions in Apsheronsk, Goryachiy Klyuch, Mostovskoy, Severskaya districts, Sochi Municipality and Arkhipo-Osipovka settlement of Krasnodar Region [Stolyarov, 2007].

The Caucasian cave cricket is interpreted by Stolyarov [1960] and some other authors as a relic species, deserving special conservation measures. Noteworthy, this point of view is supported by the recent federal experts, who offered for it a particular sozological status [The list..., 2014]. According to the IUCN Red List Categories and Criteria [2012], the Caucasian cave cricket is listed (evaluated) as critically endangered taxon. It is included in the regional red data books of both Krasnodar Region [Stolyarov, 2007] and Republic of Adygea [Shchurov, 2012] with the similar category “Facing the risk of extinction”. The cricket seems to be the most easily distinguishable and perspective cave “umbrella” species in the Caucasus, with the quite narrow ecological specialization, inhabiting caves, grottoes, artificial galleries, usually deposited mainly within the forest belt.

Below some new Caucasian records of this species from the territory of Republic of Adygea are given, followed by the observation year and month:

3. Budkova Cave (Fig. 1). Situated SE of Novosvobodnaya village at the left bank of Lakrush River in the basis of the rocky exposure almost at the ridge crest. Being the largest karst cavity of all studied, it represents a multilevel labyrinth with numerous halls chambers. May 2013.
5. 100 m artificial gangway in the vicinities of Dakhovskaya village, valley of Sibir’ River (right tributary of Belaya River), entrance situated at 650 m in the beech-hornbeam forest. May 2014.
6. Right bank of Belaya River near Dakhovskaya village,
SW exposition of Skalistyi Mt. Range, rocky taluses in the beech-hornbeam forest, 530 m. May 2014.

7. Left bank of Belaya River near Skala site, rocky taluses in the oak-hornbeam forest, 850 m. May 2014.

One further population has been also found in 2014 in the karst cavity at Azishtau Mt. Range (nameless glade near Ardova Polyana site), fir-mixed forest, 1450 m. Even it is deposited in Krasnodar Region, this locality is spatially quite close to Adygea, this fact allows to assume existence of species’ populations in the nearby natural boundary Tserbelevy Polyany.

Obviously, the main threat to the known local populations is now caused by possible degradation of the cave ecosystems as a result of the increasing uncontrollable recreational impact. However, all studied natural objects from Adygea, populated by D. euxina, do not represent the large karstic cavities usually visited by cave explorers and tourists, therefore this factor seems to be not limiting there. On the contrary, intensive forest exploitation may essentially affect change of the subterranean microclimatic conditions and lead to extinction of the species in question.

Due to sharply expressed specifics of the habitats within its whole distribution area, this species is represented in nature by the separate isolated populations. Geographical isolation and ecological insularization of such populations make impossible their effective natural restoration. System development of tourist and recreational resources of Krasnodar Region and the Republic of Adygea, observed in the recent years, has led to considerable degradation of the subterranean ecosystems of the region. Species’ extinction could be expected in all open for visit and particularly equipped natural cavities. So allusion of the Caucasian cave cricket in the new edition of the Red Data Book of Russian Federation seems quite reasonable, even attributed data deficient survival threats status [The list..., 2014] seems to be not so suitable.

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References

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Perechen’ taksonov i populyatsiy nazemnykh bespozvonochnykh zhivotnykh, rekomendovannykh sektsiy eksperˈtov po nazemnym bespozvonochnym dlya zaneseniya v Perechen’ taksonov i populyatsiy zhivotnykh, nuzhdayushchihkhsya v osobom vnimanii k ikh sostoyaniyu v prirodnoy srede (Prilozhenie 3 k Krasnoy knige Rossiyskoy Federatsii). Proekt [The list of taxa and populations of the land invertebrate animals recommended by the section of experts on land invertebrates for entering in the List of taxa and populations of animals, requiring special attention to their condition in the natural environment (The annex 3 to the Red Data Book of the Russian Federation)]. Project. 2014. Moscow. 75 p. (in Russian).