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NEW RECORDS OF CAMEL SPIDER *GALEODES ARANEOIDES* PALLAS, 1772 (SOLIFUGAE, SOLPUGIDAE) IN THE KHERSON REGION (UKRAINE)

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Information on the records of common Camel Spider, *Galeodes araneoides*, at archaeological sites (settlements) of the Right Bank of Dnieper territory in the Kherson Region is presented: the species is recorded at one territory (Staroshvedske) based on observations of the authors (confirmed by the photo), and given for other territory (Chervonomaiatske) based on the data of survey. Last time this species was recoded on the territory of continental Ukraine more than 100 years ago.

Keywords: Camel Spider, continental Ukraine, new record, Kherson Region.

Новая находка сольпуги *Galeodes araneoides* Pallas, 1772 (Solifugae, Solpugidae) в Херсонской области (Украина) Мойсиенко И.И., Радзиковский П., Роман Е.Г., Дембич И.

Представлена информация о находке Сольпуги обыкновенной (*Galeodes araneoides*) на городищах в Херсонской области на Правобережжье Днепра: для одного городища (Старошведского) – на основании собственных наблюдений авторов (подтверждено фотографией), для другого (Червономаяцкого) – на основании опроса. Последний раз этот вид отмечали на територии континентальной Украины более чем 100 лет назад.

Ключевые слова: Сольпуга, континентальная Украина, новая находка, Херсонская область.

Нова знахідка сольпуги *Galeodes araneoides* Pallas, 1772 (Solifugae, Solpugidae) в Херсонській області (Україна) Мойсієнко І.І., Радзіковський П., Роман Є., Дембіч І.

Представлена інформація про знахідку Сольпуги звичайної (*Galeodes araneoides*) на городищах в Херсонській області на Правобережжі Дніпра: для одного городища (Старошведського) – на основі власних спостережень авторів (підтверджене фотографією), для іншого (Червономаяцького) – на основі опитування. Останній раз цей вид відмічали на території континентальної України більш ніж 100 років тому.

Ключові слова: Сольпуга, континентальна Україна, нова знахідка, Херсонська область.

Introduction. *Galeodes araneoides* (Pallas, 1772), also called camel spider, is a common inhabitant of dry steppes and semi-deserts (Fig. 1); this species is very common in the arid ecosystems of the Lower Volga region, Transdanubia Region, Caucasus and Transcaucasia (the Armenian Highlands and Northern Iran) (Kukushkin, 2013). Nevertheless, in Ukraine, the camel spider is rare, known only from two territories, the Crimea and the Right Bank territory of the Dnieper River in the Kherson Region. Therefore this species was included in the last edition of the Red Book (Yevtushenko, 2009).

At the same time, if the fact of the inhabitation and, in general, the rather stable state of the population of this species in the Crimea are undoubtful (Yevtushenko, 2009), the status of this species in the continental Ukraine is completely uncertain. All findings of this species in the Kherson Region were made more than 100 years ago (Birulya, 1912 by: Kukushkin, 2013; Byalinitsky-Birulya, 1938



Fig. 1. Camel spider at the Late Scythian settlement Staroshveds'ke. Photograph by I. Dembicz.

by: Kukushkin, 2013). This suggested the possibility to confirm the extinction of this species in the continental part of Ukraine on the territory of Right Bank of the Dnieper (Kukushkin, 2013). Probably for the same reasons, the settlement in the Kherson Region was not mentioned at all in the latest edition of the Red Data Book of Ukraine (Yevtushenko, 2009).

Material and methods. The finding was made during complex studies on vegetation and Orthoptera (Insecta) of archaeological sites (settlements). Visual observation and photography were performed; observation was carried out by Pavel Radzikovsky, Iwona Demich and Ivan Moysienko, the final identification was made by E.G. Roman. Also the information obtained from scientists (personal communication of archeologists) was used.

Results and discussion. One specimen of camel spider was observed at Starosvedske Late Scythian ancient settlement in the village of Zmeivka of the Beryslav District of Kherson Region, September 08, 2017, N 46.8672300, E 33.5906600. This location is situated much more southwards than two well-known locations discovered by M. Sidorenko in 1886–1887 (Sidorenko, 1891, by: Birula, 1912, by: Kukushkin, 2013) at the territory that now belongs to the Novovorontsov District of the Kherson Region (neighborhood of Dudchany village and between villages that ceased to exist in the times of filling (flooding) of the Kakhovka reservoir, Firsovka and Mali Gyrly villages).

In the Staroshvedske ancient settlement, the common camel spider lives in steppe habitats, the significant influence of pasture for these habitats take place. At major part of the settlement the vegetation is strongly depressed; *Poa bulbosa* L., *Euphorbia seguierana* Neck and *Eryngium campestre* L. dominate here. The steppes at steep slopes are much better preserved: on the shafts dominates *Festuca valesiaca* Guadin, on the slopes of the southern exposition of the terrace of the Kakhovsky reservoir dominates *Agropyron pectinatum* (M.Bieb.) P.Beauv. Protected plants, including *Ephedra distachya* L. and *Galium volhynicum* Pobed, are also recorded here.

It is interesting, that, according to the reports of archeologists, the camel spider also inhabits the late-Scythian settlement located in the neighborhood of the village of Chervonyi Mayak (Beryslav District of the Kherson Region, D. Sikoza, pers. comm.). Further research are necessary to confirm

this locality and to reveal the origin of the species in both localities (as they would be of relict origin or a result of recent expansion of camel spider e.g. due to climate change).

It is also necessary to add that for more than ten years we have been studying the phytogenic diversity of the archaeological and historical sites of the South of Ukraine: especially of burial mounds, as well as ancient settlements and old cemeteries. A significant number of protected species of plants and groups of species were identified, including several types of feather grass (*Stipa capillata* L., *Stipa lessingiana* Trin. et Rupr., *Stipa ucrainica* P. Smirn.), two species of tulips (*Tulipa biebersteiniana* Schult. et Schult.F., *Tulipa gesneriana* L.) and many others – more than 70 species of vascular plant species in general (Deák et al 2016; Moysiyenko et al., 2014; Sudnik-Wójcikowska, 2011; Sudnik-Wójcikowska, 2016; Wódkiewicz et al., 2016). Since 2018 we have also started a special research of biodiversity of these territories on the example of Orthoptera. It were, also, the first findings of this species (camel spider) during ten years of research of phytogenic diversity of this territory.

Conclusions. Our observation confirmed the occurrence of common Camel Spider in continental Ukraine. This finding indicate that biodiversity of archeological and historical sites in the South of Ukraine deserves more attention of researchers and naturalists as well as the effective protection to save high natural value of these unique places.

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