

FIRST RECORD OF THE DESERT LOCUST IN CROATIA AFTER MORE THAN A CENTURY

JOSIP SKEJO¹ & MATEA MARTINOVIĆ^{2*}

¹Evolution Laboratory, Department of Biology, Faculty of Science, University of Zagreb, Rooseveltov trg 6, HR-10000 Zagreb, Croatia

²Dubrovnik Natural History Museum, Androvićeva 1, HR-20000 Dubrovnik, Croatia

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In this faunistic contribution, we report the first record of the desert locust, *Schistocerca gregaria* (Forskål, 1775) (Acrididae: Cyrtacanthacridinae), in Croatia after more than 100 years. Specimen of this migratory species was photographed in April 2025 near Dubrovnik, southern Croatia. Reliably known from only two previous records, one reported by Padewieth from Senj in 1900 and another by Langhoffer from Dalmatia in the 1920s, the Dubrovnik finding represents the third known occurrence of this species along the Croatian coast.

Keywords: *Schistocerca gregaria*, Orthoptera, Acrididae, Cyrtacanthacridinae, Dubrovnik, Montenegro, Italy.

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U ovom faunističkom doprinosu predstavljamo prvi nalaz pustinske šaške *Schistocerca gregaria* (Forskål, 1775) (Acrididae: Cyrtacanthacridinae) u Hrvatskoj nakon više od 100 godina. Jedna jedinka ove migratorne vrste fotografirana je u travnju 2025. godine u blizini Dubrovnika, u južnoj Hrvatskoj. Pouzdano poznata samo iz dvaju prethodnih nalaza, jednoga kojeg je Padewieth zabilježio u Senju 1900. godine i drugoga kojeg je Langhoffer zabilježio u Dalmaciji tijekom 1920-ih, nalaz iz Dubrovnika predstavlja treći poznati nalaz ove vrste duž hrvatske obale.

Ključne riječi: *Schistocerca gregaria*, Orthoptera, Acrididae, Cyrtacanthacridinae, Dubrovnik, Crna Gora, Italija.

The desert locust or *Schistocerca gregaria* (Forskål, 1775) (Acrididae: Cyrtacanthacridinae), originally described from Egypt, Cairo (FORSKÅL, 1775) is a large Afro-Asian grasshopper species (Fig. 1a) capable of long-distance flights and occasionally reaching southern Europe as a vagrant, but not a resident species (HOCHKIRCH *et al.*, 2016). In Croatia (Fig. 1b), it has historically been regarded as doubtful or non-established species—doubtful because of the uncertainty of assigning old names such as “*Acridium tartaricum*” (KOLLAR, 1846; FRAUENFELD, 1861; KRAUSS, 1879) to modern species, but most likely referring to *Anacridium aegyptium* (Linnaeus, 1764); and non-established because of only two known published records (SKEJO *et al.*, 2018). The first Croatian record was published by PADEWEITH (1900) from Senj; and the second record was discovered during the revision of old material preserved in the Hungarian Natural His-

* Corresponding author: matea.martinovic@pmd.hr

tory Museum, where Langhoffer's specimen from Bakar in Kvarner region was found (Puskás *et al.*, 2018). No confirmed records have been reported since the 1920s (Puskás *et al.*, 2018; Skejo *et al.*, 2018).

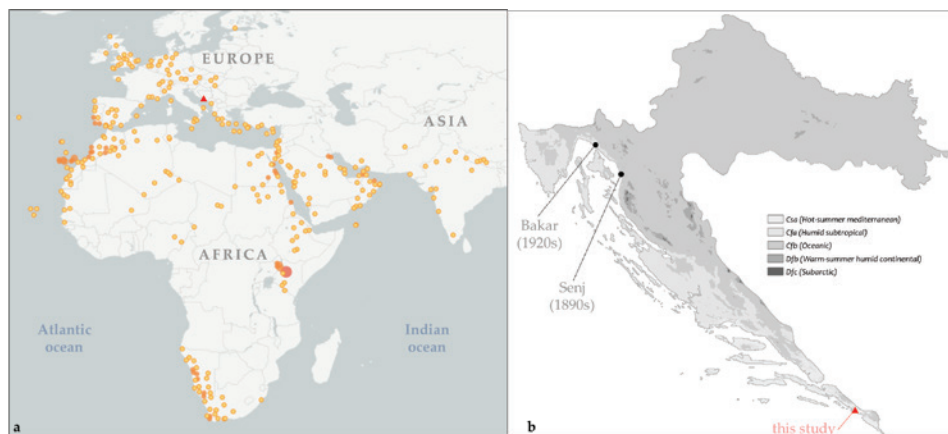


Fig. 1. Distribution of *Schistocerca gregaria* and its occurrence in Europe. A) Occurrence of *Schistocerca gregaria* in Europe, Africa, and Asia. In Northern Africa and in the Middle East the species is considered resident, while in Europe it is considered vagrant. Map source GBIF. B) Three *S. gregaria* records from Croatia shown on the Köppen-Geiger climate map (by Adam Peterson, CC BY-SA 4.0 licence)—Senj from 1890s (PADEWEITH, 1900), Bakar from 1920s (Langhoffer's record from Puskás *et al.*, 2018), and our record from Brgat near Dubrovnik.

Here, a new record of *S. gregaria* from Croatia is reported (Fig. 1, Fig. 2). The species was documented on 5th April 2025 by the author and publicly available on iNaturalist (observation ID [268801718](#)). The photographic documentation (Fig. 2) unambiguously supports the identification. The species is easily distinguished from *Anacridium aegyptium* (Linnaeus, 1764) by its flat pronotum with sulci that don't make strong incisions in medial keel of pronotum, while *A. aegyptium* has strongly raised median keel with three deep sulci (incisions) (HARZ, 1975).

This observation from Brgat represents the first confirmed record of *Schistocerca gregaria* in Croatia in approximately one hundred years. The species should still be considered a vagrant in the country, with no evidence of local reproduction, but the record confirms that sporadic incursions into the eastern Adriatic continue to occur. This is the first record of the species from the Dubrovnik area of the country. In the following years, the presence of the species will be checked in the same locality where it was observed.

Although the occurrence of a naturally dispersed individual in the eastern Adriatic is plausible, especially considering the species' well-known migratory capabilities, an alternative explanation cannot be excluded. As the observation was made within the wider Dubrovnik urban area, the specimen could also represent an escaped individual originating from the pet trade, where *S. gregaria* may be used as live feeder insect.

Nevertheless, the hypothesis of a natural arrival is supported by several observations of *S. gregaria* reported on iNaturalist from the Balkan Peninsula during spring and summer 2025, including records from the South Adriatic region. Namely, a specimen has been observed on April 15th 2025 in Ulcinj, Montenegro (iNaturalist observation ID 277467220, observer username @franciscoantoniofidalgofelixdias), exactly 10 days after our record. On the other side of the Adriatic Sea, the species has also been observed in in Lecce (Apulia, Italy), on March 25th 2025 (iNaturalist observation ID 266925691, observer Thomas Mazzotta), what is 10 days prior to our record. These contemporaneous observations suggest that the Dubrovnik specimen may have been part of a broader dispersal event affecting southeastern Europe. Continued monitoring of the locality may help clarify whether similar occurrences will be detected in the future.

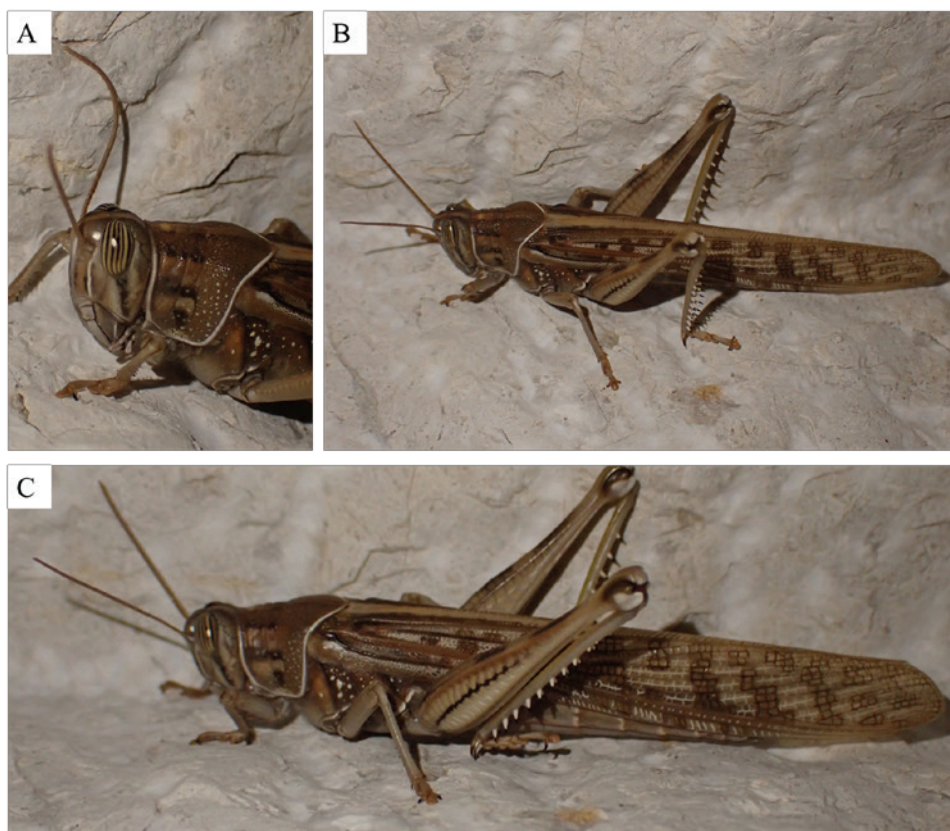


Fig. 2. *Schistocerca gregaria* photographed in Brgat, east of Dubrovnik. April 5th 2025. A) Head and pronotum detail. B) Dorsolateral habitus. C) Lateral habitus (photo Matea Martinović).

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REFERENCES

- FORSKÅL, P., 1775: Descriptiones Animalium Avium, Amphibiorum, Piscium, Insectorum, Vermium; quae in itinere orientali observavit Petrus Forskål. prof. haun. Carsten Niebuhr, Hauniae, Copenhagen, 164 pp.
- FRAUENFELD, G.B., 1861: Dritter Beitrag zur Fauna Dalmatiens, nebst einer ornithologischen Notiz. Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien **11**, 97–110.
- HARZ, K., 1975: Die Orthopteren Europas II./The Orthoptera of Europe II. In: Series Entomologica. Vol. 11. Dr. W. Junk, The Hague, pp. 1–939.
- HOCHKIRCH, A., NIETO, A., GARCÍA CRIADO, M., CÁLIX, M., BRAUD, Y., BUZZETTI, F.M., CHOBANOV, D., ODÉ, B., PRESA ASENSIO, J.J., WILLEMSE, L., ZUNA-KRATKY, T., BARRANCO VEGA, P., BUSHHELL, M., CLEMENTE, M.E., CORREAS, J.R., DUSOULIER, F. *et al.*, 2016: European Red List of Grasshoppers, Crickets and Bush-crickets. Publications Office of the European Union, Luxembourg.
- KOLLAR, V., 1846: Animali: Insetti: Ortoteri. In: CARRARA, F. (Ed.), La Dalmazia descritta. Fratelli Bat-tara Tipografi Editori, Zara, pp. 1–95.
- KRAUSS, H.A., 1879: Die Orthopteren-Fauna Istriens. Sitzungsberichte der Österreichischen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse, **1** (78), 451–542.
- PADEWIETH, M., 1900: Orthoptera genuina des kroat. Littorale und der Umgebung Fiumes. Glasnik Hrvatskog naravoslovnog društva **11**, 8–38.
- PUSKÁS, G., NAGY, B., & SZÖVÉNYI, G., 2018: Faunistical data on the Croatian Orthoptera with four species newly recorded in the country. Annales de la Société entomologique de France (NS), **54**(6), 539–558.
- SKEJO, J., REBRINA, F., SZÖVÉNYI, G., PUSKÁS, G. & TVRTKOVIĆ, N., 2018: The first annotated checklist of Croatian crickets and grasshoppers (Orthoptera: Ensifera, Caelifera). Zootaxa **4533**(1), 1–95.