The genus Cheilosia Meigen (Diptera: Syrphidae) in the Caucasus with the description of eleven new species

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Abstract

Cheilosia Meigen, 1822 is a species rich genus with some 420 described species. The greatest number of species occurs in in the Palaearctic Region (Peck 1988; Thompson 2021; S. Bot, unpubl. data). The Caucasus Region lies between the Black Sea and the Caspian Sea. The region is home to the Caucasus Mountains and is one of the global 'biodiversity hotspots' (Myers et al. 2000; Mittermeier et al. 2004). Work on Cheilosia in the Caucasus was mainly conducted by Russian authors and was summarized by Barkalov (1993). A checklist and a species key of the Cheilosia of the Caucasus is presented, based on literature research and the results from four field expeditions between 2018 and 2021. The field expeditions and genetic analysis resulted in the discovery of eleven new species, new synonyms and revalidation of old names. While the previous checklist for the region (Barkalov 1993) included 48 Cheilosia species, our current checklist of the Cheilosia of the Caucasus comprises 66 species. Taxonomic changes in the meantime make exact comparison of the lists difficult, but the increase of the list is mainly explained by the description of eleven new species in this publication and the discovery of several species new to the region during our field expeditions. Expeditions in 2018 and 2019 have been funded through the German Federal Ministry of Education and Research (BMBF) under grant number 01DK17048, within the GGBC project aimed at establishing a Georgian-German Biodiversity Center co-operated by Ilia State University (ISU) and Zoological Research Museum A. Koenig (ZFMK).

Keywords: Caucasus, Cheilosia, new species

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