

New Miocene limoniid craneflies from Dominican amber and their evolutionary importance


Katarzyna Kopeć, Iwona Kania-Kłosok, Andrew Ross, Agnieszka Soszyńska, and Wiesław Krzemiński
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This paper describes three new species belonging to the genus *Styringomyia*, based on specimens preserved in Early Miocene (Burdigalian) Dominican amber: *Styringomyia caridadi* sp. nov., *S. caribea* sp. nov., and *S. grimaldii* sp. nov. Previously, only five extinct species of *Styringomyia* were known, including two from Dominican amber. These new discoveries increase the total number of species known from fossils to eight. The genus *Styringomyia* is morphologically intriguing, characterized by the highly complex structure of the male and female terminalia, particularly the morphology of the gonostyles. The hypopygial features of the five Dominican amber species resemble those of certain extant *Styringomyia* species found in Australia. These findings contribute to our broader understanding of cranefly diversity and significantly enhance our knowledge of Miocene *Styringomyia* and this stage of evolution of the genus. Notably, despite the abundance of *Styringomyia* fossils in Dominican amber, the genus is not known to inhabit the island of Hispaniola today.

Key words: Diptera, Limoniidae, Chioneinae, fossil insects, taxonomy, evolution, Miocene, Dominican Republic, Hispaniola.

Katarzyna Kopeć [kopeck1981@gmail.com; ORCID: <https://orcid.org/0000-0001-6449-3412>] and Wiesław Krzemiński [wieslawk4@gmail.com; ORCID: <https://orcid.org/0000-0001-5685-891X>], Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Sławkowska 17, 31–016 Kraków, Poland. Iwona Kania-Kłosok [ikania@ur.edu.pl; ORCID: <https://orcid.org/0000-0002-2325-4308>] (corresponding author), Faculty of Biology, Nature Protection and Sustainable Development, University of Rzeszów, Zelwerowicza 4, 35–601 Rzeszów, Poland. Andrew Ross [A.Ross@nms.ac.uk; ORCID: <https://orcid.org/0000-0003-2751-9091>] Department of Natural Sciences, National Museums Scotland, Chambers St., Edinburgh EH1 1JF, UK. Agnieszka Soszyńska [agnieszka.soszynska@biol.uni.lodz.pl; ORCID: <https://orcid.org/0000-0002-2661-6685>], University of Lodz, Faculty of Biology and Environmental Protection, Department of Invertebrate Zoology and Hydrobiology, Łódź, Poland.

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