

Terrestrial-aquatic wood-inhabiting ascomycete *Potamomyces* from the Miocene of Poland

Grzegorz Worobiec, Elżbieta Worobiec, Przemysław Gedl, Jacek R. Kasiński, Danuta Peryt, and Marek Widera

Acta Palaeontologica Polonica 67 (3), 2022: 737-744 doi:https://doi.org/10.4202/app.00976.2022

We report fungal ascospores of *Potamomyces* affinities from four Miocene localities in Poland. The spores are similar to the ones known from extinct species of *Potamomyces invaginatus*, *Potamomyces batii*, and *Potamomyces pontidiensis*, as well as to living *Potamomyces armatisporus*. Living representatives of *Potamomyces* are saprophytic, and usually found on decaying wood. They are mainly found in a freshwater or brackish environment, and sometimes also on terrestrial, moist to damp substrates. Therefore, the species of *Potamomyces* can be classified as a facultative-aquatic or terrestrial- aquatic fungus. Both living and extinct species of *Potamomyces* prefer a tropical to subtropical, and usually humid climate as their past and recent distribution is mostly confined to the intertropical zone. Fossil record of the *Potamomyces* ranges from the Lower Miocene to the Holocene, covering all continents with the exception of the Antarctica. Miocene findings of *Potamomyces* from Poland represent the first known fossil record of this genus from Europe and confirm the warm temperate to subtropical and humid climate during Middle to Late Miocene of present Poland previously inferred from palaeobotanical investigations.

Key words: Fungi, palaeoecology, palaeoenvironment, non-pollen palynomorphs, Neogene.

Grzegorz Worobiec [g.worobiec@botany.pl] and Elżbieta Worobiec [e.worobiec@botany.pl], W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, 31-512 Kraków, Poland. Przemysław Gedl [p.gedl@ingpan.krakow.pl], Institute of Geological Sciences, Polish Academy of Sciences, Research Centre in Cracow, Senacka 1, 31-002 Kraków, Poland. Jacek R. Kasiński [jacek.kasinski@pgi.gov.pl], Polish Geological Institute-National Research Institute, Rakowiecka 4, 00-975 Warszawa, Poland. Danuta Peryt [d.peryt@twarda.pan.pl], Institute of Paleobiology, Polish Academy of Sciences, Twarda 51/55, 00-818 Warszawa, Poland. Marek Widera [marek.widera@amu.edu.pl], Institute of Geology, Adam Mickiewicz University, Krygowskiego 12, 61-680 Poznań, Poland.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Full text (494.1 kB) |
Supplementary file (165.1 kB)