New data on the Miocene stem lagomorph *Eurolagus fontannesi*, and its northernmost record

Łucja Fostowicz-Frelik, Adam Nadachowski, and Magdalena Kowalewska-Groszkowska


We describe new dental material of *Eurolagus fontannesi* from the Late Miocene (Early Vallesian, MN9) lignite beds of Bełchatów A (central Poland), which is the northernmost occurrence of this lagomorph. This material considerably increases the sample size of this rare genus and species. We review the systematic position of *Eurolagus* and argue that it is not an ochotonid, but represents a terminal taxon of an independently evolved stem lineage of Lagomorpha. The enamel of the molars, here studied for the first time, exhibits a relatively thin decussating external and a radial internal layer, and in general resembles the palaeolagine lagomorphs (*Palaeolagus*) rather than the archaeolagine leporids (*Hypolagus*) or advanced ochotonids (*Ochotona*). The dental wear features of *Eurolagus fontannesi* indicate that the species was a sylvan mixed–feeder. This agrees with the Belchatów A paleoenvironment, which is best approximated as the kind of mixed mesophytic forest now encountered in the Caucasus, Iran, and India. The extinction of *Eurolagus* was probably related to the noticeable faunal change following the increased cooling of the European climate during the Late Miocene. The first indicator of this event can be observed in Belchatów A, marked by the immigration of *Microtocricetus* and the absence of *Neocometes*.

**Key words:** Lagomorpha, *Eurolagus*, microwear, paleoecology, semihypsodonty, Vallesian, Belchatów, Poland.

Łucja Fostowicz-Frelik [lfost@twarda.pan.pl], Institute of Paleobiology, Polish Academy of Sciences, Twarda 51/55, PL 00-818 Warsaw, Poland and Division of Paleontology; current address: American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024, USA; Adam Nadachowski [nadachowski@biol.uni.wroc.pl], Department of Paleoecology, Institute of Zoology, University of Wrocław, Sienkiewicza 21, PL 50-335 Wrocław, Poland; Magdalena Kowalewska-Groszkowska [mkowalewska@miiz.waw.pl], Museum and Institute of Zoology, Polish Academy of Sciences, Wilcza 64, PL 00-679 Warsaw, Poland.