

4. LAGOMORPHS

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Abstract. Fossil remains of lagomorphs are known from Pliocene terrestrial sediments of world sites, but not so frequently as rodents. Rare records of lagomorphs have also been found during the new research of the Hajnáčka I site (MN 16a). They are determined only as *Lagomorpha* gen. et spec. indet. However, their classification to the species *Hypolagus brachygnathus* KORMOS, 1934 is not excluded.

Key words: lagomorphs, Late Pliocene, Hajnáčka, Slovakia

INTRODUCTION

Fossil records of lagomorphs are known from the Pliocene sites all over the world. However, they are not so frequently found as records of rodents. On the other hand, they also serve as a relevant source of our knowledge on the forming of the recent fauna of the Northern Hemisphere.

During the new research of the Pliocene site Hajnáčka I, fossil remains of lagomorphs have also been found. They probably belong to one taxon, but they are determined only as *Lagomorpha* gen. et spec. indet. on the basis of the absence of diagnostic teeth (p3). However, FEJFAR and HEINRICH (1985) mention the records of *Hypolagus brachygnathus* KORMOS, 1934 from this site and so it is not excluded that new records of lagomorphs can belong to this taxon, too.

MATERIAL AND METHODS

The fossil remains of lagomorphs have been found by washing of the fossiliferous sediments and they are deposited in the collections of the Gemer-Malohont Museum in Rimavská Sobota (GMM).

Records were documented by binocular magnifying Carl Zeiss Jena and drawing apparatus Meopta. The measurements of studied teeth were taken by the standard method with the binocular scale. All measured data are in millimetres.

SYSTEMATIC PALEONTOLOGY

Order Lagomorpha BRANDT, 1855

Lagomorpha gen. et spec. indet.

Material: fragment of incisor (GMM, B-4023, probe Nr. 2/96); 1 left upper tooth (P4 – M1 sin.) (GMM, B-4067, probe Nr. 2/96); 1 m3 dext.(?) (GMM, B-4005, probe Nr. 1/96).

Description: The surface of the light enamel of the incisor fragment is smooth. The dentine is yellow-white. The cross-section of this incisor is square-like. The height (or sagittal diameter) of the tooth is 1.75 mm and the width (or transversal diameter) of the tooth is 2.15 mm.

The brown to grey cylindrical crown of the left upper tooth (P4 – M1 sin.) is worn and damaged, especially on the buccal side. The crown is weakly arched lingually. The occlusal surface consists of two lobes, posterior of that is larger. A deep narrow syncline, filled by cement, is situated on the lingual side. It reaches towards the buccal side, where other wide and relatively shallow syncline without cement is present. The walls of the enamel are thin.

The light brown crown of m3 dext.(?) consists of two parts, forming 8-like occlusal surface. The oval anterior part is larger than round posterior one. The both parts are distinctly separated.

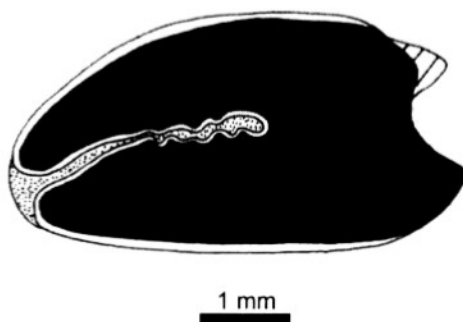


Fig. 4.1. Occlusal view to the left upper tooth (P4 – M1 sin.; B-4067) of a lagomorph from the Late Pliocene sediments of Hajnáčka.

Tab. 4.1. The comparison of teeth measurements of *Hypolagus brachygnathus* from the Pliocene sediments of Węże 1 (SULIMSKI, 1964) with teeth measurements of lagomorphs from Hajnáčka I site.

Locality	Węże 1 (MN 15) <i>Hypolagus brachygnathus</i> n, min., mean, max.	Hajnáčka I (MN 16a) Lagomorpha sp. n, min., mean, max.
P4		
length	169, 2.60, 3.00, 3.40	-
width	-	-
M1		
length	262, 2.40, 2.90, 3.50	1, -, 2.90, -
width	-	1, -, 5.60, -
m3		
length	103, 1.40, 1.80, 2.30	1, -, 1.70, -
width	103, 1.50, 2.00, 2.60	1, -, 1.95, -

DISCUSSION AND CONCLUSION

The records of the genus *Hypolagus* are known from the Pliocene sediments of some European sites. It is one of the most widespread fossil representatives of the leporids (FEJFAR, 1964) in the Northern Hemisphere. It evolved probably during the Miocene in North America, from where it migrated to Eurasia during the Pliocene.

From the European Pliocene, the species *Hypolagus brachygnathus* KORMOS, 1935 is one of the most frequently found leporids. In the Slovak part of the Western Carpathians, the fossil records of this species are known from sites Ivanovce (MN 15b), Hajnáčka I (MN 16a) (FEJFAR, 1961; FEJFAR & HEINRICH, 1985), and probably from Koliňany near Nitra (MN 17 – MQ 1) (FEJFAR, 1964). On the basis of that, it is not excluded that new records of lagomorphs from the researched site belong to this species too. However, no p3, as the only tooth with diagnostic characters, have been found. Thus, the records are described as *Lagomorpha* gen. et spec. indet. only.

Acknowledgement. The author is indebted to the Grant Agency for Science, Slovakia (project No. 1/0080/03) and the Ministry of Education, Slovakia (project „Ecosystems of the Late Miocene, Pliocene, and Quaternary – an indicator of the age and climatic changes“) for financial support, and to many sponsors, especially Tauris Co. in Rimavská Sobota for financial and material support. Also he wishes to thank to Prof. Oldřich Fejfar from the Charles University in Prague for his useful comments.

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