A NEW MAMMOTH FINDING IN DOBROGEA

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Abstract. A half mandible found in south Dobrogea at Ostrov, on the Danube right bank terrace gravel, document the presence of Mammuthus primigenius (BLUMENBACH 1799) in these Pleistocene deposits. Ostrov is a new locality for this species in this region.

Key words: Pleistocene, Dobrogea, wooly mammoth.

Rezumat. O nouă descoperire de mamut în Dobrogea. O hemimandibulă descoperită în Dobrogea de sud, în depozite de terasă de pe malul drept al Dunării la Ostrov, dovedeşte prezenţa speciei Mammuthus primigenius în aceste depozite Pleistocene. Localitatea menţionată este nou semnalată pentru această specie de proboscidian.

Cuvinte cheie: Pleistocen, Dobrogea, mamut.

INTRODUCTION

As in all Europe, the Pleistocene large herbivores findings are rather common in our country. Among them, the mammoths (*i.e.*, the *Mammuthus* genus representatives) are the most frequent. As a rule, the commonest fossils originating from these mammals are the cheek teeth. Their frequency can be explained by the peculiar teeth functionality in these proboscideans (it is well known the fact that along its lifetime, a mammoth was able to replace a worn cheek tooth by the following one trough ejection, pending the last molar) as well as by their high susceptibility to be fossilized. On the opposite, complete mammoth skeletons are practically missing in our country. Only skeletons parts had been discovered until now (*e.g.* APOSTOL, 1971; JURCSÁK & MOISI, 1983), none of them allowing the reconstruction of an entire individual.

A retrospective on the mammoth findings in Romania (PATTE, 1936; APOSTOL, 1968; PĂUNESCU, 2000, 2001) stress out the wooly mammoth (*Mammthus primigenius*) numerous findings. This fact is not unusual, as long as the deposits accumulated in the Pleistocene last glacial (Weichsel) are widespread in Romania, originating from a wide range of environments (cave fillings, river terraces, löess et.c.). The most numerous such fossils are issuing from Transylvania (JURCSÁK, 1983; VÖRÖS, 1983; PĂUNESCU, 2001) and Moldova, but their scarcity elsewhere could be falsified by the findings reports absence: it is trustworthy to believe that a large number of findings from Muntenia, Dobrogea or south Moldova remained unknown, as long as these fossils could be retrievable in school, local museums or even private collections.

In these circumstances, in southwest Romania the wooly mammoth remains extremely poor documented (APOSTOL, 1962; 1968). However, a recent mammoth finding on the right Danube bank at Ostrov (Constanta district), adds a new locality for this species in Dobrogea (Fig. 1).

Figure 1. *Mammuthus primigenius* localities in Dobrogea
Figura 1. Localităţi cu *Mammuthus primigenius* în Dobrogea

This discovery concerns a half mandible, still preserving its m2. The fossil was found in gravel and sand, deposits probably representing a Danube terrace, located at Chiciu-Ostrov passing (390 km on Danube). It had been donated to one of us (A.C.) for study by MENAEV EVDOCHIA in March 2006. The fossil is curate in Museum of Natural Sciences Constanţa, inventory number 902/Paleontology Collection/346/2006.

From structural viewpoint, this region belongs to the South Dobrogea block, part of the Moesian Platform. It involves a heteroclite metamorphic basement, covered by Paleozoic, Mesozoic and Cenozoic sedimentary covers accumulated during sedimentary cycles (IONESI, 1994). The Pleistocene is there mainly represented by löess draping the oldest rocks, in this manner hiding their contact relationships. However, besides löess, the fluvial terraces gravel and sand occur too, mainly on the banks of Danube and its tributaries.

SYSTEMATIC PALEONTOLOGY

Class Mammalia
Order Proboscidea ILLINGER 1811
Family Elephantidae GRAY 1821
Subfamily Mammuthinae SIMPSON 1845
Genus *Mammuthus* BURNETT 1830

Mammuthus primigenius (BLUMENBACH 1799)
(Plate I, figs. 1-2)

The wooly mammoth material available from Ostrov concerns a left mandible fragment. It preserves only the horizontal branch with m2, as well as its damaged symphysis area.

Only the m2 is preserved into its alveoli. It has a distal arched outline ("distal bogenförmig", in MUSIL, 1968, Abb. 12, 7). The tooth was nearly entirely worn (N = 17 and N_F = 17; wear stage B4 or even C, in BEDEN, 1979). The m1 had not been still ejected during the animal life. It was broken probably when the mandible fragment had been unearthed, because its roots are still remaining in their alveoli.

Dimensions (mm): length – 170+; width – 59 (at l_6); enamel thickness – 1.5; lamellar frequency (DLI) – 8.

The horizontal branch exposes a rather round mental foramen (14 mm in diameter). Its high before m1 is 130 mm, and its width in the same area, 135 mm.

CONCLUSION

The Ostrov fossil originated form a mature mammoth, probably belonging to an evolved form (according to its lamellar frequency and enamel thickness). Unfortunately, the poor stratigraphy of this finding does not allow an advanced discussion on the deposit yielding the fossil. Obviously, it is a Pleistocene Danube terrace, but for more details we would need additional data on this finding, for instance unfortunately, unavailable.

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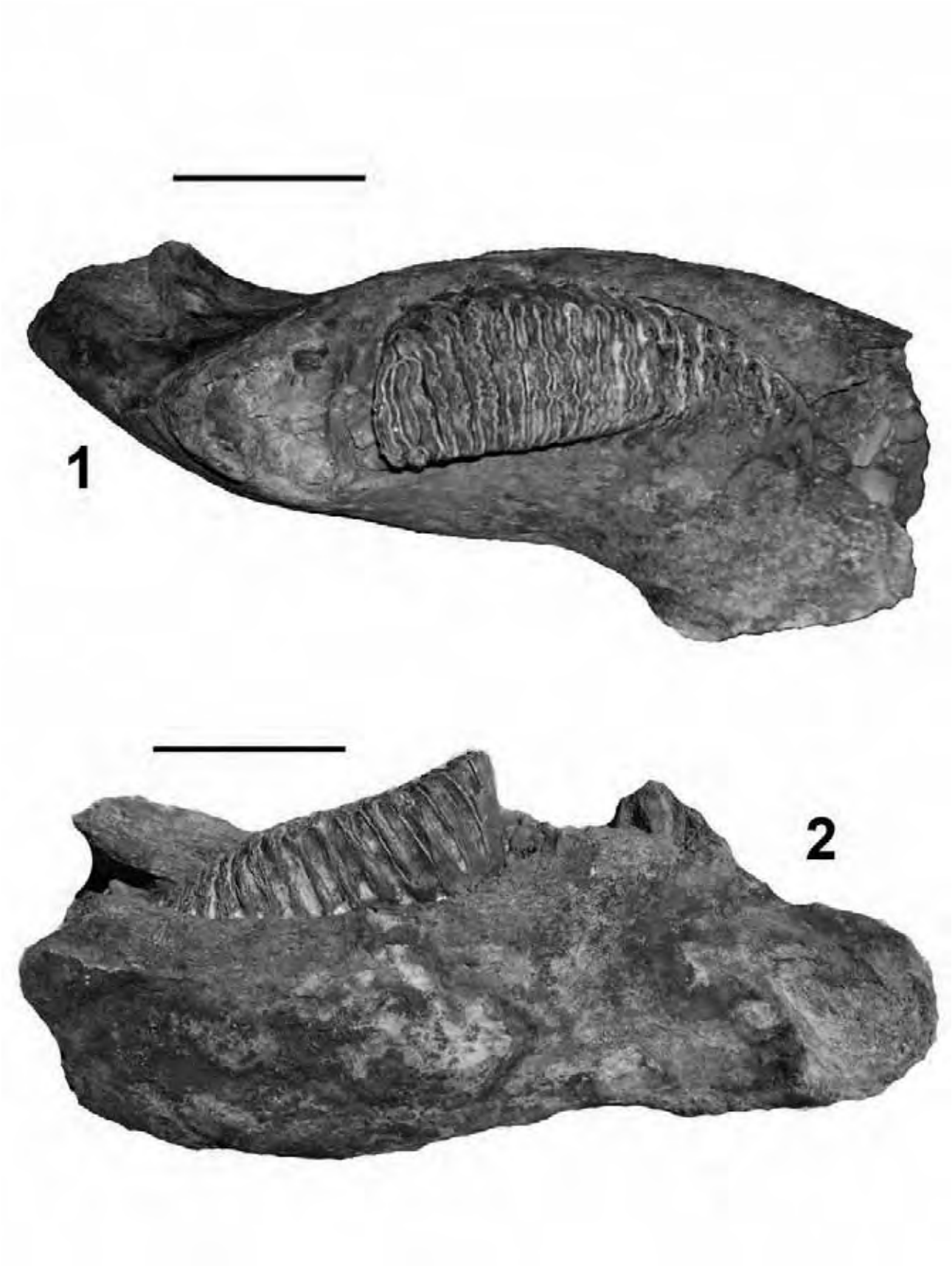

Plate I, figs. 1-2