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HIPPARIONINE HORSES FROM THE ODESSA REGION (UKRAINE)

Wolfgang RABA

Department of Paleontology , Geocentre, University of Vienna, Althanstrasse 14, A-1090 Wien, Austria; raba.w@gmx.at

Introduction

The tridactyl horse *Hipparion* has fascinated scientists all over the world for many decades. It's appearance in many localities gives good statements about the paleoenvironmental index and furthermore it's very useful among the large mammals
for stratigraphic correlation. *Hipparion* derived from *Cormohipparion* in North America and reached Europa by crossing the Bering bridge in the late Miocene. They spread all over the Eurasian continent and reached an enormous biodiversity with more than 40 species. Up to 70% of the faunal record are from hipparionine horses in some Greek and Ukrainian localities.

Locality

The hipparions presented here are from the Ukranian localities Novo Elisavetovka and Grebeniki. These localities, close to Odessa are famous for their abundance hipparion remains.
Grebeniki is in the Velykomykhailivs'kyi District of Odessa region and the ravine
"Frolovs'kyi Iar" lies near Grebeniki village. Novo Elisavetovka is in the Shyriaivs'kyi District of Odessa and the ravine lies near Novo Elisavetovka village on the left side of Velykyi Kuial'nyk River Valley.

Stratigraphy and history of collection

Grebeniki and Novo Elisavetovka are both of Turolian age. Grebeniki is correlated to the MN-Zone MN 11 and Novo Elisavetovka to MN-Zone 12.
The fossil remains were excavated in the beginning of this century and are stored at the Metschnikoff University of Odessa (ONU) in the Ukraine. Since 2002, a co-operation exists between the Departement of Paleontology/Vienna and the Paleontologic Museum Odessa. One aim is the revision of the mammal material from Miocene localities in the collection of the ONU. In May 2004 the author focused on the equid material.

Conclusion

The bones are in good condition while the skulls are sometimes broken or crushed. Measurements were taken on Metacarpalia III, Metatarsalia III, Astragali, Calcanei, Tibiae, Femura, Radii and skulls and plotted on scatter diagrams.
The results show, that Grebeniki (Fig. 1.) holds two and possible three different taxa, while in Novo Elisavetovka (Fig. 2.) only two species were distinguished. Metrically as well as morphologically a third is possible. GROMOVA (1952) described *Hipparion giganteum* and *Hipparion gracile* from Grebeniki and *Hipparion moldavicum* and *Hipparion gracile* for Novo Elisavetovka. In both localities the smaller form dominates while the larger one is only present up to 25%.
It is necessary to answer the two/three species-question for further comparision with other Upper Miocene sites from Europe and Asia.

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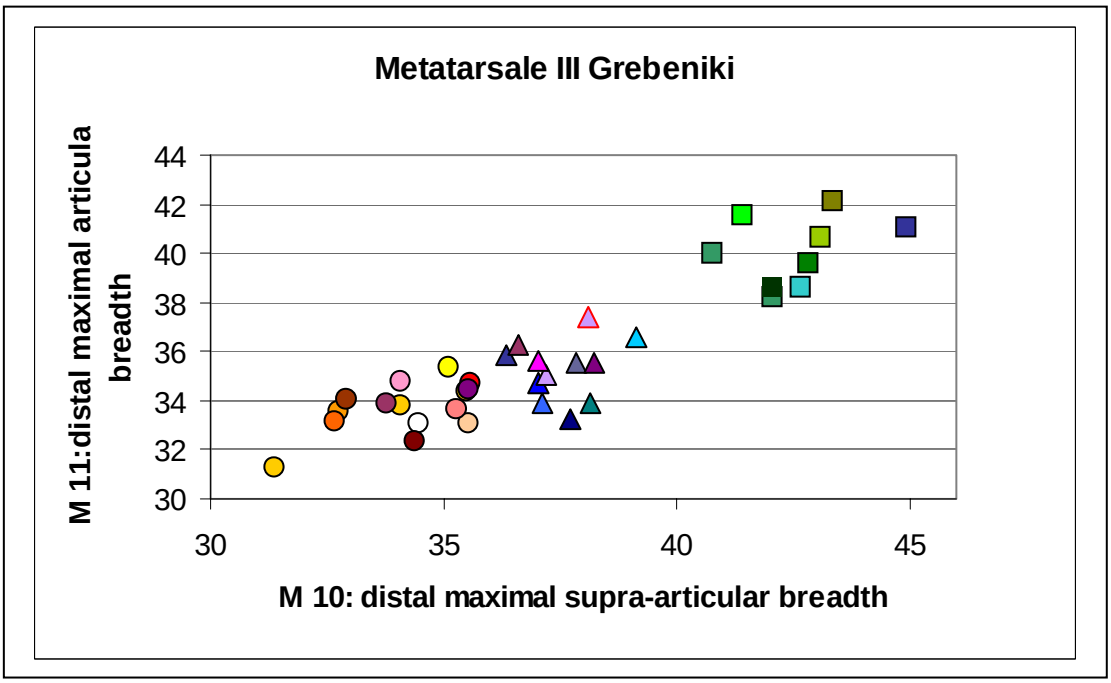

Fig. 1.: Distribution of the Mt III (M10/M11). Legend: *Hipparion gracile* = circle; *H. sp.* = triangle; *H. giganteum* = rectangle;

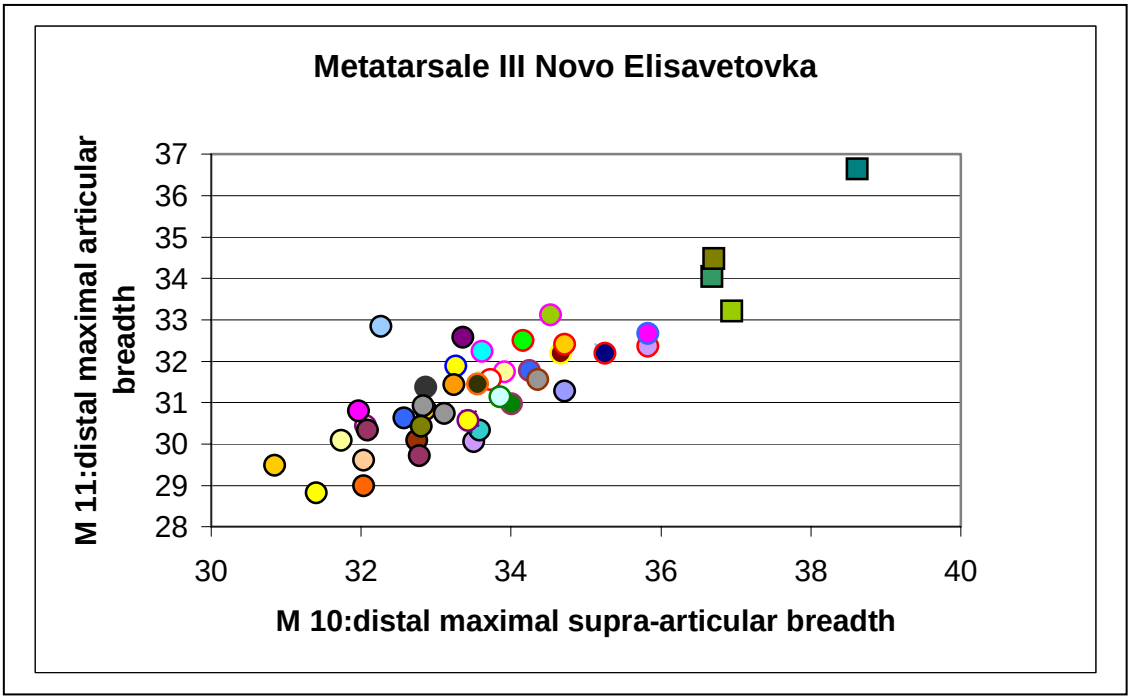

Fig. 2.: Distribution of the Mt III (M10/M11). Legend: *Hipparion gracile* = circle; *H. moldavicum* = rectangle;

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