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Hipparion macedonicum revisited: New data on evolution of hipparionine horses from the Late Miocene of Greece

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The new expeditions to the Axios Valley (Macedonia, Greece) provided a new set of fossils from the various localities. Among the material collected from the Late Miocene hominoid bearing mammal locality Ravin de la Pluie (RPl) were some remains of *Hipparion macedonicum*, which was originally described from this locality. The most important is the skull and associated mandible, the first from the type locality. The new material is compared with the previously collected material of the taxon from the Vallesian and Turolian levels of Greece, as well as with corresponding material from Eurasia. The RPl skull is compared with the type skull of *H. matthwei*, a taxon, which several times has been referred as synonym to *H. macedonicum*. The comparison indicated several differences which distinguish the two species. *Hipparion macedonicum* has a continuous stratigraphic range from the Vallesian to middle Turolian and it is possibly present in the late Turolian. The comparison of the chronologically different samples of *H. macedonicum* indicates that the Vallesian form of *H. macedonicum* has larger size, shorter narial opening, longer tooth rows, rich enamel plication, more elongated and narrow plis, more robust metapodials and less running legs than the Turolian form. Some of the morphological changes are related to the habitat, which was more closed, warmer and wetter in the Vallesian than Turolian.

Key words: Mammalia, Equidae, systematic, evolution, palaeoecology, Miocene, Greece.

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