

## Mesozoic and Neozoic anurans (Amphibia: Anura) from the Carpathian Basin

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The Maastrichtian deposits of Hațeg Basin, Romania has yielded dissociated skeletal remains of discoglossid frogs, assigned to *Eodiscoglossus* sp. (Grigorescu et al. 1999). Based on a more abundant new material there are at least two distinct discoglossid frogs: a still unnamed new bombinatorine discoglossid frog and a still unnamed new discoglossine discoglossid frog (work in progress). The sympatric occurrence of these, primarily Laurasian frogs suggests that the cladogenetic events leading to these distinct lineages within discoglossids may have taken place earlier than previously estimated.

From the Oligocene deposits of Cetățuia Cluj remains of large discoglossids (*Latonia*) have been recorded.

The Neogene localities of Hasznos, Szentendre, Sámsonháza 3, Mátraszőlős 1 & 2, Felsőtárkány 1 & 2, Tardosbánya 3, Polgárdi 4 & 5 (Hungary) yielded at least seven anuran taxa: *Latonia gigantea*, *Discoglossus* sp., *Palaeobatrachus* sp., *Pelobates* sp., *Bufo* cf. *viridis*, *Hyla* cf. *arborea*, and *Rana esculenta* synklepton (Hír et al. 1998, Gál et al. 1999, 2000, Venczel 1999). The remains of *Palaeobatrachus* and *Pelobates* from the Middle Miocene of Sámsonháza 3 and Mátraszőlős 1 & 2 belong to new, still unnamed species displaying clear affinities with those known from the Oligo-Miocene of Europe (work in progress), while those of *Bufo*, *Hyla* and *Rana* morphologically are close to recent species. The genera *Latonia* and *Pelobates* are present in all the studied localities, but they never reach high frequency. *Palaeobatrachus* is relatively frequent in the Middle Miocene of the Carpathian Basin, becoming rare during Late Miocene times. *Discoglossus* was recorded from the Mátraszőlős 1 & 2 localities only. The genus *Bufo* is extremely rare in the Middle Miocene localities, but became more abundant in younger localities (e.g. in the Middle Pliocene of Csarnóta 2, Hungary). The remains of *Hyla* are rare due its small size and fragility. The genus *Rana* was recorded in all the Neogene localities.

The Quaternary frog remains morphologically are undistinguishable from those of living species. *Pliobatrachus langhae* is the only extinct form, recorded from the Lower Pleistocene of Betfia and Subpiatră (Romania).

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GÁL, E., HÍR, J., KESSLER, E., KÓKAI, J., MÉSZÁROS, L., VENCZEL, M. 1999, Folia Historico Naturalia Musei Matraensis, 23: 33-78.

GÁL, E., HÍR, J., KESSLER, E., KÓKAI, J., MÉSZÁROS, L., VENCZEL, M. 2000, Folia Historico Naturalia Musei Matraensis, 24: 39-75.

GRIGORESCU, D., VENCZEL, M., CSIKI, Z. & R. LIMBEREA. 1999, Geologie en Mijnbouw 78: 301-314.

HÍR, J., KÓKAI, J., MÉSZÁROS, L., VENCZEL, M. 1998, A Nógrád Megyei Múzeumok Évkönyve, 22: 171-204.

VENCZEL, M. 1999, 10<sup>th</sup> Ordinary General Meeting of Societas Europaea Herpetologica, p.249-251, Crete.