

## AMPHIBIANS AND REPTILES FROM CAVA MONTICINO (RAVENNA, ITALY) IN THE FRAME OF THE LATE MIOCENE ITALIAN HERPETOFAUNAS

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Among the Italian late Miocene localities that have yielded fossils of amphibians and reptiles, the fissures of Cava Monticino have one of the richest herpetofaunas, both in terms of number of remains and of identified taxa. The analysis of more than 5100 fossils has allowed us to both confirm previous identifications and add new taxa to the taxonomic list. The complete list of amphibians and reptiles from the locality, based on the new observations, includes: Caudata indet., *Bufo* gr. *B. viridis*, *Hyla* gr. *H. arborea*, *Pelobates* sp., *Pelophylax* gr. *P. ridibundus*, Anura indet., *Crocodylia* indet., *Testudo* sp., Testudines indet., Agamidae indet., *Varanus* sp., *Pseudopus* sp., *Ophisaurus* sp., non-*Anguis* Anguinae indet., Eremiadini indet., Lacertidae indet., Scincidae indet., Lacertilia indet., Amphisbaenia indet., *Eryx* cf. *E. jaculus*, “Colubrines” indet., *Natrix* sp., *Vipera* sp. (oriental group), Serpentes indet. The presence of at least 18 different taxa, 5 amphibians and 13 reptiles, testifies to a very diverse fauna, with both taxa that are common in the Italian Miocene (e.g., non-*Anguis* anguines) and taxa that have never been reported before from the whole Italian fossil record (e.g., undetermined Eremiadini).

From a palaeoecological point of view, the amphibian and reptile assemblage of Cava Monticino includes both taxa living usually in relatively dry environments (e.g., agamids and *Eryx*) and more water-linked ones (e.g., *Pelophylax*, *Crocodylia*, *Natrix*). Amphisbaenians live preferably in sandy soils, whereas agamids are linked to rocky areas. The herpetofauna suggests, therefore, the presence of a complex environment in the surroundings of the fossiliferous fissures, pointing out also to a warm climate because of the identification of the crocodiles and the monitor lizard.

If compared with the other well-known and diverse Italian late Miocene herpetofaunas, Moncucco Torinese (Piedmont) and Gargano “Terre Rosse” (Apulia), Cava Monticino appears to have more affinities with the former than with the latter. This higher affinity of Cava Monticino with Moncucco Torinese than with Gargano is retained also when the other Italian late Miocene herpetofaunas (Ciabòt Cagna and Verduno in Piedmont, Fosso della Fittaia in Tuscany) are considered, despite their lower taxonomic diversity due to sampling and taphonomic biases. At least two different herpetofaunal complexes seem, therefore, to be

present in the Italian late Miocene: one in the Central/Northern part of the country and one in the Gargano area.