

**COELODONTA ANTIQUITATIS PRAECURSOR (MAMMALIA, RHINOCEROTIDAE,
ZONE 24) FROM THE LOWER AXIOS VALLEY DEPOSITS
(GEPHYRA, MACEDONIA, N. GREECE)**

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The subspecies *Coelodonta antiquitatis praecursor* GUERIN of the rissian (saalian) age (zone 24) has been described for the first time in Greece. A complete articulated series of one left anterior limb (scapula, humerus, radius, ulna, carpus, metacarpus and one Ph I) was found «in situ» by the villager Dimitrios Magopoulos in a cohesive conglomerate, 500 m east of the Axios river and close to the village of Gephyra (25 Km west of Thessaloniki). The morphological characteristics of this rhinoceros in comparison with these of other species from the Pleistocene – *Dicerorhinus mercki* and *Dicerorhinus hemitoechus* – as well as with older species, allow us to classify it as this subspecies. In addition to the descriptions and discussion, a table of measurements, seven comparative diagrams and photographs are presented in this paper.

**BIOGEOGRAPHIC PATTERNS OF THE AEGEAN REGION
AND THEIR GEOLOGICAL ORIGIN**

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The postorogenic development of the Aegean region is fundamentally known. There were no possibilities for animals to reach the outer islands on feet via landbridges. Therefore the swimming dispersal was postulated. But the dispersal of the rodents is a problem, because there exist narrow physiological limits set by exposure and food shortage.

After introducing the endemism of the Melian herpeto – fauna in context with other endemics of the Melos island – group biogeographic patterns of distribution are related to the volcanic eruptions of Thera. The dispersal by tsunamis is discussed as the reason for distinctive patterns.

As a second centre of tsunami-origin Nisyros island was found. Its activity was important for the farreaching-dispersal in the Upper Pleistocene. Also the dispersal of deer and elephants is explained by tsunamis.

One can observe a tendency of the phases of volcanic activity to be generally connected to the glacials. The possible cause for this synchronism could be the fluctuations in the

body of the Aegean Sea water in the rhythm of the ice ages: crustal erosion and magmatic differentiation during the interglacials, extension and volcanism during the glacials.

Then the phases of dispersal can be correlated with the phases of volcanic activity, whereas the endemic markings can possibly develop during phases of interglacial inactivity.

In the Aegean the dispersal by tsunamis may be the normal way of dispersal for all robust animals and plants which can actively swim or passively drift: many mammals, reptils, arthropods, and gastropods.

Thereby island arc – marginal basin – systems as the Aegean Sea prove to be centres not only of recent geodynamic activity but also of biological origin of species.