University of Fribourg / Faculty of Science / Department of Geosciences

Fossil Reptiles from the Aegean Region

Georgios Georgalis

Fossil reptiles can offer valuable insights into several fields of the geosciences and biological sciences. Nevertheless, the palaeoherpetofaunas of many regions remain virtually unexplored. The Aegean Region (comprised of Greece and western and central Turkey) is one of these areas, although it is situated at a geographic meeting point, at the boundaries of southeastern Europe with southwestern Asia and Africa.

Fossil reptiles from the area were first described during the 1850's and important discoveries were subsequently made during the course of the 19th and 20th centuries, including key extinct species that still serve as the basis of comparison with other European finds. The history of discoveries of fossil reptiles from the Aegean Region is herein presented in detail. All previously named taxa are revised and their taxonomic status is evaluated under a modern systematic approach. All known occurrences of fossil reptiles, originating from more than 80 different Paleogene, Neogene, and Quaternary localities from throughout the area, are reviewed in detail.

New finds from several Neogene and Quaternary localities from Greece and Turkey are described and their systematic status and biogeographic affinities are assessed. Certain reptile clades are recorded for the first time from the region, whereas the geographic and stratigraphic distributions of others significantly expanded.

Fossil reptiles from the area provide important implications into biogeography and biostratigraphy, the evolution of modern taxa, taxonomy, faunal turnovers and extinction, and palaeoenvironmental reconstructions.

Jury:

Prof. Dr. Walter Joyce (thesis supervisor)Prof. Dr. Massimo Delfino (thesis supervisor)Dr. Krister Smith (external co-examiner)Dr. Márton Rabi (external co-examiner)Prof. Dr. Martin Hölzle (president of the jury)