

An early Eocene pan-gekkotan from France could represent an extra squamate group that survived the K/Pg extinction

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In this paper we describe a new lizard from the early Eocene of the Cos locality in the Quercy region (near the Caylus village, Southwest France). The age of the Cos deposit has been proposed as the MP 10–11 interval, close to the transition of the late Ypresian to early Lutetian. The fossil material includes a nearly complete right maxilla and a large section of the right dentary, both elements attributed to Pan-Gekkota. These specimens are morphologically different from crown gekkotans, therefore, we describe them as a new species. Some aspects of the maxilla are very atypical regarding geckos (e.g., the shape of the facial process). The posterior margin of the facial process slopes down gradually dorsoventrally towards the jugal facet, reaching the posterior end of the maxilla, in contrast to gekkotans, where the facial process ends anterior to the posterior end of the maxilla. A similar maxilla is present in the Late Jurassic–Early Cretaceous pan-gekkotan genus *Eichstaettisaurus*. This suggests that the new fossil taxon represents either a lineage that persisted from the Mesozoic to the early Eocene in Europe, or perhaps a morphology otherwise unrepresented in crown gekkotans. We allocate this taxon provisionally to Pan-Gekkota, and contribute to increase the diversity of this clade in Western Europe during the Paleogene, which now includes the stratigraphically similarly aged *Laonogekko lefevrei* from France (MP 10), and older *Dollogekko* from Belgium (MP 7).

Key words: Squamata, Pan-Gekkota, Mesozoic, K/Pg extinction, Paleogene, Phosphorites du Quercy, France.

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