SHORT COMMUNICATION

REDISCOVERY OF THE LONG-LOST HOLOTYPE OF THE LACERTID LIZARD PSEUDEUMECES CADURCENSIS (FILHOL, 1877)

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Citation for this article: Bolet, A., J.-C. Rage, and J. L. Conrad. 2017. Rediscovery of the long-lost holotype of the lacertid lizard Pseudeumeces cadurcensis (Filhol, 1877). Journal of Vertebrate Paleontology. DOI: 10.1080/02724634.2017.1315669.

Pseudeumeces cadurcensis (Filhol, 1877a) is a lacertid lizard first described from the classic assemblage of mainly Paleogene localities known as the ‘Phosphorites du Quercy’ (France). The type specimen was recovered from an unspecified locality of Oligocene or, less probably, earliest Miocene age. This age estimate is based on later finds of the genus from the Phosphorites du Quercy and Gaillant in France and Herrlingen 8, 9, and 11 in Germany (Augé, 2005; Augé and Hervet, 2009; Cerřanský and Augé, 2012; Cerřanský et al., 2016), which are dated from MP25 to MP30 and MN1. The species was described by Filhol in 1877 under the name of Plestiodon cadurcense (also named Plestiodon cadurcensis in the same publication), and, as was usual at that time, no type specimen was formally designed. However, a single specimen, a dentary, was figured (Fig. 1A) and described in the text. Hoffstetter (1944), in common with all previous authors working on the Muséum National d’Histoire Naturelle (MNHN) collections since Filhol, did not mention having seen this specimen when he erected the genus Pseudeumeces for ‘Plestiodon cadurcensis’. To our knowledge, the first explicit mention of this dentary as the holotype of Pseudeumeces cadurcensis was by Estes (1983), more than a century after the original publication. He designated the specimen by monotypy, although this is not explicitly stated in the text and despite it being presumably lost at the MNHN (note the question mark after the acronym in Estes, 1983:104, line 30). The reason for assuming a possible location at the MNHN was probably related to the fact that many of the specimens belonging to Filhol’s personal collection were acquired by the MNHN after his death in 1902. However, it is probable, for reasons outlined below, that, in contrast to many other specimens studied by Filhol, this dentary never reached the MNHN collections.

Another issue regarding the type of Pseudeumeces cadurcensis is that Filhol’s thesis, where it was described, was published in several almost contemporaneous versions, and these versions contain multiple differences. The work was published twice in two separate volumes (Filhol, 1876a, 1876b, 1877a, 1877b) and also as a single volume (Filhol, 1878c). We have followed other authors (e.g., Augé, 2005; Augé and Hervet, 2009) in identifying Filhol (1877a) as the taxonomic authority, although we have been unable to find out which of the versions of 1877 was published first. One of the important mistakes in Filhol’s volumes was the incorrect labeling of specimens figured in the plates. Therefore, our goal here is to establish beyond doubt which of the figured specimens corresponds to the holotype of P. cadurcensis. Although, as expressed above, no type specimen was formally designated by Filhol, the fact that a single specimen is cited in the text means that this of necessity has to be the holotype. Hoffstetter (1944) cited figure 426 of plate 26 in Filhol (1877a) when erecting the genus Pseudeumeces for ‘Plestiodon cadurcensis’. However, this version of Filhol’s work contains an errata list stating, among other amendments (Filhol, 1877a:338), “Page 486, Plestiodon cadurcense, fig. 425 au lieu de 426,” i.e., that reference to figure 426 in the description of ‘Plestiodon cadurcensis’ should read figure 425.

Now that we have established that the type specimen of Pseudeumeces cadurcensis is the one corresponding to figure 425 of plate 26 in Filhol (1877a, 1877b, 1877c), we can report that this long-lost specimen has been unexpectedly rediscovered by one of us (A.B.) at the American Museum of Natural History (AMNH), raising some questions regarding how and when this important fossil reached the U.S.A. The AMNH collection contains two specimens coming from the Phosphorites du Quercy (AMNH FAR 241A, B; Fig. 1B–E), labeled as ‘Eumeces cadurcensis’ (a pencil amendment on the card, which originally read ‘Plestiodon cadurcensis’), and belonging to E. D. Cope’s collection. More specifically, the label reads ‘Exch. from Kowalevsky II Cope Coll.’. One of them, AMNH FAR 241A (Fig. 1B, C), is, without a doubt, the lost type of Pseudeumeces cadurcensis (Fig. 1A).

The specimen is an incomplete left dentary bearing seven teeth and the empty spaces for at least five more dental elements. The teeth are robust and ambyloodont and show faint striae on their crowns. The Meckelian canal is open, although the ventral margin of the subdental shelf and the ventral margin of the dentary approach each other close to the symphysis. The subdental shelf is well developed and bears a sulcus dentalis, and both the shelf and the ventral margin of the dentary are ventrally bowed. This specimen and the one figured by Filhol (1877a, 1877b, 1877c) both have seven teeth, with three empty positions in the same exact places, and are missing the anterior- and posterior-most regions. The match between fractures and missing portions is very precise, making the possibility of similarity by chance very small. The specimen is described in Filhol’s text as