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***Apostolepis parassimilis* Lema & Renner, 2012 an objective synonym of *A. tertulianobeui* Lema, 2004 (Dipsadidae: Elapomorhini)**

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Lema (2004) described *Apostolepis tertulianobeui* based on a single specimen (a young male) from “hinterland Minas Gerais state”. The holotype was originally housed in the collection of Instituto Pinheiros Produtos Terapêuticos S.A. and labeled as IP 1934 (Lema 2004). The Instituto Pinheiros was founded in 1928 in the city of São Paulo, Brazil and became the largest producer of vaccines and antitoxins of the country (Ribeiro 2001). It was purchased in 1972 by the company Sintex do Brasil (Edler 2006) and its former collection was partitioned among several institutions (Lema 2004). As a result, the specimen IP 1934 was donated to the collection of the Museu de Ciências Naturais from Fundação Zoobotânica do Rio Grande do Sul (MCN hereafter) in Porto Alegre, Brazil, and labeled as MCN 8535 (Fig. 1A–D).

Ferrarezzi *et al.* (2005) synonymized *A. tertulianobeui* with *A. assimilis* as follows: ‘In most relevant diagnostic features presented by Lema (2004b), the holotype of *A. tertulianobeui* does not differ from the range of variation we have observed in a large sample of *A. assimilis* [...]. Therefore, even though we did not examine the holotype of *A. tertulianobeui*, we have no doubt that this name must be relegated as a junior synonym of *A. assimilis*.’ (Ferrarezzi *et al.* 2005: 218). Two years later, Lema & Renner (2007:129–130) compared the holotype of *A. tertulianobeui* with over 100 specimens of *A. assimilis* and resurrected *A. tertulianobeui* from the synonymy of the last species.

Recently, Lema & Renner (2012) described *A. parassimilis*, another member of the *Apostolepis assimilis* group (sensu Ferrarezzi *et al.* 2005), based on two specimens. The paratype is housed at the Museu Nacional (MNRJ hereafter) in Rio de Janeiro, Brazil (MNRJ 6524, a young female, from the state of Bahia, without locality data in the catalogue of the reptiles collection [P. Passos, pers. comm.]). Oddly, the holotype of *A. parassimilis* is MCN 8535, the same onomatophore that based the description of *A. tertulianobeui* (although the provenance has been attributed by Lema & Renner 2012 to the municipality of Uberlândia, state of Minas Gerais, Brazil). Despite minor rephrasing and other writing details, the description of the holotype of *A. parassimilis* is virtually identical to that of *A. tertulianobeui*. The main difference is that Lema & Renner (2012) describe the snout of MCN 8535 as ‘not projecting’, in contrast to Lema’s (2004) description of the same specimen. Lema & Renner (2012) also make no reference to *A. tertulianobeui*; it is also worth noting that illustrations of the holotype of *A. tertulianobeui* and *A. parassimilis* are clearly based on different specimens. Actually, Figures 5–8 in Lema & Renner (2012) are based on MNRJ 6524, the paratype of *A. parassimilis* (Fig. 1E–H). This confusion can also be observed comparing the paratype description (Lema & Renner 2012:75) with Figures 5 and 7 in Lema & Renner (2012), especially because the refereed specimen (MNRJ 6524) has scale anomalies in the parietal region and in the underside of head.

According to the curator in charge of the reptile collection from MCN the specimen MCN 8535 was loaned to MNRJ in 2005. This specimen was registered as *A. assimilis* in the collection’s catalogue, but posteriorly loaned as the holotype of *A. tertulianobeui* in the invoice (R.B. Oliveira, pers. com.). When we decided to investigate the nomenclature issue between *A. tertulianobeui* and *A. parassimilis*, MCN 8535 was still in loan to MNRJ, and no specimen has ever been assigned to *A. parassimilis* at the MCN collection (R.B. Oliveira, pers. com.). Therefore, we discard the hypothesis of the description of *A. parassimilis* being based on another specimen housed at the MCN collection. Apparently, Lema & Renner (2012) examined MCN 8535 before its loan to MNRJ collection.



FIGURE 1. Dorsal (A), lateral (B), and ventral (C) views of head and tail (D) of the holotype of *Apostolepis tertulianobeui* and *Apostolepis parassimilis* (MCN 8535); and dorsal (E), lateral (F), and ventral (G) views of head and tail (H) of the paratype of *Apostolepis parassimilis* (MNRJ 6524). Scale bars = 2 mm. Photos of MCN 8535 by Manoela W. Cardoso and Marcos Bilate, and of MNRJ 6524 by Pedro Pinna.

As both *A. tertulianobeui* and *A. parassimilis* have the same holotype, the latter is a junior objective synonym of the former. Furthermore, the fact that Lema & Renner (2012) consider MNRJ 6524 and MCN 8535 conspecific, the first should represent a second specimen of *A. tertulianobeui*. Once we recognize *A. parassimilis* and *A. tertulianobeui* as synonyms, the following characters proposed by Lema (2004) as diagnostic of the latter must now be discarded (see Lema & Renner 2012 for morphological description of MNRJ 6524): (1) Snout shape: according to Lema (2004:156, 158), MCN 8535 has a projecting snout, while Lema & Renner (2012:74) described it as not projected. Additionally, Figs. 1–8 in Lema & Renner (2012) suggest the snout of MNRJ 6524 is even less projected than that of *A. assimilis* (IBSP 49354) (Lema & Renner 2012, Figs. 1–4); (2) size of frontal shield and eye: the characters described as ‘very small frontal plate’ and the eye ‘smaller than its distance to oral border’ attributed to MCN 8535 (Lema 2004:156–157)

are not observed in MNRJ 6524 (Lema & Renner 2012:74–75); (3) size and shape of terminal scale: the terminal scale is described as ‘slightly compressed’ or ‘high, slightly edged’ in MCN 8535 (Lema 2004:156, 158), and ‘conical’ in MNRJ 6524 (Lema & Renner 2012:75); (4) head distinction from neck: Lema (2004: 156, 158) argued that MCN 8535 has the head ‘larger’ or ‘broader’ (sic.; i.e. ‘wider’) than ‘neck’ (maximum head width 5.9 mm and diameter of neck 4.8 mm), which would be another diagnostic character between *A. tertulianoabei* and *A. assimilis*. However, MNRJ 6524 has 3.6 mm of maximum head width, only slightly wider than the diameter of neck (3.5 mm) (Lema & Renner 2012:74); (5) length of black nuchal collar: according to Lema & Renner (2012:74), the narrow ‘cervical collar’ (‘nuchal collar’ sensu Harvey 1999) of MCN 8535 is also diagnostic of *A. parassimilis*. However, when describing the same specimen as *A. tertulianoabei*, Lema (2004:158) state: ‘The black cervical collar varies in *A. assimilis* and as short as the new species’. Although written in a confused way, it appears that Lema (1994) considered the ‘cervical’ collar of *A. assimilis* as short as that of *A. tertulianoabei*, contrary to Lema & Renner (2012). Additionally, in MNRJ 6524 the cervical collar is two scales long (see Fig. 5 of Lema & Renner 2012), a pattern usually found in *A. assimilis* (Ferrarezzi *et al.* 2005).

Therefore, the two known specimens of *A. tertulianoabei* (MCN 8535 and MNRJ 6524) could be distinguished from *A. assimilis* (characters in parentheses) by mental region immaculate (vs. blackish), tail blotch black dorsally, grayish ventrally (vs. tail blotch completely black), and terminal scale white (vs. black). However, considering the small number of known specimens of *A. tertulianoabei*, the potential diagnostic of such characters remains doubtful. Ferrarezzi *et al.* (2005) suggest that the reduced dark pigmentation in *A. tertulianoabei* may reflect a preservation artifact, an assumption rejected by Lema & Renner (2007:130). On the other hand, Lema & Renner (2012:75) admitted that the specimens they described as *A. parassimilis* (here an objective synonym of *A. tertulianoabei*) could represent variant morphs of *A. assimilis* with low melanin rates, but insisted to maintain its specific status, arguing that more specimens are needed to evaluate this issue. We wonder why it would be worthy to describe a new taxon based on such a small sample, if the proponents themselves concede that the presumed diagnostic characters may in fact be polymorphic. Since we did not examine additional samples of *A. assimilis*, considerations about the validity of *A. tertulianoabei* transcend the scope of this paper.

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