Soil herpetofauna biodiversity is conservatively estimated as 2775 species, made up of 10% and 28% of Amphibia and Squamata, respectively; they are neglected in their taxonomy, ecology and standard sampling methods suggests that proportions, as well as numbers, are likely to be far higher (Measey, 2006). In the last few years, new species have been described for South America, most discovered during surveys carried out in previously unexplored regions (Rodrigues et al., 2003; Ribeiro, et al., 2008, 2018; Centeno, et al., 2010; Oliveira, et al., 2018). In the last years, some herpetological fieldwork carried out in the coastal islands of Southeastern Brazil have provided opportunities for recording poorly known species, as well as registering new insular distributions. In this study, new insular records for the Small Head Worm Lizard *Leposternon microcephalum* and the first insular record for the Brongersma’s Worm Snake *Amerotyphlops brongersmianus* in Southeastern Brazil are reported.

The worm lizard *Leposternon microcephalum* Wagler, 1824 (Squamata, Amphisbaenidae) is the most widely distributed species belonging to this genus, with records from Brazil, Bolivia, Paraguay, Argentina and Uruguay, in several phytogeographic regions (Ribeiro et al., 2008). About one hundred specimens have been recorded in land-bridge islands off the southeastern coast of Brazil, of which 80% were recorded at Búzios and Vitória islands, 55 years ago; the blind snake *Amerotyphlops brongersmianus* (Vanzolini, 1972) is widespread in South America, occurring in almost all habitats (Arruda et al., 2011). However, only one insular record is known for this species (MCP 7722), from Ratones Grande island (27.4759 °S, 48.5628 °W), of the state of Santa Catarina, Southeastern Brazil, and a recent review of *A. brongersmianus* distribution (Graboski et al., 2015) reveals no insular records for this species in Southeastern Brazil. Herein, four *L. microcephalum* specimens (Fig. 1A), and one *A. brongersmianus* specimen (Fig. 1B) are reported from Moela Island (24.0498 °S, 46.2635 °W), 2.5 km off the coast of the state of São Paulo, Southeastern Brazil.

All records (Fig. 2) were obtained through occasional encounters by lighthouse keepers, who collected the specimens and sent them to the Instituto Butantan, in São Paulo, Reference Collection (IBSPCR), Brazil: *L. microcephalum*: IBSPCR 0108, 07/X/2010, Snout–vent length (SVL): 360 + Tail length (TL): 23 mm, mass: 40 g; IBSPCR 0109, 21/11/2010, (SVL): 255 + (TL): 17 mm, mass: 20 g; IBSPCR 0110, 07/10/2010, (SVL): 389 + (TL): 18 mm, mass: 45 g; IBSPCR 0111, no date, (SVL): 436 + 26 mm, mass: 53 g; IBSPCR 0637, no date, (SVL): 290 + 16 mm, mass: 28 g. *A. brongersmianus* IBSP 87402, ca. 2002, (SVL):171 + (TL): 6 mm, mass: 5 g.

Considering that one-fifth of the Brazilian worm lizard species are known from a single locality, and that range size is a better conservation status predictor for these Brazilian reptiles (Colli et al., 2016), new records are particularly important for this group. A case of passive *L. microcephalum* transport was recorded at Fernando de Noronha Island (Vanzolini, 1978). Perhaps one of the first records of an insular amphisbaenid vouched for in a Brazilian herpetological collection was the endemic *Amphisbaena ridleyi* collected by American geologist John Casper Branner in 1876, at Fernando de Noronha (Branner, 1888), and according to the author, deposited at the Museu Nacional in Rio de Janeiro, Brazil. However, this specimen is lost (Manoela W.
Arthur Diesel Abegg et al.

In general, insular records for *L. microcephalum* are scarce, except for Búzios Island, in the state of São Paulo, which contains 65 specimens deposited at the Museu de Zoologia da Universidade de São Paulo (Aline S. Benetti, pers. comm.). Other records can be found in Ribeiro et al. (2018), who report a single specimen from Arvoredo Island (MZUSP 67047), state of Santa Catarina, Southern Brazil; one from Alcatrazes (MZUSP 6496) and São Sebastião islands (MZUSP 6525), two from Queimada Grande Island (MZUSP 77031, 77032) and four from Mar Virado Island (MHNCI 7238, MZUSP 77027, 77027, 78431), all in São Paulo, Southeastern Brazil. In addition to the specimens reported in this study for Moela Island, voucher specimens from Cardoso (MZUSP 94258) and Ratones Grande islands (MCP 7723) are also available in zoological collections. Thus, *L. microcephalum* currently has records in 10 islands off southeast and south coasts of Brazil.

The *A. brongersmianus* record is particularly remarkable, as no record of this species is known for the coast of the state of São Paulo (Dixon and Hendricks, 1979; Graboski et al., 2015). Considering the strong geographic isolation in light of the evolutionary species concept put forth by Wiley (1978), the *A. brongersmianus* population from Moela Island, as well as all the island populations of *L. microcephalum*, should represent lineages that have evolved separately from the others, whose particular evolutionary history could characterize it as new taxa. However, all the examined diagnostic morphological data insert the specimen of *A. brongersmianus*, as well as those of *L. microcephalum*, within the known morphological variation for these species (Dixon and Hendricks, 1979; Ribeiro et al., 2018). Thus, no features distinguish (= unique state or combination of characters) these putative taxa of their widely distributed continental species in their current concepts.

Another interesting question in relation to island species is that they can present a regime growth distinct from continental populations (or related species), leading to dwarfism or gigantism (Foster, 1964; Van Valen, 1973). This phenomenon has been recorded for snakes of the genus *Bothrops* in the coastal islands of Southeastern Brazil, for which the tendency is for a decrease in body size (Barbo et al., 2016). In general, snake dwarfism is associated with reduced availability of prey in the environment (Boback, 2003; Keogh et al., 2005). Indeed, *Bothrops* island species that exhibit dwarfism have altered their diets to prey on mainly arthropods, possibly in response to the absence of rodents in the islands, the main food item of the continental species (Sazima, 1992; Barbo et al., 2016). However, for the specimens of *A. brongersmianus* and *L. microcephalum* of the present study, no obvious change in body size was observed. Although we have not examined the diet of the insular specimens here, this is probably explained by the availability of prey (invertebrates) in the islands,

Figure 1. (A) *L. microcephalum* (IBSPCR 0110) and (B) *A. brongersmianus* (IBSP 87402) specimens from Moela Island, in the state of São Paulo, Southeastern Brazil.
which are naturally the food items of these burrowing reptiles on the continent (Barros-Filho et al., 1996; Embert et al., 2015).

The presence of reptile species in the coastal islands of Southeastern Brazil has been explained by sea-level oscillations, especially during the Pleistocene (ca. 12,000–10,000 ya), when the sea level was about 60 m lower, connecting the present islands to the continents (Martin et al., 1986). In this scenario, as sea level has been rising over thousands of years, populations of previously connected species have become disjointed. If this is true, this scenario allows predicting, at least for L. microcephalum and A. brongersmianus, that populations more distant from the continent (such as from Alcatrazes and Queimada Grande, for example) would tend to be more distinct (morphological and/or genetically) in response to longer isolation time. This is an interesting issue that can be explained soon, since studies on the biogeography of Brazilian Atlantic coast islands and the time of divergence of their respective reptile faunas are in progress.

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