Ectrodactyly of the exotic lizard *Hemidactylus mabouia* (Squamata: Gekkonidae) in an urban area of northern Brazil, eastern Amazon

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Resumen: Presentamos el primer caso conocido de ectrodactilia (pérdida de dedos) en el gecónido *Hemidactylus mabouia*, en el municipio de Macapá, estado de Amapá (Brasil). El espécimen presentaba pérdida de un dedo en un miembro posterior. El registro incrementa el conocimiento de las anormalidades en lagartos.

Malformations are structural abnormalities that are often related to the abnormal development of the limbs (e.g., extra limbs, malformed eyes) (Reaser & Johnson, 1997; Lannoo, 2009). Examples of malformed individuals among lizards are uncommon, such cases are much more common among amphibians than reptiles (Gatti & Sannolo, 2014). Ectrodactyly is a type of abnormality characterized by the complete absence of digit and metatarsal bone (Lannoo, 2009). Herein, we report a case of ectrodactyly in a species of the gekkonid lizard *Hemidactylus mabouia* in Eastern Amazon (Brazil).

Hemidactylus mabouia (Moreau de Jonnès, 1818) is an exotic medium-sized lizard widely distributed in the tropics of South America, Central America and the Caribbean (Carranza & Arnold, 2006). This nocturnal lizard is commonly found in anthropic or perianthropic environments (Anjos & Rocha, 2008). The abundant occurrence of *H. mabouia* in natural habitats from Brazilian states changed the status of the species from an exotic species condition to an exotic invasive species in Brazil, being usually associated to anthropic environments (Rocha *et al.*, 2011).

During a herpetofaunal survey, at 20:30 hours on July 25, 2017, in an urban area in the municipality of Macapá (0º0'30"S, 51º5'43"W; 12 masl), Amapá state, an adult male *H. mabouia* (SVL= 53.2 mm) was observed showing ectrodactyly (Figure 1). The specimen presented missing toe on the posterior limb. This individual was not collected.

Records of malformation have been reported for the genus *Hemidactylus*, such as polydactyly on *Hemidactylus agrius* (De Andrade *et al.*, 2015), and tail bifurcation on *H. frenatus* (Chang *et al.*, 1984) and

Figure 1: Male *H. mabouia* with ectrodactyly of the right foot.
Figura 1: Macho de *H. mabouia* con ectrodactilia en el pie derecho.

H. flaviviridis (Kumbar *et al.*, 2011). Studies of malformation in lizards mostly register cases of polydactyly or tail bifurcation, the cases of ectrodactyly being an unusual anomaly among lizards.

The possible causes of abnormalities in vertebrates include environmental pollutants, parasites, UV radiation and genetic mutations (Alford & Richards, 1999; Ankley *et al.*, 2002; Lunde & Johnson, 2012). In this note, it is not possible to establish the factors that caused the anomaly, so future studies related to ecotoxicology and genetics are necessary.

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