

Hemidactylus mabouia MOREAU
DE JONNÈS, 1818 and *H. frenatus*
SCHLEGEL, 1836 in western Ecuador:
new records reveal range extension

The name *Hemidactylus* (GRAY, 1845) specifies a group of nocturnal geckos occurring naturally through much of tropical Asia and Africa (CARRANZA & ARNOLD 2006). This genus comprises more than 80 species, eight of which are known as successful invasive species, *H. mabouia* (MOREAU DE JONNÈS, 1818), *H. frenatus* SCHLEGEL in DUMÉRIL & BIBRON, 1836, *H. turcicus* (LINNAEUS, 1758), *H. brookii* GRAY, 1845, *H. garnotii* DUMÉRIL & BIBRON, 1836, *H. persicus* ANDERSON, 1872, *H. flaviviridis* RÜPPELL, 1835, and *H. bowringii* (GRAY, 1845) (CARRANZA & ARNOLD 2006). These species are frequently found in human settlements, therefore their invasive range could well be the result of human introduction, along with some natural transmarine journeys (CARRANZA & ARNOLD 2006). Displacement of native species by invasive *Hemidactylus* has been suggested (BALDO et al. 2008), and there are some cases, in which the introduction of *H. mabouia* and *H. frenatus* has

affected natural populations of lizards, irrespective of their ecology and biology (PETREN et al. 1993; CASE et al. 1994; MESHAKA 2000).

Hemidactylus mabouia has its natural range in central and eastern Africa (CARRANZA & ARNOLD 2006) and has colonized western Africa, the Caribbean, South America and Florida (RÖDDER et al. 2008). There are two hypotheses to explain its dispersal from Africa to the American continent, transport by man (slavery ships), or other floating objects (CACCIALI & MOTTE 2009). In South America, *H. mabouia* is widespread throughout the Amazon basin, where it arrived possibly with human settlers (ÁVILA-PIRES 1995) and subsequently dispersed through river systems (CARRANZA & ARNOLD 2006; ANJOS & ROCHA 2008). This colonization is known to include Ecuador east of the Andes. However, we report here the first records of *H. mabouia* west of the Andes in northern Ecuador, province of Esmeraldas: three specimens (QCAZ 5998-6000) collected in Quinindé (0°19'48"N, 79°28'48"W), and one (QCAZ 6098) from Esmeraldas (0°57' 0"N, 79°40'0"W). How *H. mabouia* arrived west of the Andes in Ecuador is unknown, but its current distribution seems to be related to human settlements.

Hemidactylus frenatus has its natural range in tropical Asia and the Indo-Pacific Archipelago (CASE et al. 1994), and has been introduced in many tropical and subtropical regions worldwide (BAUER & HENLE 1994). Its introduction in South America has been reported recently for western Venezuela (RIVAS FUENMAYOR et al. 2005) and western Ecuador, provinces of Esmeraldas and Manabí (JADIN et al. 2009). Here we report new records from western Ecuador, province of Guayas: one specimen (QCAZ 8472) from Ingenio San Carlos, cantón Marcelino Maridueñas (2°11'30"S, 79°31'41"W), and another specimen (QCAZ 9111) from Bosque Protector Cerro Blanco (2°07'0"S, 80°05'0"W). The former specimen was found under a log in a crop of cacao, banana, cassava and corn. The new records lie approximately 145-160 km south of the southernmost known locality (JADIN et al. 2009), which suggests that *H. frenatus* is widespread in western Ecuador.

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KEY WORDS: Reptilia: Squamata: Sauria Gekkonidae, *Hemidactylus mabouia*, *Hemidactylus frenatus*, invasive species, range extension, distribution, ecology, Ecuador, South America

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