



## ***Conolophus marthae* sp.nov. (Squamata, Iguanidae), a new species of land iguana from the Galápagos archipelago**

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### **Abstract**

*Conolophus marthae* **sp. nov.**, a new species endemic to Volcan Wolf of northern Isla Isabela of the Galápagos archipelago, is described. The new species is morphologically, behaviorally, and genetically distinguished from the other two congeneric species *C. subcristatus* and *C. pallidus*. Besides the taxonomic implications, *C. marthae* **sp. nov.** is extremely important as it is the only evidence of deep divergence within the Galápagos land iguana lineage.

**Key words:** Galápagos pink land iguana, *Conolophus*, Iguanidae, Squamata, Galápagos Islands, Galápagos National Park, lizards, endemism

### **Introduction**

Land iguanas from the Galápagos are among the most emblematic organisms of that archipelago. The current distribution of these reptiles reflects direct and indirect human impacts (Snell *et al.* 1984). Consequently, at present, land iguanas occur only in limited areas of a few islands. Current taxonomy of Galápagos land iguanas recognizes two species: *C. pallidus* Heller, 1903 and *C. subcristatus* (Gray, 1831). The first species occurs only on Santa Fe, whereas *C. subcristatus* occurs on Fernandina, Isabela, Santa Cruz, Plaza Sur, Seymour Norte (a translocated population), and Baltra (a repatriated population). Morphological (Snell *et al.* 1984) and genetic data (Rassmann *et al.* 2004; Tzika *et al.* 2008; Gentile *et al.* 2009) suggest that some populations of *C. subcristatus* may warrant specific status. Thus, the taxonomy of Galápagos land iguanas is incomplete and this may represent a further threat to the persistence of all species in the group (Daugherty *et al.* 1990).

Recently, a previously overlooked pink and black-striped species of land iguana was found in Galápagos Islands (Gentile *et al.* 2009). For its genetic, morphological, and behavioral characteristics, Gentile and collaborators identified this form as a distinct species. Despite recognition as distinct, the species remained unnamed. In fact, in previous works (Tzika *et al.* 2008; Gentile *et al.* 2009), it was referred to the pink form by using the term “rosada” (pink in Spanish), but such a term was disclaimed for nomenclature purposes (Gentile *et al.* 2009). Here, we name this new species and provide its formal description and diagnostic characteristics.

### **Materials and methods**

Morphological, behavioral, mitochondrial and nuclear DNA data are used to describe the new species and to distinguish it from other species of the genus *Conolophus*.

Snout-vent length (SVL) and vent to tip of the tail length (VTL) were measured to the nearest 0.1 cm, at