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## New species of salamander (Caudata: Plethodontidae: *Cryptotriton*) from Quebrada Cataguana, Francisco Morazán, Honduras, with comments on the taxonomic status of *Cryptotriton wakei*

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### Abstract

We describe a new species of the plethodontid salamander genus *Cryptotriton* from Honduras after comparing morphological, molecular, and osteological data from the holotype to that of the other nominal forms of the genus. The new species differs from all of the known species of *Cryptotriton* in at least one character from all three datasets. We also suggest placing *C. wakei* in the synonymy of *C. nasalis* after examining the morphological and osteological characters of the single known specimen of *C. wakei*.

**Key words:** Honduras, Plethodontidae, *Cryptotriton necopinus* sp. nov., morphology, mtDNA, 16S, cytochrome b, *Cryptotriton wakei* synonym nov., *Cryptotriton nasalis*

### Resumen

Se describe una especie nueva de salamandra pletodóntida del género *Cryptotriton* de Honduras basado en una comparación de datos morfológicos, moleculares, y osteológicos entre el holotipo y las otras especies del género. La especie nueva se distingue de todas las demás especies conocidas de *Cryptotriton* por lo menos en un carácter de cada tipo de datos. Sugerimos sinonimizar *C. wakei* con *C. nasalis* después de haber examinado los caracteres morfológicos y osteológicos del único ejemplar conocido de *C. wakei*.

### Introduction

The genus *Cryptotriton* represents a group of six described species of small salamanders that is known to occur in disjunct montane habitats from northern Chiapas, Mexico, to northwestern Honduras (Köhler 2011, Wake *et al.* 2012). Individuals of some of these six nominal forms have proved difficult to find by scientists in the field, with three species known from fewer than five specimens each (JRM, SMR pers. observ.). Those same three species are also known only from the vicinities of their type localities (Köhler 2011).

During June 2013, one of us (JRM) collected an adult male *Cryptotriton* that represents an undescribed species in a cloud forest habitat in north-central Honduras. This new locality lies about 125 km SSE of the nearest known locality for the genus in the Sierra de Omoa west of San Pedro Sula, Cortés, Honduras. A description of that new species is herein provided.

McCranie and Wilson (2002) and McCranie (2006) suggested that one of those poorly-known species, *Cryptotriton wakei* (Campbell and Smith), was not a valid species, but was instead a junior synonym of *C. nasalis* (Dunn). We also revisit that suggestion by comparing X-rays of those two nominal forms.

from *C. nasalis* for any of the characters used in its diagnosis. We compared the holotype of *C. wakei* to several specimens of *C. nasalis* in the MVZ and found no differences for the diagnostic characters listed in the description of *C. wakei*. Our X-ray of the holotype of *C. wakei* showed no evidence of a tibial spur, which is also absent in *C. nasalis* (Lynch & Wake 1978). Unfortunately, tissues are not available from *C. wakei* (the only described *Cryptotriton* species for which tissues are not available) to test that opinion despite two trips to the vicinity of the type locality of *C. wakei* by the second author (SMR) and many trips by collaborators working in the newly established Sierra Caral Amphibian Reserve near the type locality (C.R. Vásquez-Almazán pers. comm.). Campbell & Smith (1998) described a second new species of salamander, *Nototriton brodiei*, from the same locality as *C. wakei*. Tissues were collected from one of the paratypes of *N. brodiei* (see Garcia-París & Wake 2000), and the sequence data obtained by Garcia-París & Wake (2000) were compared to a specimen of *Nototriton* collected in Cusuco National Park in Honduras. That sequence data from the Honduran specimen confirmed its identification as *N. brodiei* (Kolby *et al.* 2009). It is noteworthy that the Honduran locality for *N. brodiei* is also the area from which *C. nasalis* occurs. Based on that geographical distribution similarity, the absence of morphological differences, and the realization that tissues of the *Cryptotriton* from the Sierra de Caral population are not likely to be forthcoming in the near future (based on the recent collecting failures, see above), we propose to place *Nototriton wakei* Campbell & Smith in the synonymy of *Oedipus nasalis* Dunn.

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