

## NOTES ON GEOGRAPHIC DISTRIBUTION

### Amphibia, Anura, Hylidae, *Hylomantis medinai*: Distribution extension by discovery of a third population.

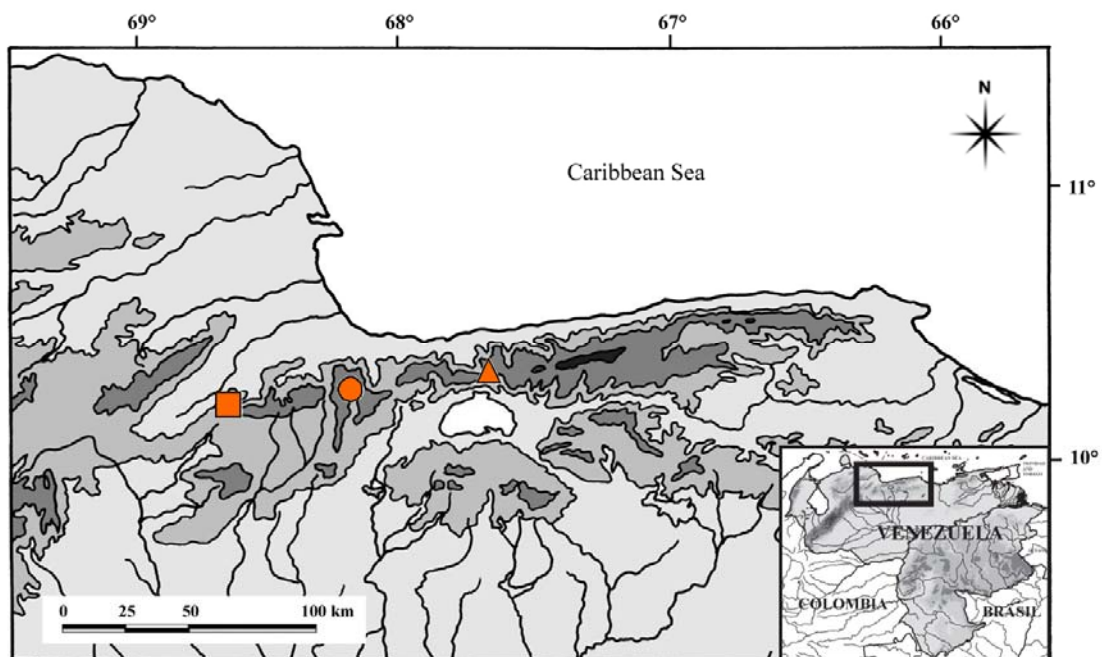
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*Hylomantis medinai* is a lemur frog included in the *H. buckleyi* group (Cannatella 1980) and inhabiting Cloud Forest above 1000 m a.s.l. in the Venezuelan Coastal Range (Funkhouser 1962; Manzanilla et al. 1995; Proy 2000). Like the other members of the genus (e.g. *Hylomantis lemur*), it reproduces in small ponds within mountain creeks or adjacent flooded areas (Proy 2000; Kubicki 2004). The species was originally described as *Phyllomedusa medinae* by Funkhouser (1962). Rivero (1967) corrected the specific name to *medinai*, and Faivovich et al. (2005) placed the species in the genus *Hylomantis*.

For a long time the species has been considered endemic to the type locality Rancho Grande (10°21' N, 67°41' W) in Henri Pittier National Park (PNHP, for its initials in Spanish), state of Aragua. *Hylomantis medinai* has not been detected again in Rancho Grande since 1974, and in spite of greatest search efforts carried out by Manzanilla et al. (1995) and Manzanilla (2001) as well as in the time between Januaries of 2005 and 2007 (Javier Valera-Leal, unpublished data) in PNHP between 400 - 1200 m a.s.l., new individuals have not been found neither in the type locality nor in its vicinity.



**Figure 1.** Distribution map showing the three localities known for *Hylomantis medinai* in northern Venezuela: the type-locality Rancho Grande (triangle), Bejuma (circle), and Cerro Zapatero (square).

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After the presence of *H. medinai* in PNHP had not been detected for almost three decades, Proy (2000) collected tadpoles of *H. medinai* from a flooded ditch at 1000 m a.s.l. in a cloud forest west of PNHP (10°18' N, 68°14' W), near the town Bejuma, state of Carabobo. Recently, during a field trip in October 2006 to the western extensions of the central Coastal Range, we observed several specimens of *H. medinai* on Cerro Zapatero (10°14' N, 68°38' W), between the towns of San Felipe and Nirgua, state of Yaracuy (see Figure 1). Two specimens (MIZA 405 and 406; male and female, respectively) were deposited at Museo del Instituto de Zoología Agrícola de la Universidad Central de Venezuela (MIZA). Directly comparing their morphological

and color characteristics with a paratype (EBRG-36) of the species, they were identified as *H. medinai* sensu Cannatella (1980) and Funkhouser (1962). This identification has been verified by Jesús Manzanilla. Now, three populations of *H. medinai* are known, whereas the last localities (Bejuma and Cerro Zapatero) represent range extensions of approximately 60 and 100 km west of the type locality, respectively. The population of Cerro Zapatero was encountered around a still pond situated in a depression between two peaks of the mountain at 1300 m a.s.l. Some males were calling, while other adults were found in amplexus (Figure 2 shows the collected specimens MIZA 405 and 406 as they were found).



**Figure 2.** Amplexing pair of *Hylomantis medinai* on the banks of a still pond on Cerro Zapatero, Venezuela (male: MIZA 405; female: MIZA 406).

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Among the frogs of the *H. buckleyi* group (Cannatella 1980; Faivovich et al. 2005), *H. danieli*, *H. psilopygion* and *H. medinai* are not assigned to any IUCN Red List category representing threat risk, but are listed as "Data Deficient" (Bolívar et al. 2004; Castro et al. 2004b; Manzanilla and La Marca 2004b). According to IUCN (2001), this category is applied to species for which the available information on distribution and/or population status is inadequate to assess the risk of extinction.

*Hylomantis medinai* is not the only amphibian that has literally vanished from Rancho Grande: Other species whose presence has not been reaffirmed in PNHP are the salamander *Bolitoglossa borburata*, the marsupial frog *Gastrotheca ovifera*, and the harlequin frog *Atelopus cruciger*, the latter two species having been quite abundant throughout most of the twentieth century (Manzanilla 2001; Manzanilla et al. 1995; Manzanilla and La Marca 2004a). In the case of Venezuelan species of *Atelopus*, the chytrid fungus *Batrachochytrium dendrobatidis* is assumed to have played a role in their respective population declines (Bonaccorso et al. 2003; Lampo et al. 2006).

On the base of these extensions of the geographical distribution (although the presence of *H. medinai* in Bejuma is to be verified as Proy (2000) did not mention any voucher specimens

and the results obtained by a study that is currently being carried out in the Costal Range (with the support of the fund IEA-Provita, Venezuela) concerning the status of knowledge on *H. medinai* (Valera-Leal et al., in progress), the necessity arises to carry out detailed studies on the populational status of *H. medinai* as well as the presence of *Batrachochytrium dendrobatidis* in the members of its populations. Thus reevaluating the current status of conservation of this rare species will allow for the proposal of programs that benefit the preservation of this lemur frog directly and other species indirectly.

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