



Media only: Beth King +507 212-8216 or kingb@si.edu

26 Sept., 2014

Media website: [STRI News Releases](#)

Scientists Discover New Poison Dart Frog Species in Donoso, Panama

A bright orange poison dart frog with a unique call was discovered in Donoso, Panama by researchers from the Smithsonian Tropical Research Institute and the Universidad Autónoma de Chiriquí in Panama, and the Universidad de los Andes in Colombia. In the species description published in *Zootaxa*, it was named *Andinobates geminisae* for Geminis Vargas “the beloved wife of [coauthor] Marcos Ponce, for her unconditional support of his studies of Panamanian herpetology.”

Every new species name is based on a representative specimen. The specimen for this species was collected on Feb. 21, 2011 in the headwaters of the Rio Caño, in the district of Donoso, Colón Province, Panama by Samuel Valdés, then MWH Global Inc. environment office director, and his field assistant, Carlos de la Cruz. Additional specimens were collected between the Rio Coclé del Norte and the Rio Belen by biologists Marcos Ponce and Abel Batista, then a student at the Universidad Autónoma de Chiriquí. The specimens were deposited in the Museo de Vertebrados at the University of Panama, the Museo Herpetológico de Chiriquí at the Universidad Autónoma de Chiriquí and in the Círculo Herpetológico de Panamá.

“Abel Batista and Marcos Ponce were the first to note the presence of this species,” Smithsonian herpetologist, Cesar Jaramillo, said. “They’ve known it was there for several years. However, they were not sure if it was only a variety of another poison dart frog species, *Oophaga pumilio*, which exhibits tremendous color variation. Based on morphological characteristics of the adult and the tadpole, I thought it might be a new species of *Andinobates*.” Andrew Crawford, professor at Universidad de Los Andes and former STRI postdoctoral fellow, sequenced the DNA, confirming that this was a new species of *Andinobates*. Genetic information about this species is available in the Barcode of Life Data System and in GenBank. A recording of the call is available at AmphibiaWeb.org.

Because this new frog species appears to be found in only a very small area, habitat loss and collecting for the pet trade are major threats to its existence. The authors recommend the formulation of special conservation plans to guarantee its survival. *Andinobates geminisae* will be bred in captivity by the Panama Amphibian Rescue and Conservation project, a consortium of six zoos and

research institutions dedicated to saving amphibians from the chytrid fungal disease, which is decimating amphibians worldwide, and habitat loss.

All collecting and export were done with permission from Panama's Environmental Authority, ANAM. Financial support for this study came from MWH Global, Inc. and Minera Panama. Funding for DNA sequencing was provided by a CBOL grant to barcode the vertebrates of Panama.

For more information about amphibian biodiversity in Panama, visit amphibianrescue.org or the Smithsonian's new exhibit, *Las Fabulosas Ranas de Panama* at Culebra Point Nature Center on Amador Causeway in Panama City.

The Smithsonian Tropical Research Institute, headquartered in Panama City, Panama, is a unit of the Smithsonian Institution. The Institute furthers the understanding of tropical nature and its importance to human welfare, trains students to conduct research in the tropics and promotes conservation by increasing public awareness of the beauty and importance of tropical ecosystems. Website: www.stri.si.edu.

###

Batista, A., Jaramillo, C.A., Ponce, M., Crawford, A. 2014 A new species of Andinobates (Amphibia:Dendrobatidae) from west central Panama. *Zootaxa* 3:333-352
<http://dx.doi.org/10.11646/zootaxa.3866.3.2>