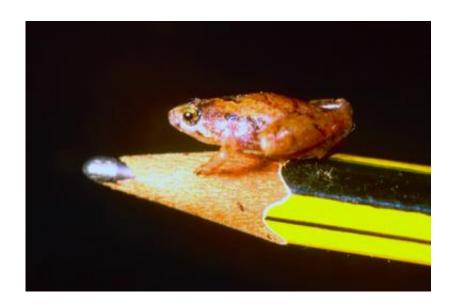


Amazing discovery in Borneo: Tiny, new, peasized frog is old world's smallest

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A new species of miniature frog was discovered in Borneo. Microhyla nepenthicola, shown here on the tip of a pencil, is about the size of a pea. © Prof. Indraneil Das/ Institute of Biodiversity and Environmental Conservation

The smallest frog in the Old World (Asia, Africa and Europe) and one of the world's tiniest was discovered inside and around pitcher plants in the heath forests of the Southeast Asian island of Borneo. The pea-sized amphibian is a species of microhylid, which, as the name suggests, is composed of miniature frogs under 15 millimeters.

The discovery published in the taxonomy journal *Zootaxa* was made by Drs. Indraneil Das and Alexander Haas of the Institute of Biodiversity



and Environmental Conservation at the Universiti Malaysia Sarawak, and Biozentrum Grindel und Zoologisches Museum of Hamburg, respectively, with support from the Volkswagen Foundation. Dr. Das is also leading one of the scientific teams that is searching for the world's lost amphibians, a campaign organized by Conservation International and IUCN's Amphibians Specialist Group.

"I saw some specimens in museum collections that are over 100 years old. Scientists presumably thought they were juveniles of other species, but it turns out they are adults of this newly-discovered micro species," said Dr. Das.

The mini frogs (*Microhyla nepenthicola*) were found on the edge of a road leading to the summit of the Gunung Serapi mountain, which lies within Kubah National Park. The new species was named after the plant on which it depends to live, the Nepenthes ampullaria, one of many species of pitcher plants in Borneo, which has a globular pitcher and grows in damp, shady forests. The frogs deposit their eggs on the sides of the pitcher, and <u>tadpoles</u> grow in the liquid accumulated inside the plant.





A freshly metamorphosed (averaging 3.5mm) Microhyla nepenthicola sp. nov. on a penny. The Old' World's smallest frog and one of the world's tiniest was found in the heath forests of Borneo. © Prof. Indraneil Das/ Institute of Biodiversity and Environmental Conservation

Adult males of the new species range between 10.6 and 12.8 mm - about the size of a pea. Because they are so tiny, finding them proved to be a challenge. The frogs were tracked by their call, and then made to jump onto a piece of white cloth to be examined closer. The singing normally starts at dusk, with males gathering within and around the pitcher plants. They call in a series of harsh rasping notes that last for a few minutes with brief intervals of silence. This "amphibian symphony" goes on from sundown until peaking in the early hours of the evening.

Amphibians are the most threatened group of animals, with a third of them in danger of extinction. They provide important services to humans such as controlling insects that spread disease and damage crops and helping to maintain healthy freshwater systems. Teams of scientists from Conservation International and IUCN's Amphibian Specialist Group around the world have recently launched an unprecedented search in the hope of rediscovering 100 species of "lost" amphibians - animals considered potentially extinct but that may be holding on in a few remote places.

The search, which is taking place in 20 countries on five continents, will help scientists to understand the recent amphibian extinction crisis. Dr. Das is leading a team of scientists who will search for the Sambas Stream Toad (*Ansonia latidisca*) in Indonesia and Malaysia in September. The toad was last seen in the 1950s. It is believed that increased sedimentation in streams after logging may have contributed to the decline of its population.



"Amphibians are quite sensitive to changes in their surroundings, so we hope the discovery of these miniature frogs will help us to understand what changes in the global environment are having an impact on these fascinating animals," said Conservation International's Dr. Robin Moore, who has organized the search on behalf of IUCN's Amphibian Specialist Group.

More information: To follow the search for the lost amphibians visit:

www.conservation.org/lostfrogs

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www.mapress.com/zootaxa/2010/f/z02571p052f.pdf

Provided by Conservation International

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