

Peretti Museum Foundation Introduces *Yaksha perettii* To World Through Documentary

Species from a lost world: *Yaksha perettii*



For immediate release (6 November 2020)

Meggen, Switzerland - A new animal species named *Yaksha perettii* has been discovered in the amber collection of the Peretti Museum Foundation in Meggen where the unique specimen is kept for safekeeping. Its story will now be told through the documentary, “Species from a lost world: *Yaksha perettii*”.

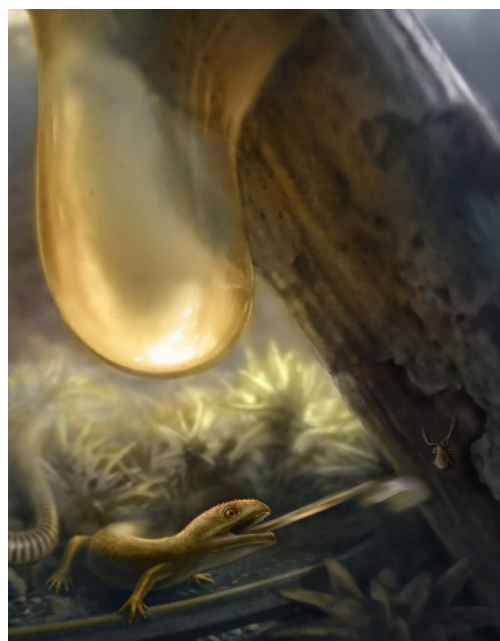


Fig. 1: Artwork of life reconstruction of *Yaksha perettii* by Stephanie Abramowicz (with permission)

The previously unidentified animal, which was discovered within a piece of amber, was an elusive creature belonging to the animal lineage of Albanerpetontidae – an amphibian similar to today’s chameleons or lizards, but in effect not belonging to either of those animal groups.

Albanerpetontids likely resembled tiny lizards more than salamanders. It was a sit-and-wait predator, living in or around trees, and it used its ballistic tongue to catch small insects, much like chameleons found today in Madagascar do.

The new species was discovered inside a piece of amber as a mere one-centimeter-long inclusion of its head, with the body in a second sample, by the founder and director of the Peretti Museum Foundation, Dr. Adolf Peretti, during field work in Myanmar. The final identification was made by an international team of experts and was published recently in the world-renowned journal “Science” (6 November 2020, Vol 370, Issue 6517).

Yaksha perettii is a so-called holotype. Only the most prestigious museums are allowed to harbor holotypes. It is a huge privilege and honor that the international community has decided to trust the Peretti Museum Foundation in safeguarding this important fossil.

WHAT'S IN A NAME?

The name of the new species – *Yaksha Perettii* – derives from a mythical Asian spirit, the guardian of natural treasures hidden in the earth or within tree roots, as well as from Dr. Peretti, who has done fieldwork and participated in humanitarian missions in Myanmar, formerly known as Burma, for the last 10 years.

A BEAUTY IN AMBER

Nobody knows exactly why this elusive form of amphibian was present on earth at the time or what their specific evolution was that justified their existence – until now. Under a microscope, *Yaksha perettii* was the most beautiful amber inclusion Dr. Peretti had ever seen during his career.

Dr. Peretti recounted how he discovered the new species in Myanmar: “When I saw it the first time under the microscope, I was taken aback by the extreme impression the skull made on me, a really ancient-looking animal that [looking at it] sent a shiver down my spine, particularly the arrangement of his teeth and the shape of the head.

“The surrounding amber was of a golden color with high clarity, a true jewel of its own. Then I spotted a long, tiny bone emerging from the skull of this mesmerizing discovery. It was a moment when you know that a unique discovery is made. It turned out that this bone was used by the animal to project a tongue – similar to what chameleons do today.”



Fig. 2: Picture of the original Amber containing *Yaksha perettii*. The sample is stored in the Peretti Museum Foundation (www.pmf.org) and can be inspected by research scientists on demand.

To capture the interest of the scientific community to study this new amber inclusion and publish it in one of the most highly recognized journals of the scientific world, Dr. Peretti set out on a global tour in 2019, carrying the piece to the world's best laboratories in the United States and Australia for the most sophisticated analysis.

One of the laboratories he visited was the renowned scan laboratory in Austin, Texas (UTCT), which specializes in the analysis of dinosaur bones. He also visited a Synchrotron laboratory in Melbourne, Australia (ANSTO), for the fine-tuning of the results, using parallel x-ray beams that can produce even higher resolutions.

Finally, Dr. Peretti invited a dozen of the world's leading international experts to a symposium in Bangkok, Thailand, in December 2019. After an entire week of intense work using the high-tech results from the laboratories he visited along with the help of in-house high-performance computers and specialized microscopes of the workshop members, the group arrived at its final conclusion concerning the amber inclusion: It was, indeed, a new animal species – a discovery meriting publication in one of the world's finest research journals, “Science”.

DOCUMENTING THE DISCOVERY

The discovery of this new animal species was truly a relentless adventure – one that if so, only happens once in a lifetime. This process of discovery should never be forgotten, and thanks to an early decision, the entire research process was captured on camera.

The idea was to document the special efforts it takes to discover a new animal. The resulting documentary, “Species from a Lost World: *Yaksha perettii*”, is probably the only documentary that shows in real time how a new species is discovered and what, exactly, the process takes.

Dr. Peretti knew that an exclusive documentary on this case should not go unmade. In his relentless effort to investigate the formation of gemstones, he has made extraordinary findings, such as new minerals, including Perettiite (a name for a single mineral and an entire new mineral group) and also life forms dating from dinosaur times, preserved and included in amber. It is such lifetime experiences that he absolutely wants to share with the world.

The unique discovery of *Yaksha perettii* as a new animal species is among the first highlights of the privately initiated Peretti Museum Foundation.

The Peretti Museum Foundation is proud to announce that it is now safeguarding one of the most important amber collections in the world, including various life forms dating back to the age of the dinosaurs. The museum is convinced that its enormous collection has just started to surprise the world with a host of new discoveries – a process that it promises to escalate over the next years.

Peretti Museum Foundation (PMF)
Baumschulweg 13
6045 Meggen
Switzerland

www.pmf.org

In cooperation with GRS Gemresearch Swisslab AG
www.gemresearch.ch

Watch 3D animation of the Yaksha perettii skull



1. Download “GRS AR” app from App Store or Google Play Store
2. Directly scan the above skull image using the AR function of the GRS AR app OR
3. Scan the QR code using the GRS AR app



Scan to download GRS AR app



Scan to watch skull clip using GRS AR app



Scan to watch skull on clip on YouTube



Scan to watch full documentary on YouTube

Facebook: www.facebook.com/gemresearch
YouTube: www.youtube.com/gemresearch
Instagram: [@grslab](https://www.instagram.com/grslab)

Powered by



GRS
Augmented Reality