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Yakamys sirindhornae: 34-Million-Year-Old Dog-Sized Rodent Fossils From Thailand Rewrite Early Mammal Evolution

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Two oversized fossilized teeth unearthed more than two decades ago in a southern Thailand coal mine belong to a previously unknown species of giant prehistoric rodent that weighed roughly 30 kilograms (66 pounds) -- about the size of a Labrador retriever. Formally named Yakamys sirindhornae in a November 4, 2026 study published in Scientific Reports , the 34-million-year-old late Eocene mammal doubles the known body-mass ceiling for rodents of its era and demonstrates that rodent gigantism emerged in Southeast Asia millions of years earlier than South America's famous giant rodents.

Because mammalian teeth are capped with dense, wear-resistant enamel, isolated molars and incisors often survive in ancient swamp and coal-forming sediments long after softer skeletal bones decay. By measuring tooth dimensions against living and extinct rodent families, paleontologists can reliably reconstruct an animal's body size and dietary ecology from just a pair of well-preserved teeth.

A Giant Among Late Eocene Rodents

The fossil specimens -- a lower second molar and a lower incisor -- were originally collected in 2004 by geologists working in the Bang Mark Pit of the Krabi lignite mine in Krabi Province, southern Thailand. Subsequent anatomical comparisons placed the fossils within Ischyromyidae, an extinct family of early rodents that inhabited the Northern Hemisphere and tropical Asia during the Paleogene period.

To reflect the animal's unusual stature, researchers named the new genus Yakamys , combining the Thai word for giant (yak) with the Greek word for mouse or rat (mys). At an estimated 30 kilograms (66 pounds), Yakamys sirindhornae was roughly twice as heavy as any other known rodent from the late Eocene, standing out sharply in ecosystems where most rodents weighed only a few hundred grams to a few kilograms.

| Paleontological Feature | | Observed Record for Yakamys sirindhornae | | Evolutionary Significance |

| Taxonomic Classification | | Rodentia: Ischyromyidae (extinct family) | | Expands known morphological range of early rodents |

| Geological Age | | ~34 million years ago (Late Eocene) | | Predates South American giant caviomorph radiations |

| Discovery Locality | | Bang Mark Pit, Krabi lignite mine, Thailand | | Highlights Southeast Asia as a Paleogene diversity hub |

| Fossil Material | | Lower second molar & lower incisor (collected 2004) | | Enamel preservation enables body-mass reconstruction |

| Estimated Body Mass | | ~30 kg (~66 lbs, Labrador-sized) | | Twice as heavy as contemporaneous Eocene rodents |

Why Rodent Gigantism Matters for Mammal Evolution

For decades, paleontologists associated extreme rodent gigantism primarily with much younger South American fossil beds from the Miocene and Pliocene epochs, where giant capybara relatives evolved in relative continental isolation. The Krabi discovery shows that large-bodied rodents were not exclusively a late South American phenomenon.

During the late Eocene, roughly 34 million years ago, southern Thailand hosted lush, swampy tropical forests rich in peat-forming vegetation -- the same wetlands that eventually compressed into the Krabi lignite coal seams. Abundant year-round plant food and warm tropical temperatures likely supported larger herbivorous or omnivorous rodents capable of defending territories and digesting tough plant matter.

Southeast Asia's Overlooked Paleogene Record

Beyond rewriting the timeline of rodent body-size evolution , Yakamys sirindhornae underscores how much early mammalian history remains hidden in museum drawers and under-sampled tropical basins. Although the two Krabi teeth sat in collections for more than 20 years after their 2004 excavation, detailed taxonomic re-examination unlocked a major evolutionary milestone -- reminding researchers that Southeast Asia played a far more active role in early Paleogene mammal diversification than previously recognized.

References & Primary Sources

* [1] Scientific Reports (2026). Yakamys sirindhornae (Rodentia: Ischyromyidae) from the late Eocene of Krabi Province, southern Thailand. -- https://doi.org/10.1038/s41598-026-76711-6

* [2] ScienceDaily (2026). 34-million-year-old giant rodent fossils uncovered in southern Thailand. -- https://www.sciencedaily.com/

* [3] SciTechDaily (2026). Fossil Teeth Reveal Ancient Dog-Sized Rodent in Late Eocene Thailand. -- https://scitechdaily.com/