

Review of: "Ancient DNA Clarifies the Identity and Geographic Origin of the Holotype of the Genus *Ctenomys*"

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Potential competing interests: No potential competing interests to declare.

The work of Renan Maestri and co-authors represents well-done interdisciplinary research addressing the identity of the type species of the highly diverse genus *Ctenomys*, namely *C. brasiliensis*. It provides molecular and morphological data that convincingly support the understanding of Blainville's type specimens as the primary type reference for the *C. minutus* species complex.

At the same time, it shows the enormous value of our scientific collections, not only as a material basis for morphological studies but also as a source of molecular information that could help, among many others, to solve taxonomic and geographical issues.

After seeing a number of excellent reviews posted, I will confine myself to a suggestion on the fundamental issue of the manuscript, which is the relationships of Blainville's type specimen to the other individuals representing the currently recognized species of *Ctenomys*.

The ideal phylogenetic condition to argue in favor of *C. brasiliensis* as an individual part of the lineage represented by *C. minutus* is to see it branching off within a monophyletic clade bringing together all individuals considered to be *C. minutus*.

I understand that in Supplementary Data S2, which I was unable to access, an illustration is provided of Cyt b-based relationships in which "it nested entirely within *C. minutus* sequences."

I would definitely advise including it in the main text, emphasizing that a "sister-group" relationship would not, in itself, be a necessary condition that would unquestionably endorse the proposed synonymy.