## Scientific note

## Snake (*Ithycyphus miniatus*) predation on mouse lemur (*Microcebus tavaratra*) in Montagne des Français, northern Madagascar

(Squamata, Serpentes and Mammalia, Primates)

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Ithycyphus miniatus is a widespread, arboreal, diurnal snake endemic to Madagascar which inhabits diverse habitats ranging from low elevation humid and dry forest to scrubland from the north and west of the island (Cadle et al. 2022).

During our ongoing research on the bio-ecology of chameleons in the Montagne des Français, Camp Centre Mikajy Andavakoera (12°20'3.30"S, 49°21'28.84"E, 93 m a.s.l.) in far northern Madagascar, an adult female of *I. miniatus* was observed preying on an adult female of the mouse lemur *Microcebus tavaratra*. Both species are, respectively, the only representatives of the *Ithycyphus* and *Microcebus* genera existing in the Montagne des Français (D'Cruze et al. 2007, Sabel et al. 2009).

The observation took place on 6 April 2025 within an abandoned nest of *M. tavaratra*, but freshly rehabilitated with green leaves by a new pair. Under the shade of a large jackfruit tree *Artocarpus heterophyllus*, the nest, about 5 m high, was located in an endemic threatened tree *Grewia sely* at about 20 m away from our working table.

At 11:00 a.m. we heard a loud and repeated alarming call from the male mouse lemur. At this time, part of the female's head was already in the predator's mouth. For a few minutes, the female mouse lemur's tail was still moving, swinging from side-to-side and up-and-down, thus indicating its sign of life. The snake began swallowing its prey just after the cessation of the tail movement. The head of the prey was completely swallowed within 20 mins from the beginning of the event (11:20 h). The ingestion stopped briefly when reaching the front limbs of the captured prey. The prey was completely consumed by 12:10 h, denoting the total predation time at one hour and ten minutes since our first observation. Unfortunately, a photo camera was not available to document this behaviour.

Although *I. miniatus* is known as frog eater (Glaw & Vences 2007), it has also been found preying on the closely related grey mouse lemur *M. murinus* and other small mammals (Goodman et al. 1993). This observation

is the first recorded observation of predation by *I. miniatus* on *M. tavaratra*. As both species are very common, particularly in northern Madagascar (Glaw & Vences 2007, Louis Jr. et al. 2008), predation on *M. tavaratra* by *I. miniatus* is likely more frequent, especially in the open deciduous forest where *M. tavaratra* nests are easily spotted by predators.

## References

Cadle, J. E., Scherz, M. D., Ruane, S., Burbrink, F. T., Raxworthy, C. J. & Glaw, F. 2022. Pseudoxyrhophiidae and Psammophiidae, Colubroid snakes, *Bibilava*. Pp. 1525–1531 in: Goodman, S. M. (ed.). The new natural history of Madagascar. Princeton and Oxford (Princeton University Press)

D'Cruze, N., Sabel, J., Green, K., Dawson, J., Gardner, C., Robinson, J., Starkie, G., Vences, M. & Glaw, F. 2007. The first comprehensive survey of amphibians and reptiles at Montagne des Français, Madagascar. Herpetological Conservation and Biology 2: 87–99.

Glaw, F. & Vences, M. 2007. A field guide to the amphibians and reptiles of Madagascar. 3rd edition, 424 pp., Verlag Vences & Glaw.

Goodman, S. M., O'Connor, S. & Langrand, O. 1993. A review of predation on lemurs: implications for the evolution of social behavior in small, nocturnal primates. Pp. 51-66 in: Kappeler, P. M. & Ganzhorn, J. U. (eds). Lemur social systems and their ecological basis. Boston (Springer).

Louis Jr., E., Engberg, S., McGuire, S., McCormick, M., Randriamampionona, R., Ranaivoarisoa, J., Bailey, C., Mittermeier, R. & Lei, R. 2008. Revision of the mouse lemurs, Microcebus (Primates, Lemuriformes), of northern and northwestern Madagascar with descriptions of two new species at Montagne d'Ambre National Park and Antafondro Classified Forest. Primate Conservation 23: 19–38.

Sabel, J., Green, K., Dawson, J., Robinson, J., Gardner, C., Starkie, G. & D'Cruze, N. 2009. The conservation status of mammals and avifauna in the Montagne des Français massif, Madagascar. Madagascar Conservation & Development 4: 44–51.

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