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ON THE SIGNIFICANCE OF THE 'TCHI-FAK': A REFLECTION ON SPECIES-RECOGNITION IN LOUD CALLS OF SIFAKAS (*PROPITHECUS SPP.*)

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Madagascar is one of the top global biodiversity hotspots with extremely high endemism rates for both flora and fauna, and the diversity of its endemic primates is still not completely known. Traditionally, scientists divided the genus into 3 species – *Propithecus diadema*, *P. verreauxi*, and *P. tattersalli* – with 4-5 subspecies in each of the first taxa, but recent studies have suggested that a larger number of distinct species should be recognized. Because vocalizations of non-human primates are predominately innate, vocal variation may be important in characterizing population divergence. In this study, I characterized geographical variation in the “Tchi-fak” - loud calls among wild *P. verreauxi* and its subspecies as well as *P. tattersalli*. Acoustic analyses revealed differences in call structure between all 5 taxa. In order to test whether differences in the acoustic structure of the taxon-specific loud calls are also perceived by sifakas, I conducted playback experiments with these calls in four different populations. Individuals differentiated calls that diverged strikingly in acoustic structure from their own calls, but there was no clear-cut differentiation between taxa, reflecting either the lack of discrimination between some taxa or the relatively recent divergence process among taxa.

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