



THE FIRST OBSERVATION OF *MYZOPODA* SP. (MYZOPODIDAE) ROOSTING IN WESTERN MADAGASCAR



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Key words: *Myzopoda*, roost, cave, western Madagascar

Myzopodidae is an endemic family to Madagascar and is currently considered to be monospecific (SCHLIEMANN and GOODMAN 2003). *Myzopoda aurita* (MILNE-EDWARDS and GRANDIDIER, 1878) is a long-eared microchiropteran with distinctive adhesive suckers on the thumb and sole (SCHLIEMANN and MAAS, 1978). This species was formerly listed as 'vulnerable' because of habitat loss (HUTSON *et al.* 2001), but in the 2005 Global Mammal Assessment workshop in Antananarivo, Madagascar, it was provisionally classed as 'least concern' because of its reported association with degraded habitats and unpublished accounts of high local population abundance. It is known to occur in the eastern side of the island, at elevations up to 900 m. Individuals have been captured in relatively intact humid and littoral forests, agricultural areas, and near marsh habitats. An observation in 1947 (reported in SCHLIEMANN and MAAS, 1978) of an individual inside an uncoiled leaf of the Traveler's tree (*Ravenala madagascariensis*, Family Strelitziaceae) and

observations by GÖPFERT and WASSERTHAL (1995) of a captive bat roosting head up on such leaves are the only published accounts of its roosting ecology and have been used to infer a close association with broad-leaved plants (SCHLIEMANN and GOODMAN 2003). We report here on the first known roosting site of *Myzopoda* sp. in western Madagascar, which in this case was in a cave. The taxonomic status of this population is currently under review (GOODMAN, *et al.*, submitted); hence, we refer to it as "*Myzopoda* sp." herein.

On 13 October 2004 our team surveyed Andriabe Cave in the Parc National de Namoroka, Province de Mahajanga, western Madagascar (16° 24' 30.6" S, 045° 18' 39.5" E, 5 km south of Namoroka village). The habitat surrounding the cave site is dry deciduous forest resting on exposed limestone and dominated by karst habitat. The cave contains several different chambers and has a total length of 30 m, width of 15 m, and average height of 18 m (Figure 1). At 12h00 a colony of four *Myzopoda* sp. was found roosting 15 m from the

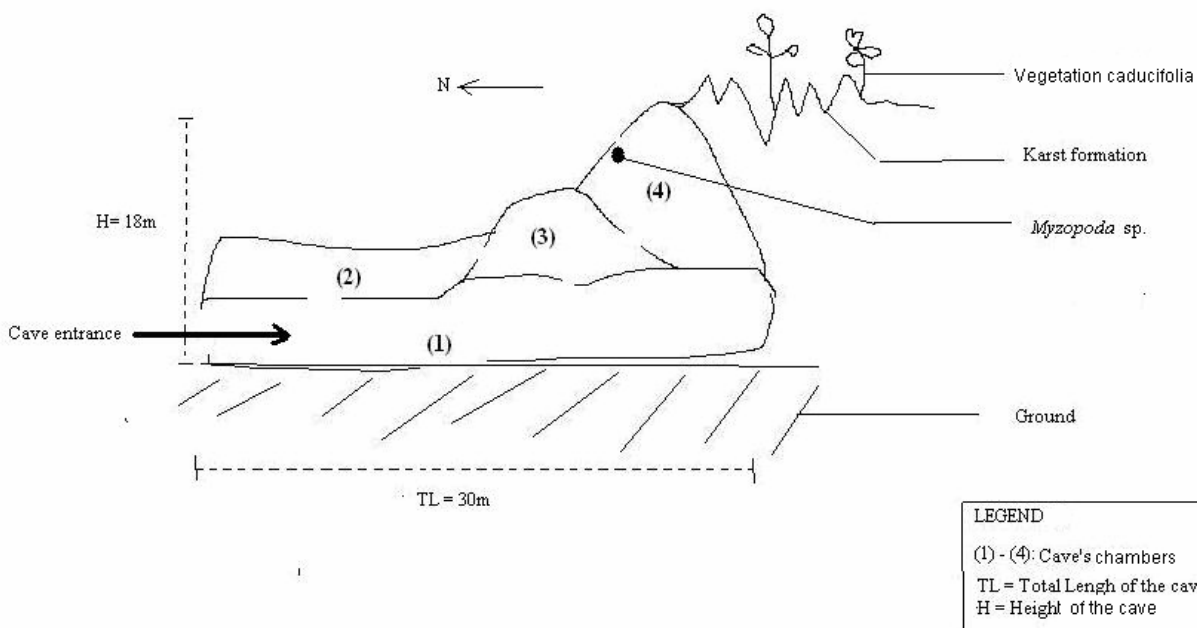


Figure 1: Sketch map of Andriabe Cave and placement of the *Myzopoda* roost.

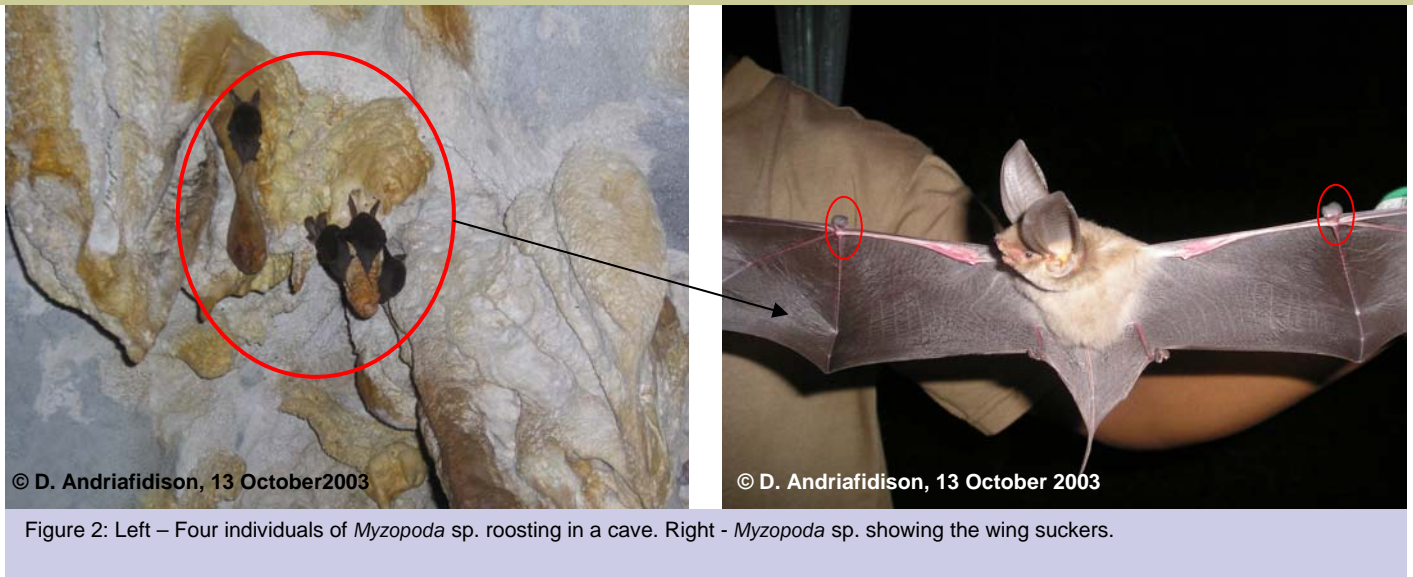


Figure 2: Left – Four individuals of *Myzopoda* sp. roosting in a cave. Right - *Myzopoda* sp. showing the wing suckers.

ground in a dark part of the cave, about 20 m from the entrance, and were easily approached without provoking disturbance. They were first located at a distance of 6 m from the observer and all were roosting in a vertical position against the cave wall, with their heads up (Figure 2). It was our impression that the bats at this point had not been distressed by our presence and they were in their natural roosting positions. On closer approach, the animals started to vertically climb the rock face, but it was not possible to determine the extent to which the claws or sucker-pads were being used. Subsequently, all four bats were captured with a hand net and consisted of three females (two with large mammae) and a male with large descended testes. Two individuals were collected as voucher specimens (an adult female RBJ 203 and an adult male RBJ 204) as allowed by the permit issued by the Ministre de l' Environnement, Eaux et Forêt (Permit # 139, 5/7/04), which were deposited in the collections of the Department of Animal Biology, University of Antananarivo, Madagascar.

An extensive bat survey of western Madagascar found no *Myzopoda* sp. roosting inside caves (GOODMAN *et al.* 2005). Furthermore, members of this genus were not found on a previous visit to the Andriabe Cave on 26-27 September 2003 (F. RATRIMOMANARIVO pers. comm.). On the basis of these new observations, it is clear that more information is required on the roosting ecology of *Myzopoda*. The presence of a *Myzopoda* in the western Parc National d'Ankarafantsika (GOODMAN *et al.* 2005), a deciduous forest without caves or exposed rock outcrops, suggests that western individuals are not restricted to cave roost sites and may share certain roosting preferences with the eastern *M. aurita*.

ACKNOWLEDGEMENTS

For funding our fieldwork, we are grateful to the Darwin Initiative, Rufford Small Grants, and the Conservation, Food and Health Foundation. For issuing permits for this research we thank the Ministre de l' Environnement, Eaux et Forêt and Association Nationale pour la Gestion des Aires Protégées. Thanks also to the Parc National de Namoroka's management staff. We are also grateful to Steven Goodman and Paul Racey for comments on the manuscript, and the former for taxonomic advice.

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Submitted: 08 March 2006
Accepted: 30 March 2006