

Small Mammals Diversity of Mount Murud

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INTRODUCTION

- ☛ Mount Murud (2438m asl), located on the Limbang and Miri Divisions is the highest mountain in Sarawak (Mjoberg 1925; WWF Malaysia 2003). The vegetation on Mount Murud consists of both lowland forest and montane forest.
- ☛ The purpose of the study was
 - to determine the composition of small mammals in two different study sites at Mount Murud.
 - to compare information gathered from this study with a previous study done by Tuen *et al.* (2003)

SAMPLING SITES

- ☛ Two sampling sites:
 - Raven's Court (≈ 1335 m asl)
 - Merarap Camp (≈ 700 m asl).
- ☛ Previous sampling by Tuen *et al.* (2003):
 - Pa Labata (≈1200m),
 - Raven's Court (≈1335m)
 - Church Camp (≈2000m)

DATA COLLECTION

- ☛ 15 mist nets, 2 four-bank harp-traps and 40 cage traps were used

RESULTS & DISCUSSION

- ☛ A total of 112 individuals of bats comprising 10 species from 3 families, Pteropodidae, Hipposideridae and Vespertilionidae were recorded.
- ☛ Tuen *et al.* (2003) had recorded 79 individuals comprising of 14 species from 6 families of small mammals (Soricidae, Tupaiidae, Pteropodidae, Rhinolophidae, Hipposideridae and Muridae).

- ☛ The capture rate of chiropterans in this study was 66 individuals per 100 net or trap-nights, higher compared to previous work by Tuen *et al.* (2003) which was 26 individual per 100 net nights. This might be due to the usage of four bank harp-traps, which were not available in the previous study by Tuen *et al.* (2003).
- ☛ Forty cage traps were set at each sampling site but no rodents were captured. This may be due to the cage traps were not set up at ideally strategic places in the forest to capture the rodents.

Murina rozendaali

- ☛ Previously only recorded at Poring, Gomantong and Tepadong in Sabah and this endemic species was known to be confined to disturbed lowland dipterocarp forests (Payne *et al.* 1985).
- ☛ Tuen *et al.* (2002) documented *M. rozendaali* in the undisturbed limestone areas at Balambangan Island.
- ☛ *Murina rozendaali* is sub-categorized as Near Threatened in the Low Risk category in IUCN Redlist of Threatened species (Chiroptera Specialist Group 1996).

Comparison of skull measurements of *M. rozendaali* from Mount Murud compared to Payne *et al.* (1985)

Skull measurements	Payne <i>et al.</i> (1985)	This study
Greatest Length	NA	15.07 – 15.55
Condylbasal Length	14.40 – 14.60	14.40 – 14.74
Condylcanine Length	NA	13.95 – 14.04
Maxillary Tooththrow	5.20 – 5.60	5.08 – 5.22
Molar Width	NA	5.11 – 5.63
Canine Width	3.80 – 4.10	3.67 – 3.86

CONCLUSION

- ✓ More microchiroptera were documented with the usage of four bank harp-traps.
- ✓ A new distributional record of *M. rozendaali* were discovered and been updated.
- ✓ More studies using combination of several methods in a single survey should be conducted in highlands to discover and update species distribution as well as the composition especially the high mobility organisms such as bats.
- ✓ For the rodents, combination of cage traps and pit fall traps with several types of baits may give better result in trapping the rodents.

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