

# A Preliminary Assessment of the Moth Diversity in Singapore



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## *Questions . . .*

1. How many species ?
2. Where do they live ?
3. What are they feeding on ?
4. Any local extinctions so far ?
5. More to be asked/answered ...



## *Answering the First Question:*

“How many species ?”

1. Existing literature
2. Examine museum specimens
3. Execute field surveys



# 1. Existing literature

- Holloway: Borneo series (1976-present)
- Murphy, 1989, 1990 etc. (mangroves)
- Poole, 1989: Noctuidae (types)
- Scoble, 1999: Geometridae (types)
- Ades & Kendrick, 2004 (Hong Kong moth list)

## 2. Examine museum specimens

- Raffles Museum of Biodiversity Research  
(National University of Singapore)

(early specimens collected by Morrel, Tweedie)

- The Natural History Museum, London

(early specimens collected by H. N. Ridley, first  
director of the Singapore Botanic Gardens: 1888-1912)



### 3. Execute field surveys

- setting up light sheets/traps
- finding, rearing caterpillars
- canopy research





# Preliminary Outcomes:

- A total of 34 families represented
- More than 700 species documented
- Most speciose group: Noctuidae (300+)
- Singapore: Type locality for 95 species
- improved caterpillar recognition





Family Adelidae

*Nemophora aurisparsella*





Family Zygaenidae

*Pompelon marginata*



Superfamily Pyraloidea

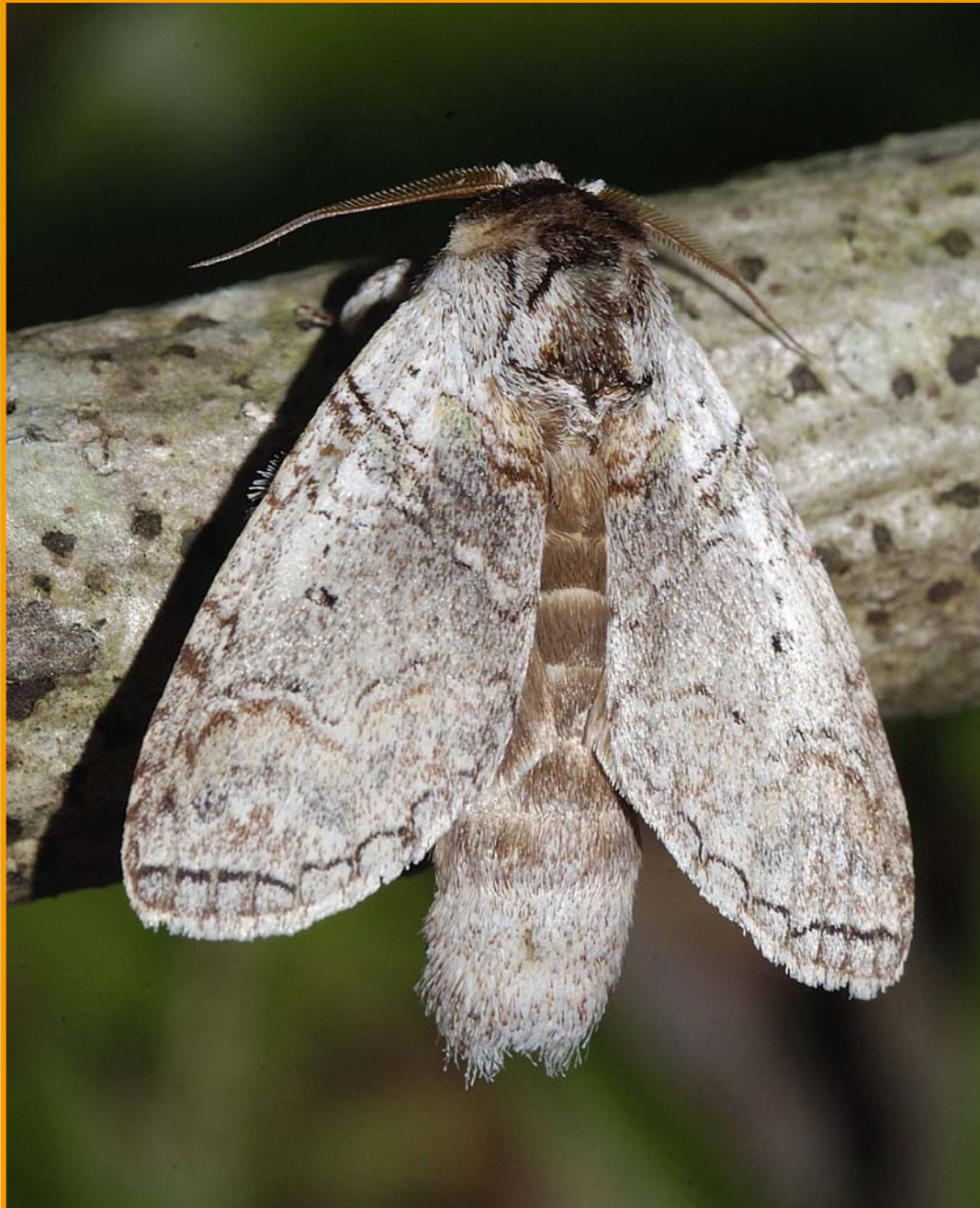




Family Sphingidae







Family Notodontidae  
*Calypteronotum singapura*  
(Gade, 1930)

Family Lymantriidae

*Lymantria singapura*

Swinhoe, 1906



Family Noctuidae

*Mosopia megaspila*

Walker, 1866: 1188



*Thank  
You !*

