

Entomology and stick insect diversity



Entomology

A close-up photograph of a brown stick insect (Phasmatodea) resting on a large green leaf. The insect is positioned diagonally across the frame, with its long, segmented body and thin legs extending from the bottom left towards the top right. The leaf is vibrant green with some lighter, mottled patches. The background is dark, making the insect and leaf stand out.

- Discipline within zoology
- Study of insects
 - Morphology
 - Behaviour
 - Life cycle
 - Pest species
 - Taxonomy
 - ...

Taxonomy

- Classification
- Morphology
- Molecular data (DNA & phylogenetic)
- Biological and zoogeographical data



The research

- Studying relationships between different stick insect species and the description of new species.
- “protocol”
 - Literature study
 - Studying type specimens
 - Field research
 - Preservation
 - Identification and (re)descriptions

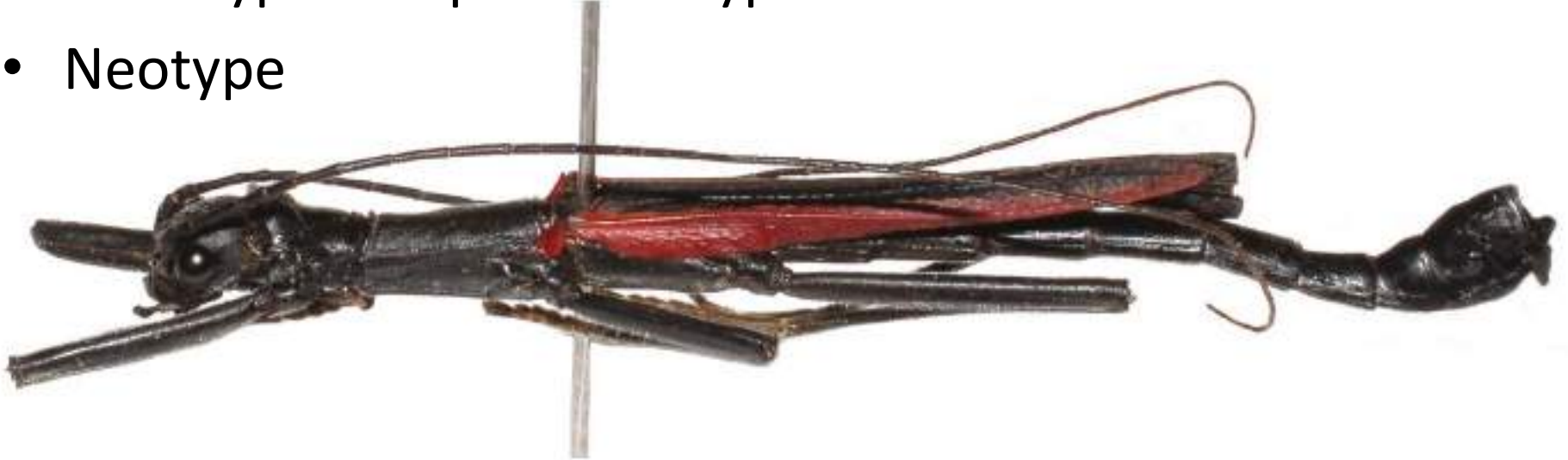
Studying literature

- Publications of different authors
 - Descriptions
 - Images
 - References



Type specimens

- Holotype and paratype (allotype)
- Syntype
- Lectotype and paralectotype
- Neotype



Orthomeria (Orthomeria) kangj

Vallotto et al., sp. n.

HOLOTYPE

det. M. Gottardo VIII. 2015



Philippines, Luzon Island, Benguet,
Sablang, Barangay Bayabas,
5.VI.2014, leg. T. Heitzmann

5 mm

Field research

- Philippines
- Vietnam
 - A step further in the entomodiversity of Vietnam.
- Cambodia
 - Fostering Entomodiversity research in South-East Asia.
Developing regional cooperation between Vietnam and Cambodia in insect taxonomy.



A step further in the entomodiversity of vietnam.



A “typical” collecting day

- Malaise traps
- Day collecting
- Light trapping
- Night collecting!



Malaise trap



Day collecting



Light trapping





Fauna & Flora

- Especially during nighttime
- Material for future publications and presentations
- Documenting biodiversity for other scientists



Stick insects(Phasmida)



Grasshoppers (Orthoptera)



Beetles (Coleoptera)



Lizards



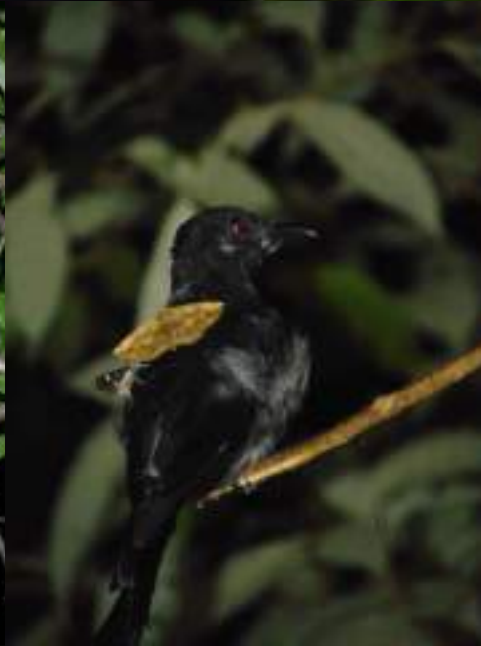
Snakes



Frogs and toads



Birds



Mammals



Flora



Preservation of the material

- In the field and transport
- Mounting
- Labelling, identification and incorporation in the collection



In the field and transport

- Killing jar
- Wood chips
- Ethyl acetate
- Zip-bags



Mounting and putting in the collection



Results Vietnam

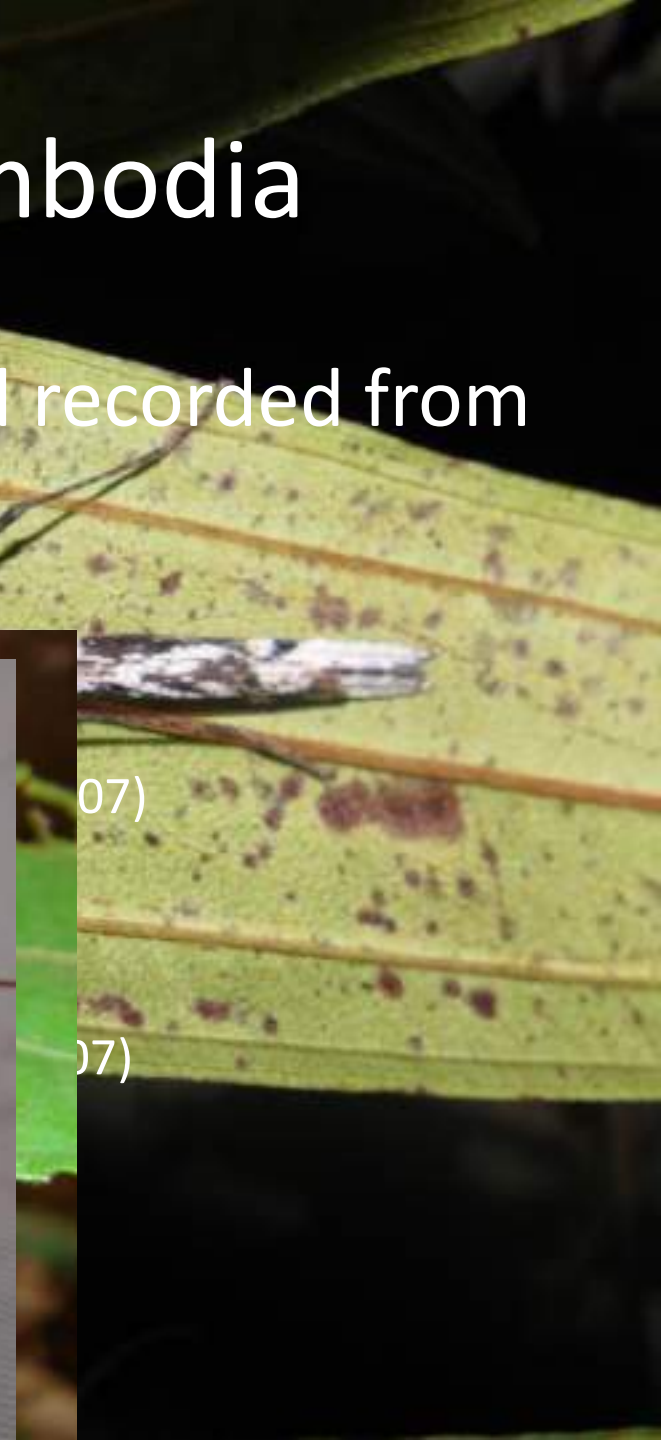
- More than 300 species collected and more than 200 new species
- 2 new genera and 8 new species described





Stick insects of Cambodia

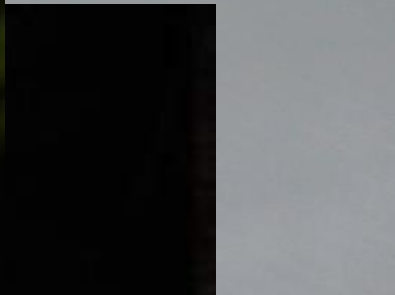
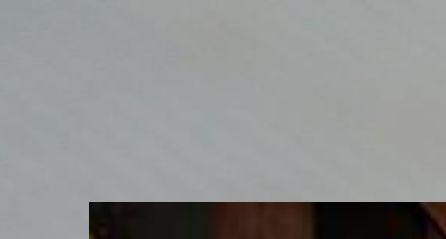
- Only five species described and recorded from Cambodia
 - *Orestes mouhotii* (Bates, 1865)



Stick insects of Cambodia (2)



- N



Thank you for your attention

