

Studying insect communities in New Guinea - the parataxonomist approach

By

Markus Manumbor

New Guinea Binatang Research Center

PO Box 604, Madang, PNG





New Guinea Binatang Research Center

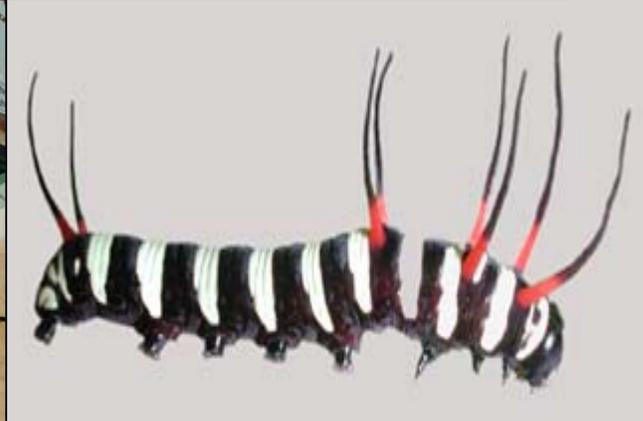
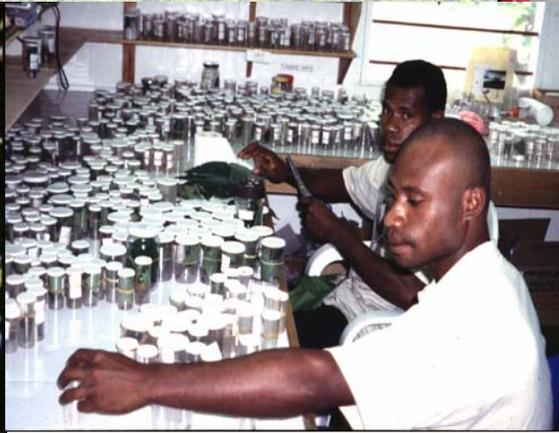
- 11 years of ecology research on PNG
- main station and 2 field laboratories,
- 15 parataxonomists, 3 students,
- 30 village assistants



Various research projects

Host specificity of caterpillars

60,000 caterpillars collected and
20,000 reared from 90 tree
species



Host specificity of *Cerambycidae*

2,500 beetles reared from 3,000kg of timber from 10 tree spp.



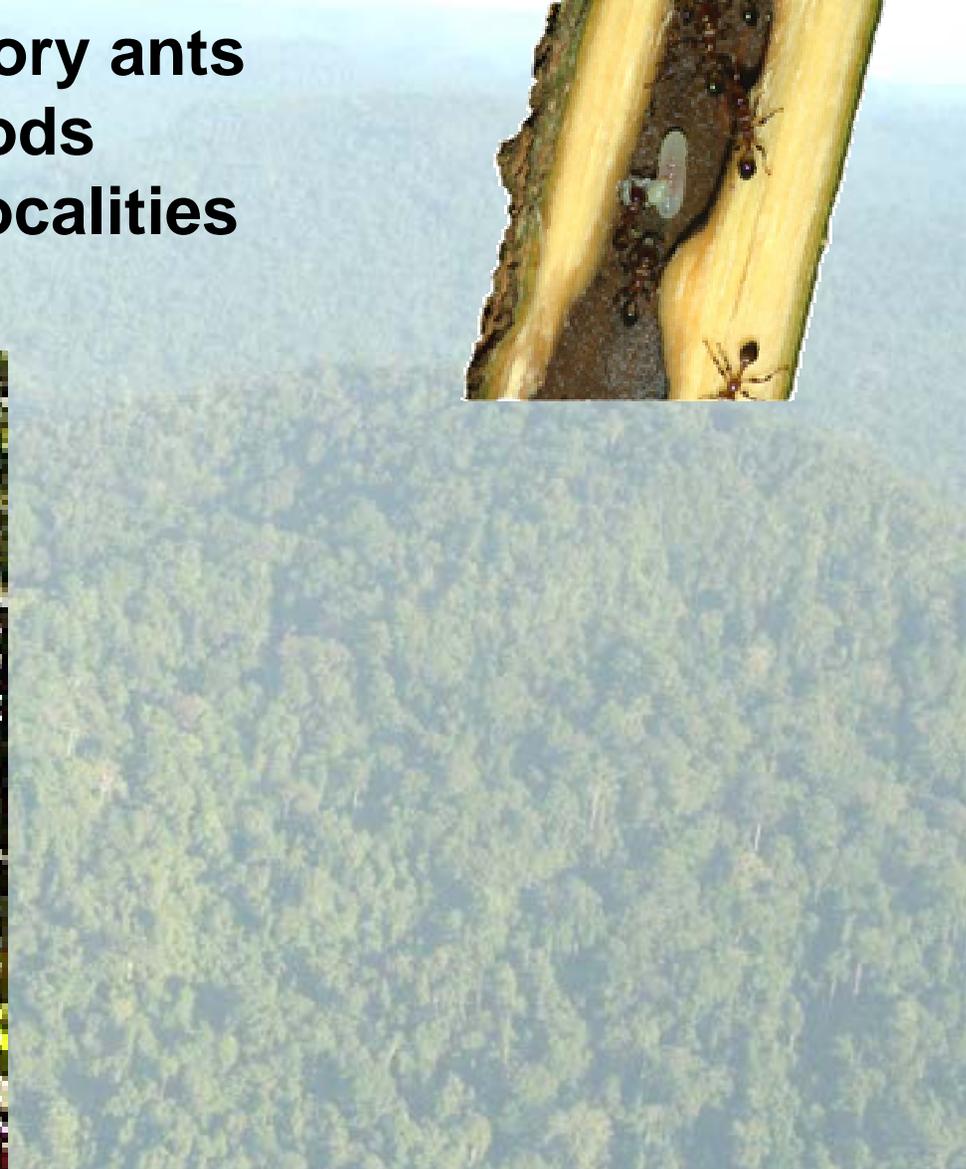
Host specificity of fruit flies

8,000 fruit flies reared from 600 kg of fruits from 170 plant spp.



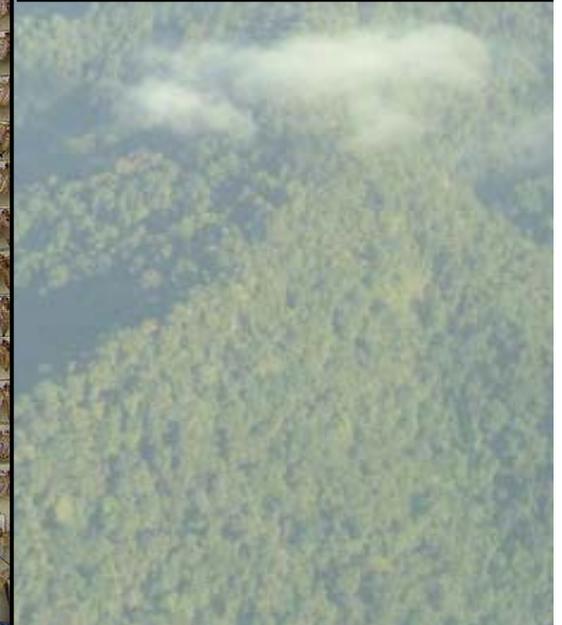
Community structure and beta-diversity of rainforest ants

ground foraging and understory ants collected by 4 different methods in more than 100 plots on 6 localities across PNG



Light trap

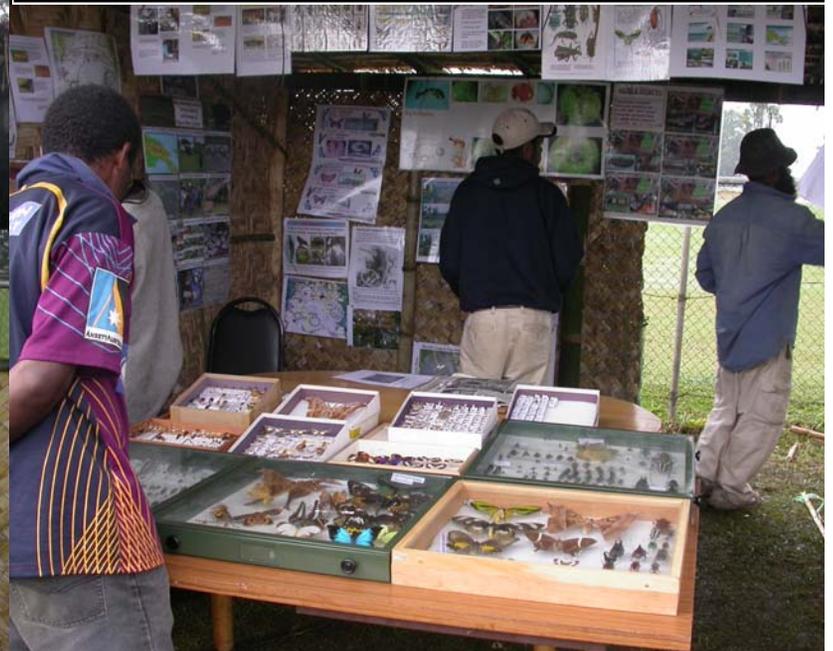
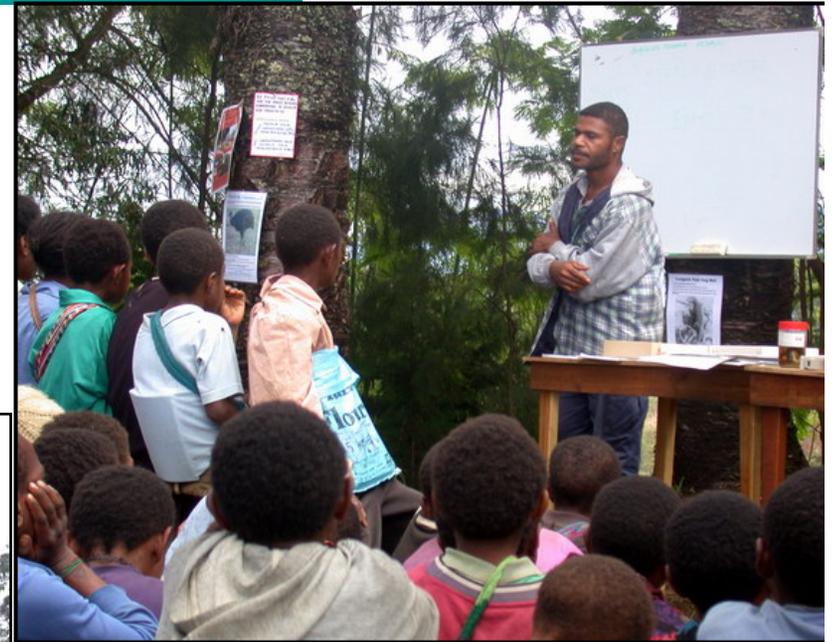
25 000 moths from 1500 species surveyed at several sites in New Guinea main land and its islands



Awareness program

School lectures (audiences 1500)

Leaflets production and distribution, over 100 leaflets, hundreds of reprints

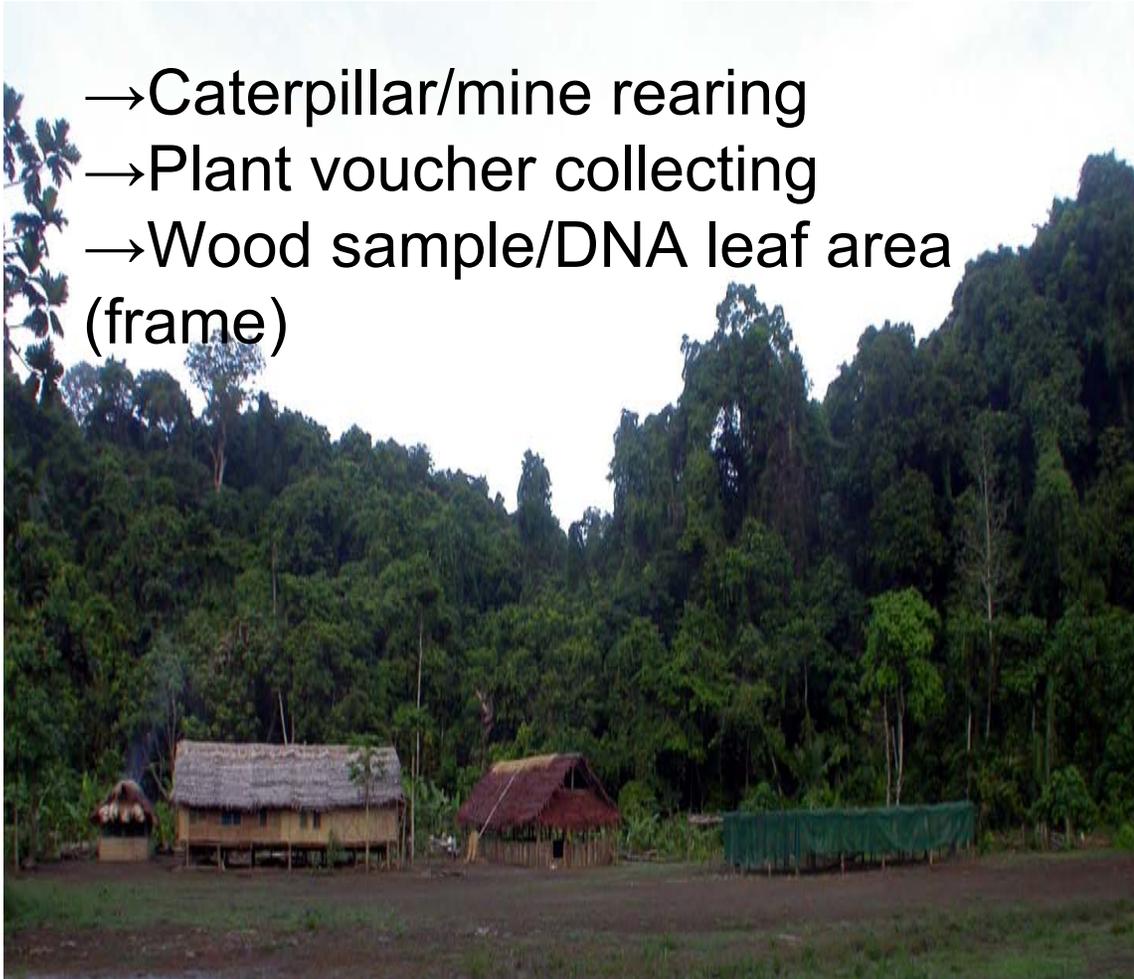


Primary and Secondary Plots 1 hectare 100 m x 100 m

Insect Herbivores (Lepidoptera) –

species diversity, community structure and host specificity

- Caterpillar/mine rearing
- Plant voucher collecting
- Wood sample/DNA leaf area (frame)



Primary and Secondary Plots 1 hectare 100 m x 100 m



➔ Wood for bark beetle rearing

-Its an ongoing project-

Acknowledgements

We wish to thank to following scientists and researchers:
Dr. V. Novotny, Dr. G. Weiblen, Dr. S. Miller,
Dr. Y. Basset, Dr. A. Stewart,
and New Guinea Binatang Research Center staff

Our work is supported by:

National Science Foundation

Darwin Initiative

Czech Grant Agency

Packard Foundation

National Geographic Society

Website: www.entu.cas.cz/png/

