

Insect Herbivores (Lepidoptera) – communities in lowland tropical rain forest.

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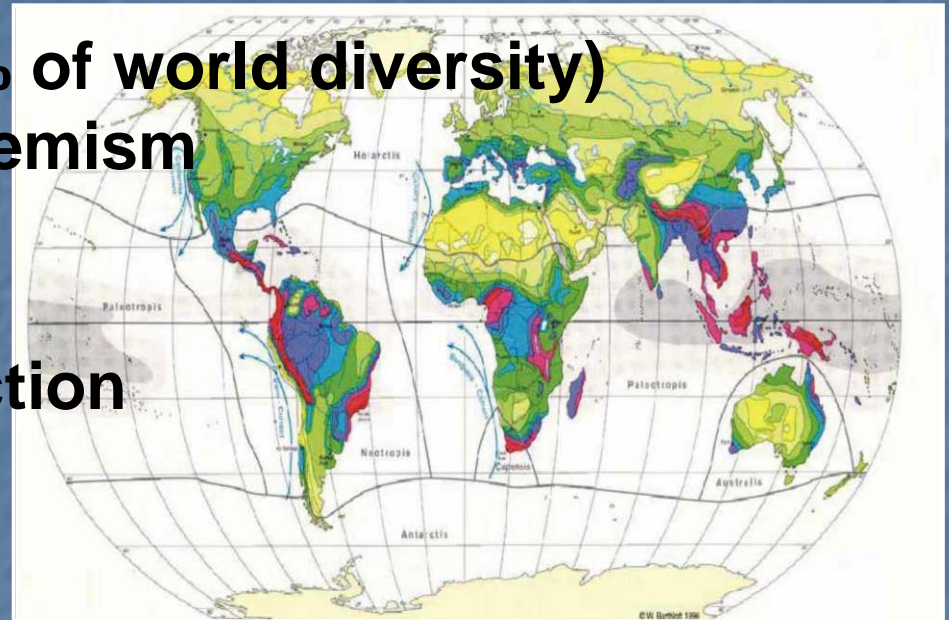
Papua New Guinea

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Why is Papua New Guinea so important and special for biodiversity research?

- large species richness (5% of world diversity)
- high levels of species endemism
- low population density
- large rainforest areas
- low environmental destruction



Beta-diversity of caterpillars across large expanses of lowland rainforests



methods

Site selection



Host plants for collection of insects (Lepidoptera larva (caterpillars)) are chosen



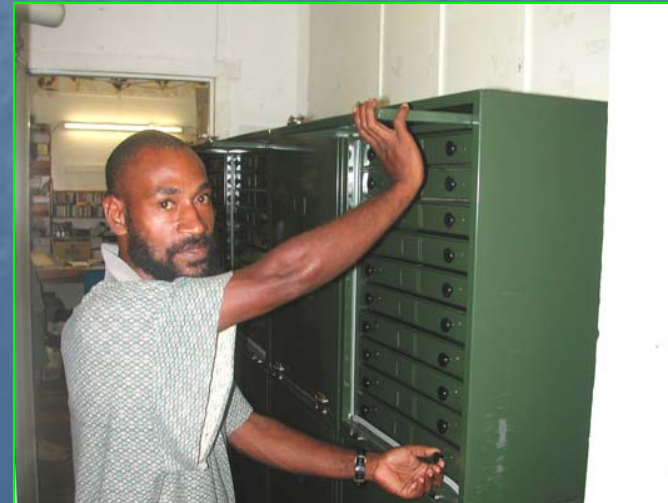
Targeting 40% rearing success rate, over 8,000 individuals larva are processed in a duration of three months.



The caterpillars are being photographed and assigned to morphospecies. The hatched out adults are being mounted, dried and packed to be sent to Madang for further determination.

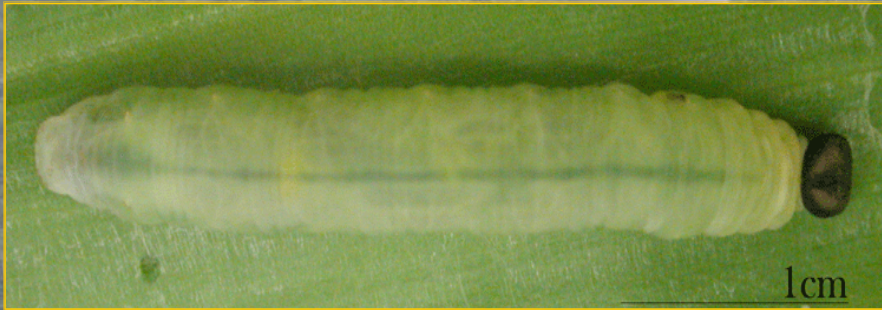


The specimens are sorted out into individual species, labeled, morphotyped, photographed and updated into access database. They are then sent to overseas for final determination.



Photos of larva and their adults

Family : *Hesperiidae*



Notocrypta renardi

Family : *Nymphalidae*



Euploea leucosticos



Choreutidae



Choreutis lutescens



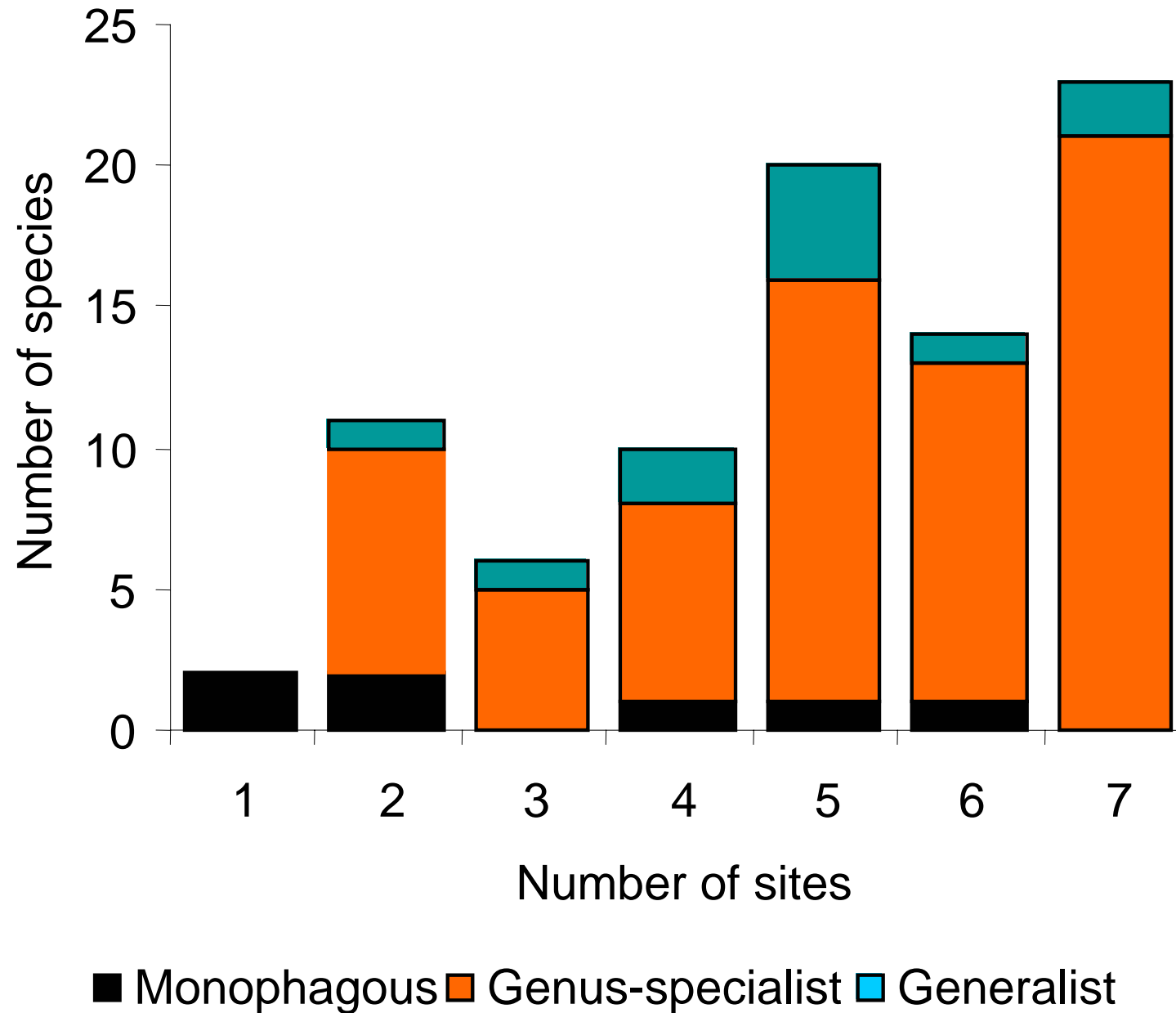
Arctiidae



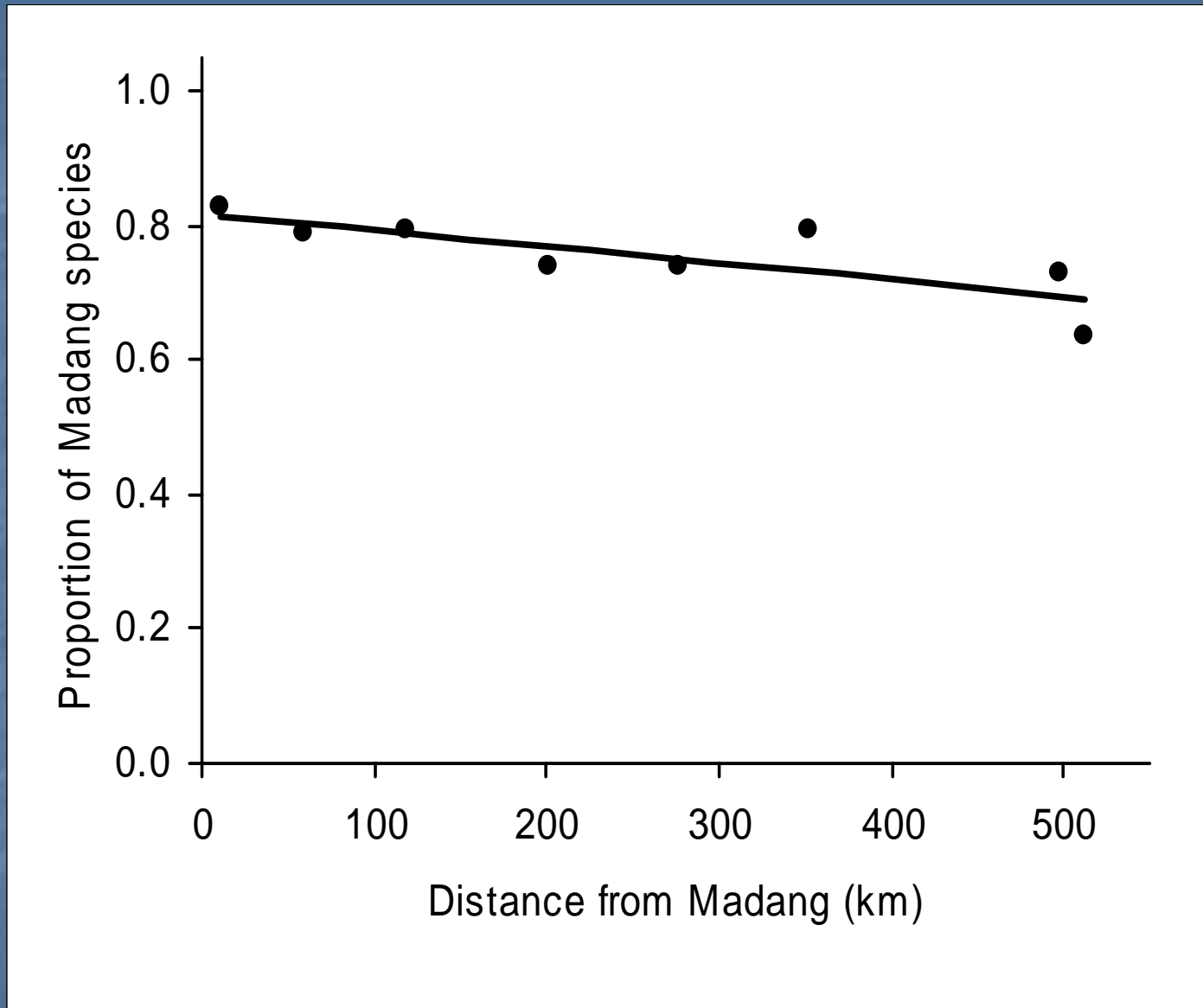
Darantasia caerulescens



Geographic distribution and host specificity of Lepidoptera species.



Overlapping of species



Conclusion

The Lepidoptera communities were dominated by genus-specialists with wide geographic distribution.



acknowledgement

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