SAP-SUCKING INSECT COMMUNITY COMPOSITION IN WANANG III PRIMARY AND SECONDARY FORESTS

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OUTLINE OF PRESENTATION

- Introduction
- Question
- Materials
- Methods
- Data Analysis
- Results & Discussion
- Conclusion
- Acknowledgement
INTRODUCTION

Order: HEMIPTERA
Suborder: Auchenorrhyncha
Infraorder: Cicadomorpha & Fulgoromorpha

- Sap sucking insects are:
  - Leaf hoppers and Plant hoppers
  - Feed on xylem & Phloem tissues
  - Are 1mm – 110mm and live in variety of environments
QUESTION:

What are the species abundance and community composition of sap sucking insects (*Hemiptera; Auchenorrhyncha*) in both Primary and Secondary Forests?

Is there any difference?

$H_0$: There is no difference between primary and secondary forest.
Forest Types

Primary

Secondary
MATERIALS

- sweep nets
- red tapes
- ethyl acetate
- plastic bags
- toilet tissue
- forceps/pins
- petri dish
- microscope
- computer/ species data base
- vials
- papers/pencils/pens
METHODS

• Using sweep nets by doing 500 sweeps/sampling unit
• Contents in sweep nets poured into plastic bags containing ethyl acetate
• Sorting
• Identification/Mounting
• Data entry
METHODS
STUDY SITE

MAP SHOWING STUDY SITES
DATA ANALYSIS

T-test, independent by groups

\[ p = 0.837148 \]
\[ t (8) = -0.21234 \]

\[ p = 0.872351 \]
\[ t (8) = 0.16590 \]
SIMPSON’S INDEX

the probability that two individuals chosen from your sample will belong to the same species

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<th>P2</th>
<th>P3</th>
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<td>Simpson</td>
<td>0.0862</td>
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DCA → length of gradient: 6.324 → CCA

F-ratio = 0.996
P-value = 0.4910
RESULTS & DISCUSSIONS

- 411 total # of individuals
- 14 families
- 137 observed species
- Five (5) samples – not a very strong test
Observed species
CONCLUSION

- There is no significant difference between the Primary & Secondary forests
- Similar observations can be done in the area with more number of sweeps & sampling units
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THANK YOU TUMAS!