

International Symposium
of the Institute of Forest Science

New Multidisciplinary Perspectives of Forest and Environmental Resources



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College of Forest and Environmental Sciences at Kangwon National University

Organizer

The Institute of Forest Science at Kangwon National University
College of Forest and Environmental Sciences at Kangwon National University

Sponsor

Korean Federation of Science and Technology Societies

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*** COMMUNITY STRUCTURE OF
MACROZOOBENTHOS IN THREE
DIFFERENT AGE CLASS OF
MANGROVES AT LAMPUNG
MANGROVE CENTER INDONESIA**



R. Diantari*), B. Putri*), M. Rianarti**) and Duryat**)

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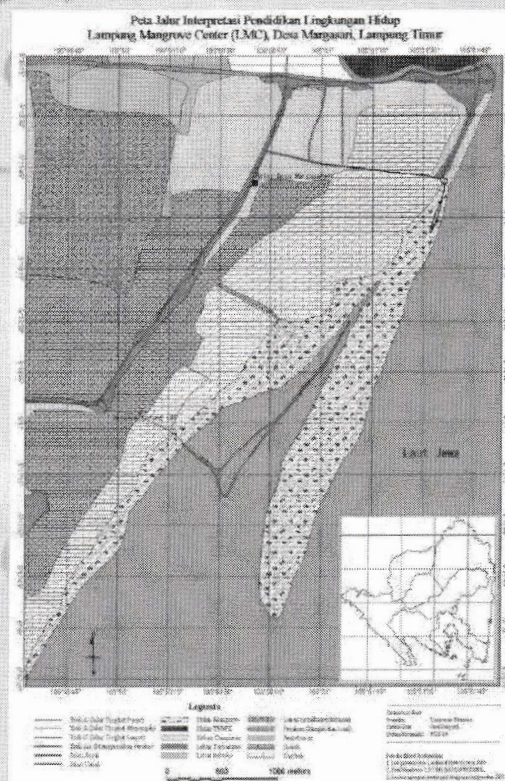
- Sta 2.2
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- * Nutrient provider,
 - * Spawning and nursery ground for many fish species
 - * Protects from abrasion,
 - * Protects from tsunami,
 - * Provider of various products of human needs

*** Mangrove Importance**

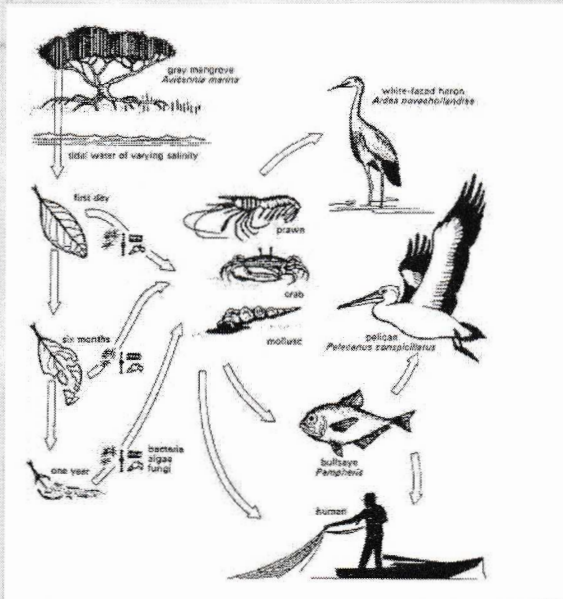
- Sta 2.2
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- *Collaboration among local government, University of Lampung and local people
 - *Continuous rehabilitation since 1995
 - *Mangrove area was increased
 - *Several age class was formed

*Lampung Mangrove Center

Lampung mangrove Center Area



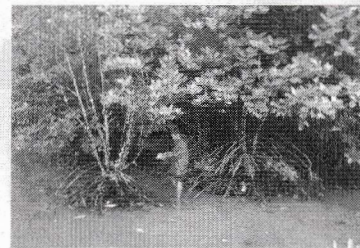
* Food Chain in Mangrove Ecosystem



Source: FAO 1994

* The aim of the research

* To understand macrozoobenthos community structure in three different class age of mangrove, namely: 6, 14 and 19 years



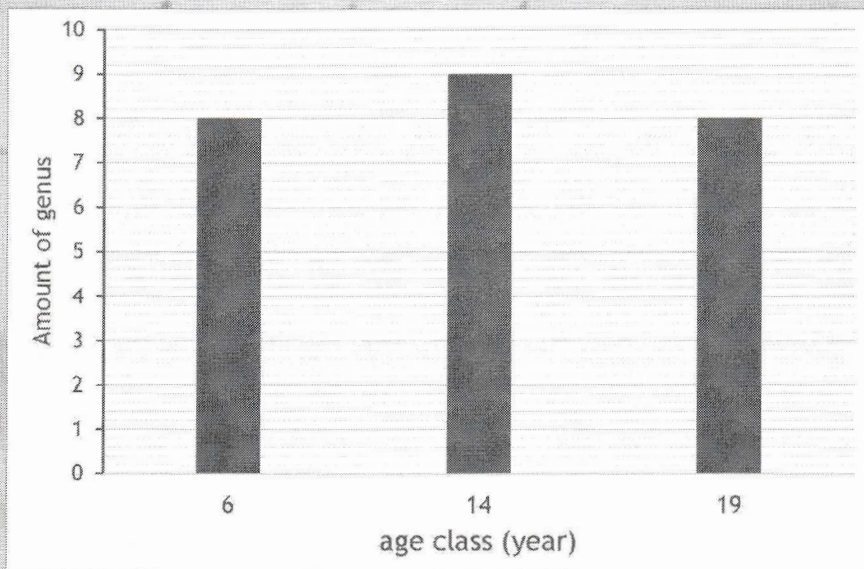
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Macrozoobenthos sampling was based on Sander method (1968):

1. Sampling technique is the same for all areas
2. The comparison is based on equality and sample size
3. The uniformity of the sample composition
4. The samples are from the same habitat

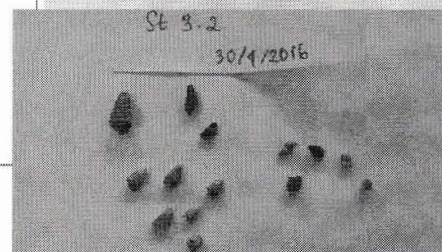
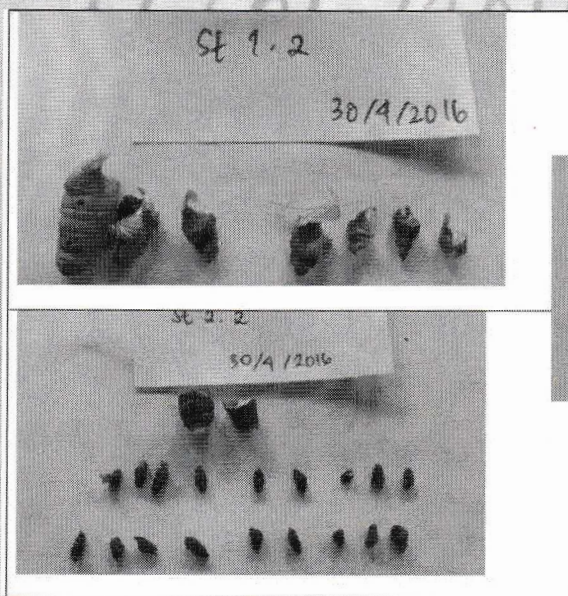
*Material and Methods

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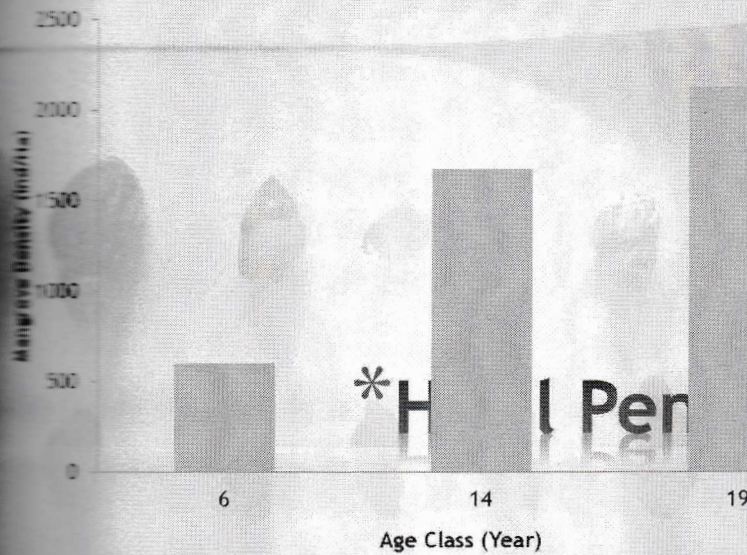
- *Three age classes (6, 14 and 19 years).
- *20mx20m plot.
- *Mangrove density and makrozoobentos density were counted in each plot.
- *Analysis of the data include:
macrozoobenthos density, mangrove density
and diversity index of macrozoobenthos



*Result and Discussion

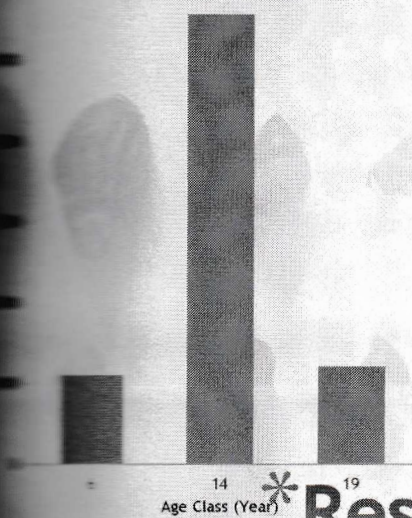


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Mangrove Density



* High Per tian

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Macrozoobenthos Density



* 11 genus of Gastropod were found

* The highest amount of macrozoobenthos was *Melanoides sp*

* *Melanoides sp* famili Turbinidae were found in each station

* Result and Discussion

*Result and Discussion

Diversity Index



* mangrove density is not proportional to the abundance and diversity of macrozoobenthos.

* Mangrove density is highest in the 19 years age class but the abundance of mangrove highest in 14-year age classes.

*Result and Discussion

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*Result and Discussion

*Gastropods is the dominant species in mangrove area (Cantera et. Al. 1983)

*Macrozoobenthos distribution on mangrove ecosystem is influenced by: sunlight, tides, salinity and substrate type (Nagelkerken, 2008)

*Macrozoobenthos feed on sedimentary organic matter and / or microalgae

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Thank You