

THE MICROHABITAT OF COMMONN GASTROPODOS IN PAGBILAO
MANGROVES (PHILIPPINES) AND THEIR
LOCOMOTORY RESPONSE TO SALINITY AND TEMPERATURE

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In the Pagbilao mangal, 13 species of gastropods occurred in six microhabitats.

To determine their locomotory response to changing salinity and temperature 4 common species were selected. 10 individuals at a time were placed in dark tall measuring cylinders with 200 ml of saline water at 25 ppt, and in temperature ranging from 10 - 45°C at 5°C intervals. In another set of experiments, at room temperature, salinity variation was from 10 - 40 ppt at 5 ppt intervals. The experiment was done in duplicate and the results normalized.

Littorina scabra which occurred on the plants in the intertidal zone was the most agile and tolerated a wide range of salinities and temperatures. Merita planospira was the least tolerant and its occurrence at the sub-tidal zone is in agreement with its response to temperature and salinity (Southward, 1958). Ellobium aurisjudae was sluggish and it preferred a low salinity range. Although it occurred in the supra-tidal zone, it was well embeded in the humid litter of the mangrove forest. Terebralia sulcata responded within a narrow range of salinity and temperature. Unlike in Papua New Guinea, where it occurred on mangrove roots, (Cook, et al 1985) here they were found on the river banks.

References

- Cook, L., Currey J.S.D. & Sanson V.H. (1985). Differences in morphology in relation to microhabitat in littorinid species from a mangrove in Papua New Guinea (Mollusca : Gastropoda). J.Zool. Lond. 206: 297-310
- Southward, A.J. (1958) Note on the temperature tolerances of some intertidal animals in relation to environmental temperatures and geographical distribution. J.Mar. Biol. Ass. of U.K. 3:49-66

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