

**COEXISTENCE OF *LITTORARIA SCABRA* AND *LITTORARIA PALLESCENS*  
(GASTROPODA: LITTORINIDAE) IN NORTHERN SULAWESI, INDONESIA**

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**ABSTRACT**

The occurrence of two common littorinid species, *Littoraria scabra* and *Littoraria pallescens* was investigated in a mangrove on North Sulawesi. These two closely related species have similar geographical ranges. They were commonly found coexisting on the same mangrove trees. One way ANOVA gave no difference of the length of *L. scabra* ( $p < 0.05$ ) with respect to 3 study sites at Manado, Bunaken, and Salibabu, while *L. pallescens* showed significant difference. *L. scabra* occupied the lower level, 25-150 cm from ground surface, and were restricted to the bark; conversely, *L. pallescens* occupied wider altitude range, 50-380 cm above ground, and inhabited mainly the leaves. In dry condition, *L. scabra* was more resistant to desiccation than *L. pallescens*. Transplant experiment showed that both species tended to crawl down to the bottom, when moved from one place to another. It seems that specialization in substrate utilization is the most likely factor explaining the coexistence of *L. scabra* and *L. pallescens* in cases of overlapping distributions.