

VERTICAL DISTRIBUTION OF THE PERIWINKLE, *LITTORARIA PALLESCENS*, WITH EMPHASIS ON THREE COLOUR MORPHS, NORTH SULAWESI, INDONESIA

By Farnis B. Boneka

Faculty of Fisheries, Sam Ratulangi University, Manado 95115, Indonesia

ABSTRACT

The proportions of three colour morphs of *Littoraria pallescens* (Philippi 1847) were relatively constant from May to October 1994. The dark morph was most common (78%), followed by the yellow, and the orange morph. The shell length showed homogeneity among morphs. The mean length of dark morphs was 11.9 mm, the yellow 12.1 mm, and the orange 12.8 mm respectively. Kruskal-Wallis test revealed no difference with respect to shell thickness of the three colour morphs. The mean shell length was studied on four different substrata: *Avicennia*, *Rhizophora*, bark and leaves of *Avicennia*. The mean length of *L. pallescens* was larger on *Rhizophora* than on *Avicennia*. The shell length was larger on bark than on leaves. There was no significant relationship between shell length and height above ground level of dark and yellow morphs, both for line slope and position. There was no significant difference of shell properties, and no ecological segregation among three colour morphs of *L. pallescens*.