

## ABSTRACT

Periwinkle snails can be used as bioindicators of environmental change such as in mangrove reforestation areas. This research was carried out in January 2024 with 4 observation stations. This is based on knowing the vertical distribution of periwinkle snails based on height in *Avicennia* sp mangrove stands. Periwinkle snails were collected by drawing a 10 m long transect and creating sample plots measuring 1x1 m, where the periwinkle snails collection was divided into 5 height groups. The results of the research found 2 species of periwinkle snails, namely *littoraria scabra* and *littoraria melanostoma*. Density *littoraria scabra* and *littoraria melanostoma* the highest melanostoma is found at a height of 51-100 cm (59 ind/m<sup>2</sup> and 5 ind/m<sup>2</sup>). For the highest diversity index it was found at a height of 101-150 cm (0.25), then for the uniformity index the highest was found at a height of 101-150 cm (0.84), while for the highest dominance index it was found at a height of 0-50 cm (0.88).

Keywords : Distribution, Ecological index, *Littoraria*, Lhokseumawe, Rancong