

Comparison of seaweed communities of the two rocky shores in Sarawak, Malaysia

ABSTRACT

A study on seaweeds was carried out at Tanjung (Tg.) Batu ($3^{\circ}12'28.3''$ N, $113^{\circ}02'38.4''$ E) and Kampung (Kg.) Kuala Nyalau ($3^{\circ}37'50.8''$ N, $113^{\circ}22'16.1''$ E), Bintulu, Malaysia, from January to October 2008. This study examined the diversity and monthly distribution of seaweeds at two rocky shores with distinct landform characteristics and differences in their environmental conditions. A total of 32 seaweeds were identified belonging to 20 families and 27 genera comprising of 28 species (9 Chlorophyta, 5 Phaeophyta and 14 Rhodophyta) at Kg. Kuala Nyalau and 15 species (5 Chlorophyta, 2 Phaeophyta and 8 Rhodophyta) at Tg. Batu. Rhodophyta was dominant at both sites. Based on Bray-Curtis similarity evaluation, four distinct clusters on species occurrence in relation to months were observed at Tg. Batu: I-January, February and March, II-June and July, III-April and August, IV-September and October and, three clusters at Kg. Kuala Nyalau: I-February, March and April, II-January, III-June, July, August, September and October. Besides the topography and wave physical forces, a combination of some environmental (physical and chemical) factors were influencing the occurrence and differences in seaweed communities between the sites.

Keyword: Bintulu; Distribution; Diversity; Rocky shore; Seaweed species