ABSTRACT

Assessment of Mangrove Community Structure in Lalang Village, Batu Bara Regency Based on Multivariate *Cluster Analysis* and *Multidimensional Scaling* aims to determine the diversity and structure of the mangrove community. Mangrove data collection was carried out using the *purposive sampling method* and quadrat transects measuring 10x10 m^2 at four different locations. The results of the study found 8 mangrove species divided into four families, namely Acanthaceae (*A. lanata* and *A. alba*), Rhizophoraceae (*R. apiculata, R. stylosa* and *B. cylindrica*), Lythraceae (*S. ovata* and *S. caseolaris*) and Combretaceae (*L. racemosa*) with the species *A. lanata, A. alba, S. ovata, S. caseolaris* and *R. apiculata* are found throughout the zone. The mangrove density is classified as very dense (1558.34 ind/ha) which is divided into two groups based on *cluster analysis* and MDS, the mangrove distribution pattern is classified as rare (>20%), while the basal area based on *cluster analysis* and MDS shows three groupings where the species are *S. ovata* and *L. racemosa* is a more mature species, while the vegetation stands between stations obtained two groupings which show that Station 2 is more mature than the other stations. The highest mangrove dominance was found in the species *S. caseolaris* (17.78%) with *cluster* analysis and MDS forming three groupings, while the highest importance index value was found in the species *A. lanata with cluster* analysis and MDS INP consisting of two groups.

Key words: *cluster*, community structure, mangrove, MDS, weeds