ABSTRACT

Tri Oktavianti. 24020119120037. Diversity of Corticolous Lichen Species and Characteristics of the Bark of Their Host Trees in the Wanadipa UNDIP Forest Management Unit, Semarang Regency. Under the guidance of Lilih Khotimperwati and Jumari.

Lichens are symbiotic organisms composed of fungi and algae whose presence can serve as an indicator of environmental conditions, as they are sensitive to changes in air quality, humidity, light, and the characteristics of the substrate on which they grow. Corticolous lichens live as epiphytes on tree bark. This study aims to identify the diversity of corticolous lichen species and the characteristics of the host tree's bark at the Wanadipa UNDIP Forest Research and Education Center (KHDTK). Data collection was conducted using a *purposive exploratory* method at three observation stations: the Educational Research Block, the Partnership Research Block, and the Special Conservation Block. Samples were collected from host trees with a diameter at breast height (DBH) > 20 cm, with observations of the bark surface conducted at a height of 130 cm. The host tree characteristics analyzed included texture, moisture content, and tree diameter. The study identified 13 species of corticolous lichens belonging to six families. The talus type found was predominantly crustose. Several species, such as *Cryptothecia striata*, *Graphis scripta*, and *Lecanora strobilina*, have a wide distribution and were found at all observation stations. In addition, six types of trees were identified as lichen hosts with varying bark surface characteristics, namely rough with cracks, rough with deep cracks, rough with cracks and nodules, and smooth without cracks. The conclusion of this study is that the Wanadipa Tropical Forest Research Station at UNDIP harbors a diversity of corticolous lichens that is ecologically influenced by variations in the substrate conditions of the host tree bark and the surrounding microenvironment.

Keywords: corticol lichen, species diversity, host trees, bark, KHDTK Wanadipa UNDIP