## **ABSTRACT**

MAYA PUTRI ANDARISTI 2024. Diversity of Moss Plants in the Foothills of Mount Karacak Cigalontang Tasikmalaya Regency as a Biology Teaching Material Supplement. Departement of Biology Education, Faculty of Teacher Training and Education, Siliwangi University, Tasikmalaya.

Moss plants are a group of low-level plants that are important to maintain, although they have not been widely researched. The area at the foot of Mount Karacak has various spsesies, one of which is moss. The purpose of this study is to inventory the types of moss plants in the Foot of Mount Karacak area which was carried out from January-July 2024. This study uses a descriptive quantitative method to provide an overview of numerical data that can be analyzed statistically, then described according to the phenomenon obtained. The sampling technique is purposive sampling by considering stations located at different altitudes, as well as the presence of moss in each research location. Sampling was done using the square method with a square line at station 1 Cibitung (800 meters above sea level), station 2 Sarkawi (1,000 meters above sea level), and station 3 Laiman (1,200 meters above sea level). Each station has an observation line of 100 meters long, the distance between plots is 10 meters, so that in one station 10 plots are made with a plot size of 1x1 meters. The ecological indices analyzed include, the Shanon-Wiener diversity index (H'), the evenness index (E), the dominance index (D), as well as environmental parameters including temperature, soil pH, soil moisture, air humidity, and light intensity. The results of the research at station 1 found 7 species of moss, at station 2.7 species of moss were found, and at station 3.11 species of moss were found with a diverse species distribution. So it can be concluded that in the Foothills of Mount Karacak 14 species of moss from 11 different families were found, and in general 5 species of moss were found in the three observation stations. Species diversity (H') of 1.82 is at a value of 1  $\hat{H}$  < 3, classified as a medium category, an evenness index (E) of 0.87 is at a value of  $0.75 \le E \le 1$ , classified as a stable category, and a dominance index (D) of 0.19 is at a value of  $0 < D \le 0.50$ , classified as a low category. The results of this research will be used as a supplement to teaching materials in the form of booklets.

Keyword: Moss Diversity; The foot of Mount Karacak; Learning resources