

## SUMMARY

Bryophytes are commonly found in humid areas, shaded situations, or in places where water is abundant such as waterfalls. Bryophytes inhabit several different substrates, such as trees, dead woods, and rocks. Bryophytes that grow on rocks around waterfall area offer essential ecological services by preventing erosion, enhancing biodiversity, improving water quality, and creating microclimates. Studying the diversity of epilithic bryophytes based on their morphological and anatomical characteristics can provide valuable insights such as conservation strategies, restoration efforts, and the development of sustainable management practices for the waterfall ecosystems. The objective of this research is to know the diversity of epilithic bryophytes in the Orak Arik Waterfall area.

The research was carried out in the Orak Arik Waterfall area, Kemutug Kidul Village, Baturraden Subdistrict, Banyumas Regency, Central Java, by an exploratory survey method, and the data collection was done by purposive sampling technique. The research was conducted within 2 months, from October until November 2023. The epilithic bryophytes observation based on morphological and anatomical characteristics were analyzed descriptively, and the relationship between environmental factors and the diversity of epilithic bryophytes was also explained descriptively.

Based on the morphological observation the results showed that there were 7 species of epilithic bryophytes, including 2 liverworts and 5 mosses species. The liverworts are *Dumontiera hirsuta* and *Marchantia emarginata* which included in division Marchantiophyta. The mosses are *Fissidens crispulus* var. *robinsonii*, *Hyophila involuta*, *Philonotis hastata*, *Ochiobryum blandum*, and *Taxithelium nepalense* which included in division Bryophyta.

Keywords: bryophytes, morphology, Orak Arik Waterfall