

ABSTRACT

One of the greatest and best cultural heritages in Indonesia is Batik, by knowing that fact one way to preserve it is by exploring new patterns to be made batik. batik patterns can be inspired from various forms of objects, plants, even animal-shaped. But in this research the pattern will be made of batik that is the pattern of the type of marine biota, especially coral reefs with web-based.

There are various types of coral reefs in the world and each shape has its own uniqueness. Seeing with the many unique forms of different types of coral reefs then it is worthy of a new pattern for the development of new batik patterns. The type of coral reefs that have been determined to become a new batik motif is the type of Acropora Aspera.

In this research, has created a design of batik using a type of Acropora Aspera web-based coral. In the making there are several mathematical operations and each operation has its own function. Each operation has a variable that has its own role in building design batik motif, in addition L-Systems is also used as a method of design development of this batik motif. With the completion of this final task, then has been created batik designs Acropora Aspera coral motif. The results of the test through the survey also showed that 97% of respondents said the need for batik development, and 97% of respondents have a positive answer about the development of batik design using coral motifs but the design of batik motifs that have been implemented need to be developed again.

Keywords: *L-Systems, WEB, Application, Web-Based, Batik, Coral*