

ABSTRACT

Batik is a famous cultural heritage in Indonesia that must be preserved to grow in the next generation.. By knowing these facts,one way to preserve is to explore a new pattern to be applied in batik. Batik patterns can be inspired from various forms of objects, plants, even animal-shaped patterns. But in this research the pattern will be made batik that is by using the pattern of a coral reef 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.

In this research, has created Acropora palifera model in web-based batik application. In the making there are several mathematical operations and each operation has its own function. L-Systems is also used as a method of design development of this batik motif. Author also conducted a survey in the form of 30 respondents. The results of the test through the survey showed that 97% of respondents said the need for batik development, and 95% of respondents have a positive answer about the development of batik design using the coral motif that has been made.

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