

ABSTRACT

Batik is the indigenous cultural heritage of Indonesia. Batik has various types of motifs based on the type of how it's create, place, and carve. Batik motif generally inspired from nature in Indonesia. Nowadays coral type batik motif is still rarely found, so create it is one way to preserve batik culture by exploring new motif. Nowadays batik fractal has been developed that is made of batik with mathematical calculation. One of the most commonly used method of batik fractal use Lindenmayer system (L-System) method. L-System will be used to redraw the part motif or the motif it's self.

The purpose of this research is to make a batik motif based on Acropora Carduus coral. Design it's self was made by mathematical operations created in PHP programing language where the results can be view from the web browser.

In the design of this motive angle value is the most influential on the design because the design of this motif is round abaout 360 degrees. Angular value affects the number of trunk that will appear on a single motif and the direction of trunks will spread. Trunk length values and maximal values each trunk also affect the design results. The more trunks then more branches appear as long as the trunk length has not yet reached its maximal value.

Keyword: Computer Graphic, L-System, Batik, Patern, Coral