

WATER QUALITY IDENTIFICATION SYSTEM IN AQUASCAPE

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ABSTRACT

Aquascape is an aquarium hobby that many people like because of its beauty. The basic concept is to create a display that resembles the view in an aquarium by using existing elements. Apart from being a hobby and business opportunity, aquascape is also a competition for aquascape fans and artists at both national and international levels. In aquascape, water is one aspect that must be considered and maintained to get a good and healthy ecosystem. There are several water parameters that must be known and maintained, namely temperature, ammonia (NH₃), pH, KH (Carbonate Hardness), and GH (General Hardness). However, based on monitoring by the Indonesian aquascape community on the Facebook platform, there are still many members who have difficulty identification the quality of their aquascape water. This research aims to develop an Android application-based aquascape water quality identification system application so that it can assist in identification aquascape water quality. In this research, the Tsukamoto fuzzy method is used to identify water quality in an aquascape. Based on the test results, the application of the Tsukamoto fuzzy method to this system obtained good results and was in line with estimates.

Key words: *Identification System, Fuzzy Tsukamoto, Aquascape, Water Quality*