

## ABSTRACT

Lovebird is a kind of lovely bird which has specific long *nyerecet* sound. In this decade, lovebird has become trend to most of the people because of its good sound. The main purpose of keeping lovebird to participate lovebird in joining the singing contest to examine the quality of lovebird's sound. Qualified lovebird which has won the singing contest has highly selling price. Many breeders like Lovebird's offsprings .

Recently, *kicau mania* don't know singing art of lovebird in singing contest . This causes that many participant of the singing contest complain to the juries' decision. The main cause is that the participant don't understand the singing art of lovebird. Because of the problem, the writer want to help the participants how to choose lovebird to join the singing contest. In this case, the writer want to classify the category of lovebird based on its sound and parameters which used to determine the qualified lovebird.

This final project is a kind of descriptive research which has purpose to help the participants and the juries in deciding and analyzing the lovebird's sound and also giving knowledge about the characteristic of good lovebirds' singing . The process of lovebird classification is derived from *spectrogram* and theresholding from each sound. From the extraction features of lovebird then the writer classifiy it by using *fuzzy logic algorithm* method.

This result of final project has the main purpose to classify lovebird 's sound into class A, class B and class C. This process of classification using *fuzzy logic algorithm* method with 60 kinds of lovebirds'sound. This include 20 kinds of lovebirds'sound class A, 20 kinds of lovebirds'sound class B and 20 kinds of lovebirds'sound class C. After the juries and lovebirds expert verify lovebirds sound, from extraction features with *spectrogram* get the accuration system for about 92.16 %.

Keywords : lovebird's sound, *nyerecet*, *kicau mania*, *spectrogram*, *fuzzy logic algorithm*.