ABSTRACT

AHP is a decision-making method using many criteria (multi-criteria decision making) that was discovered and developed by Thomas L. Saaty in 1980. Techniques of AHP method is to describe the problem into several criteria and alternatif, this method has been widely used in problem solving decision making for the last 27 years, this methode have been implemented in various areas of life, including in the field of logistics, business, manufacturing, government and even the military.

However, its application is still too unefficient to be done manually (input manually) using Microsoft Excel and/or calculator AHP. When calculating and assigning weights to each criterion is done manually, it will require a very long long time, so in this research, we propose a new method called Intelligent AHP that can perform calculations and assigning weights to each criterion intelligently. The case study used is the classification of the iris flower because it has 4 criterias and compatible to do classification using AHP.

In this research, we develop an algorithm for generate criterion pairwaise comparison matrix, then normalize and save every consistent vektor that got CR<=9%, this operation was done intelligently. The performance of intelligent AHP in iris flower classification is scored by counting the ERROR (percentage of total errors), the smallest ERROR is 5.556% and it made the classification of iris flower using intelligent AHP is success.

Keywords : *AHP, Intelligent AHP, iris flower*