DECISION SUPPORT SYSTEM TO DETERMINE SUPERIOR PALM SEEDLINGS USING THE ANALYTIC HIERARCHY PROCESS (AHP)

Nama Of Student : Reka Rama Rani

Student ID Number : 6304201232

Supervisor I : Fajri Profesio Putra, M.Cs

Supervisor II : Elvi Rahmi, S.T., M.Kom.,

ABSTRACT

This research describes the development of a Decision Support System which aims to assist in supporting increased palm oil production, using the Analytic Hierarchy Process (AHP) method. The rapid growth in the palm oil industry encourages the need for a focused scientific approach to selecting seeds that have optimal growth potential and yields. In this context, the application of artificial intelligence-based technology, such as a decision support system in the process of selecting superior oil palm seeds. The aim of this research is to model the criteria for selecting the most superior oil palm seeds using the Analytical Hierarchy Process (AHP) method by comparing 3 criteria, namely the potential to use a decision support system. The criteria used are seed growth, durability when transplanted, growth speed, seed age, harvest time. The result of this process is a decision support system that displays the value range of each oil palm seed variety, making it easier for farmers to choose the most superior oil palm seeds.

Keywords: *Website, Decision Support System, Palm Seedlings, AHP*