

APPLICATION DEVELOPMENT FOR SELECTION OF SUPERIOR VARIETY OF
RICE PLANT WITH ANALYTICAL METHOD
HIERARCHY PROES (AHP)

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ABSTRACT

Rice has certain varieties called superior varieties; the superiority of the varieties is that the superiority of its characteristics starting from the age of harvest, the taste of rice, the texture of rice, yield, and others. Based on the Indonesian Center for Rice Research data, there have been 48 *Inpari* varieties, 19 *Hipa* varieties, 11 *Inpago* varieties, and 9 *Inpara* varieties that have been released and may increase every year. This number does not include the old superior varieties still cultivated today, such as *ciherang*, IR 64, *Cibogo*, *IPB 3S*, et cetera. The vast extent of rice plant varieties and their respective criteria causes problems; how do the agricultural service businesses choose the suitable varieties so that maximum yields are maintained. There is a solution to this problem, namely using the help of a Decision Support System (DSS). Therefore, in this study, the authors made a decision support system for selecting superior rice varieties using the Analytic Hierarchy Process (AHP) method. This method was chosen because it can produce more accurate and more objective decisions by 64%. Meanwhile, the result is that the system ranks superior rice varieties from the best to the worst, and the percentage in using the system is 52.5%.

Keywords: Rice, Variety, Superior, AHP