

Sistem Informasi Estimasi Waktu Masak Fisiologis Benih Padi Berdasarkan Akumulasi Panas (Information system for estimating physiological maturity of rice seeds based on heat accumulation).

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ABSTRACT

Rice (Oryza Sativa L.) is a commodity that is a priority for cultivation in Indonesia. Unfortunately, the rice yield has decreased every year. One of the factors causing a decrease in yields is the use of seeds that do not pay attention to seed quality. Seed quality is determined by the physiological maturity of the rice seeds. To facilitate the recording and processing of data to predict the physiological ripe time of rice seeds, an accurate information system for the physiological cooking time of rice seeds was created. Forecasting is done using the DES method by entering daily parameter data for a minimum of 90 days. This research was conducted on 3 rice varieties, namely varieties IR64, Sinta Nur and Ciherang where for the IR64 variety the resulting reference for heat accumulation was 1147 dd on the 105th day of the HST with 85% germination, for the Sinta Nur and Ciherang varieties the resulting reference for heat accumulation was 1266 dd on the 115th day with the germination rate of Sinta Nur variety, namely 92% and 86% for the Ciherang variety. Forecasting with an error, namely MAPE 0.205, is obtained when forecasting uses alpha 0.9 and beta 0.1.

Key words : *Forecasting, Germination, Heat Accumulation, Information System*