Analisa Metode *Triple Exponential Smoothing* dengan Pendekatan S*ingle Moving Average* guna Penentuan Hasil Produksi di UD. Restu Bunda
(*Analysis Of Triple Exponential Smoothing Method With Single Moving Average Approach For Determining Production Output at UD. Restu Bunda*)

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ABSTRACT

UD.Restu Bunda *is one of the mushroom cultivation businesses in Malang, not only developing its cultivation but also providing mushroom cuisine that can be enjoyed at Warung Jamur Ayu. Mushroom growth fluctuates during the rainy season, which has a significant impact on their production. High humidity levels sometimes make mushroom growth unstable and difficult to predict. Despite taking measures to control the mushroom growing environment, such as using covering equipment and regulating temperature, extreme weather during the rainy season remains a major challenge. This can lead to mushroom production exceeding market demand, resulting in unwanted surplus.*

Therefore, researchers have found a solution in developing a mushroom production forecasting system. By considering historical data to forecast future production. From the data of the last 6 years, the forecasting accuracy shows a Mean Error value of -8.41, Mean Absolute Error (MAE) of 20.55, Mean Squared Error (MSE) of 726.70, Root Mean Squared Error (RMSE) of 26.96, and Mean Absolute Percentage Error (MAPE) of 3.72%. This helps to reduce the risk of unwanted surplus and financial losses, as well as improve overall operational efficiency. Thus, the mushroom production forecasting system developed by researchers becomes one of the key success factors in running their mushroom cultivation business.

Keywords: *Forecasting, Mean Absolute Error (MAE), Mean Squared Error (MSE), Root Mean Squared Error (RMSE), Mean Absolute Percentage Error (MAPE)*