

***Forecasting Dragon Fruit Yield with Seasonal Autoregressive Integrated
Moving Average Method in Banyuwangi Regency***

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ABSTRACT

The potential for horticulture, especially fruit, is currently growing in Banyuwangi Regency, namely dragon fruit. Based on the Horticultural Production Statistics Report, the number of plants that produce dragon fruit in Banyuwangi Regency until the second quarter of 2019 was 1,884,904 trees with a harvested area of 188.4 hectares and production of 4,385.5 tons. But field observations from the author show that in the harvest period of 2017 - 2019 the selling price of dragon fruit has decreased. The decline in selling prices was due to the market being the post-harvest distributor experiencing excess capacity, because at that time all areas of Banyuwangi Regency were harvesting dragon fruit. From these problems, forecasting is carried out to find out the number of harvests to anticipate the worst possibility that will occur. This study uses the Seasonal Autoregressive Integrated Moving Average (SARIMA) forecasting method. The results of the analysis using this method are dragon fruit harvest data obtained from the official website of BPS Banyuwangi Regency, Banyuwangi Regency Government, Banyuwangi Regency Agriculture and Food Service. To complete the research, the author conducted a literature study to determine other methods used in forecasting. From the results of the literature study, another method used is the Single Moving Average.

Keyword: Forecasting, Single Moving Average, Dragon Fruit, SARIMA