

*ANALYSIS OF THE INFLUENCE OF THE BLOWER LAP
VARIATION ON THE OPTIMAL DRYING TEMPERATURE
INCREASE USING OVEN DRYER PINANG TURBO JET SYSTEM.*

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Abstract

A nut drying Oven with a turbo jet system is one of the tools developed, to improve the process of betel nut productivity in large quantities and fast drying time, with fuel Liquefied Petroleum Gas (LPG) which steam from combustion in the use as a dryer media that will be transmitted through a blower that has been designed to re-transmit into the oven in the oven there is a mixer that serves as a stirrer of the betel nut that will be dry in the oven. In this study will analyze the influence of the blower rotation against betel nut drying by testing the blower rounds of 600, 700, and 800 rpm within 1 – 4 hours with a temperature of 90°C. The results of this study indicate that there are different levels of moisture generated after drying. Obtained the highest rate of water content reduction 17.04% at 4 hours and a decrease in water content of 24.56% at a time of 1 hour in a speed blower 600 rpm, in the blower round 700 rpm was obtained the highest rate of water content loss 15.94 time 4 hours and the value of water loss lowest 24.28% at 1 hour, and in testing 800 rpm obtained the highest rate of water content reduction 14.96% at 4 hours and a water content reduction rate of 21% at a time of 1 hour. Therefore, from the test result of the Pinang oven using a turbo jet system with a variation of 600,700 blower, and 800 with drying time of 1 to 4 hours can be concluded in conclusion the highest rate of decline water content is found in the round blower 800 rpm with a moisture content reaches 14.96%, test done within 4 hours.

Keywords: *Oven dryer Pinang, Turbo Jet*