

DESIGN, FABRICATION AND TESTING OF A
MANUALLY OPERATED MULTIPLE
CACAO MOULDER

An Undergraduate Thesis
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ABSTRACT

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A manually operated multiple cacao moulder was designed, fabricated and evaluated in the Department of Engineering and Agro-Industrial Technology, Don Severino Agricultural College, Indang, Cavite. The main concern in the development of this machine was to come up with a moulder which requires less manpower, shorter time of operation and higher efficiency as compared to the traditional method of moulding cacao.

Hopefully, this machine will improve and increase the production of moulded chocolates, reduce the labor cost and time needed in moulding them.

The machine consisted of five principal components, namely: the ground cacao mass feeder, the slider, the multiple moulding unit, the release trap and the foot pedal.

Results showed that the capacity of the designed machine was significantly higher compared to the traditional method of moulding chocolate with a relative efficiency of 273 percent. The moulding efficiency was dependent on the operator's performance and on the

mixture of sugar and ground cacao mass. The right amount of mixture should have the ratio of 1 cacao to 3/4 sugar.

The total amount needed to construct the machine was 1,305.00.

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