

ABSTRACT
DESIGN OF BAMBOO SPLITTER TOOL

By
Fauzan

This study aimed to make a tool that enhances efficiency and quality of bamboo strip as raw material to produce bamboo-made handicrafts. This research was conducted in December 2012 to March 2013. The research comprised into two steps (i). tools fabrication was done at *Cahaya Las* workshop at Kecamatan Teluk Betung Barat, Bandar Lampung and (ii). trial and testing at Agricultural Workshop, Agricultural Engineering Department, Faculty of Agriculture, University of Lampung. Testing of split process was conducted on laboratory scale. The steps are as follows one bar of bamboo was cutted with 0.5 m length and 0,15 width. Then, the outer skin was peeled before it was sliced into some strips. Next, the strips of bamboo was feeded to a channel and booster unit in a spinned condition. Each tests were repeated 3 times i.e. 5 samples in wet condition and 5 samples in dry condition. Part of tested bamboo was classified into 3 types i.e. culm, middle and end. Then, percentage of rodent bamboo, and the period of split process. The performance test of splitter bamboo tool for wet bamboo found that the percentage of bamboo culm is 33,33 %, middle 20 % and

end 26,67%. Based on the percentage, Culm has bigger percentage than others due to the culm has a more suitable thickness with the knife from the splitter tool. Whereas the dry of the sample found that the percentage of culm, middle is similar about 33,33 % and the end part of the bamboo has percentage around 20 %.

Keywords: Design, splitter, bamboo