ABSTRACT

CUT NYAMON DESI. ***STUDY OF COMPRESSIVE STRENGTH OF BETUNG AND BLACK BAMBOO EFFECTED BY TERMITES ATTACKS****. Essay. Jakarta: Educational Program Building Engineering, Department of Civil Engineering, Faculty of Engineering, State University of Jakarta. 2017.*

This Study aims to determine how the compressive strength of betung bamboo and black bamboo due to termites attack. The research was conducted at the materials test lab at State University of Jakarta and Agricultural of Institutes Bogor on 1th October 2016 until 30th January 2017.

*This research method based on ISO-*22157:2004 *was using the direct testing of compressive strength in the materials test lab. In this research was using two kinds of bamboo, betung and black bamboo which amounts to 40 samples. Each bamboo has 20 samples. By the position, each from the base and middle section has 10 samples. While each for the treatment by termites and with no termites has 5 samples.*

Based on the research result, can be concluded that the average of the compressive strength value for the betung bamboo from the base and the middle section that given termites have decreased rather than the bamboo that not given termites 14% to be 6%. While for the black bamboos on the middle section have same decreased on the average of the compressive strength value with the betung bamboo 9,2% to be 23%. But, black bamboos on the base section have the otherwise where the average of the compressive strength that given termites more great than the bamboo that not given termites 3,6% to be 0%. That matter can be happen caused by termites attack absences on the base section of the black bamboo samples. In terms of losing weight, obviously that all sample lost the weight 6,8% to be 5,5%. This matter happened because the termites attack in the bamboo. But, for the bamboo that not attacked by termites also can loss the weight and can be caused by others factor such as weather (heat and rain) and fungus.

Keyword: *Study of bamboo, giant and black bamboo, termites attack.*