ABSTRACT

THE ANALYSIS OF RICE QUALITY PRODUCED BY COMMUTING RICE MILLING MACHINE IN PRINGSEWU DISTRICT

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Rice is a main food for some parts of Indonesian people. Commuting rice milling is a car modified with rice milling machine installation. The rice quality is influenced by type of rice milling machine. The objective of this research was to study performance of commuting rice milling machine and to describe rice qualities produced by the commuting rice milling machine and by conventional rice milling machine. This research was conducted from February to April 2014 in Pringsewu district and post-harvest bio-process and engineering laboratory of Agricultural Engineering Department in Lampung University. Rice quality analyses were conducted at 10 commuting rice milling machines and 3 conventional rice millings. Measurements of milling capacity, milling capacity per liter of fuel, and rendement (yield) were conducted directly in the field. The results showed that the average milling capacity of commuting rice milling was 4.96 kg/minute, its milling capacity per liter fuel was 133.03 kg/liter, rendement was 64.14%, water content was 15.33%, clarity level was 95%, intact rice seed was 52.39%, broken rice seed was 45.3%, and rice groat granule was 2.33%. The average milling capacity of conventional rice milling was 4.63 kg/minute, its milling capacity per liter fuel was 123.67 kg/liter, rendement was 63.03%, water content was 14.09%, clarity level was 95%, intact rice seed was 52.39%, broken rice seed was 57.53%, and rice groat granule was 2.73%. Percentages of red, yellow, and lime rice seed were not found.

Keywords: rice, rice quality, commuting rice milling.