

ABSTRACT
THE TESTING OF FORAGE FEED CHOPPER
WONOSARI VERTICAL TYPE I

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Testing machine has the purpose to evaluate the products designed by whether qualified technically and product specifically with the established standards. Forage chopper vertical Wonosari type I is a machine designed and produced by workshop local farm in Wonosari village, subdistrict of Pekalongan, district of Lampung Timur that has never test so that no available information on the performance of the machine. This research aimed at testing performance of forage chopper vertical Wonosari type I by observation covering uniformity, capacity of machine work, pulse, and consumption fuel.

The method used was a Completely Randomized Design (CRD) with two factorial. The first factor is the three engine speeds with levels (800, 1400 and 1800 rpm), while the second factor is combined of feed freshness (fresh, withered a day and withered two days). Every treatment were repeated three times so the total there are 27 treatment. Parameter that was statistically tested is uniformity of 2 – 5 cm chopped size then continued by F test, LSD 5% and 1%.

The results show that the chopped size 2 – 5 cm most be obtained at the speed 1400 rpm for fresh corn stalks and withered a day with the 32.19% and 39.69% percentage, while the withered corn stalks two days using the speed 1800 rpm with 30.12% percentage. The results of analysis of variance calculation shows that the uniformity of chopped size 2 – 5 cm was different. The pulse measurement at speeds of 800, 1400 and 1800 rpm, were 50.02; 71.48; and 76.54 times/min. The work capacity of the machine at speed of 1400 rpm was 834 kg/hour with the 2.17 liters/hour consumption fuel.

Keywords: capacity, chopper, fuel consumption, the performance test, uniformity