ANALYSIS OF THE INFLUENCE OF THE TILT OF THE COFFEE GRADER MACHINE ON THE PHYSICAL CHARACTERISTICS OF ROBUSTA COFFEE *GREEN BEANS* (Coffee canephora)

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ABSTRACT

This study aims to analyze the effect of grader machine tilt on the physical characteristics of Robusta coffee green beans (Coffea canephora). The grader machine is used to classify green beans based on size. The research method employed is a non-factorial Completely Randomized Design with 3 grader machine tilt treatments: 10°, 13°, and 15°. The observed parameters in this study are physical characteristics (size and impurities) and grading time. The results show that a 10° tilt produces an L size of 2603.67 grams, an M size of 1359.17 grams, an S size of 104 grams, impurities of 8.83 grams, and a grading time of 1.32 minutes. The grader machine significantly affects the sorting of green bean sizes. The grader machine with a 10° tilt is more selective in sorting sizes compared to the grader machines with 13° and 15° tilts. Due to all treatments at a 10° incline showing values that closely resemble the results of manual sorting used as a control.

Keywords: *Robusta green bean, Coffee grader, Size, Grading time, Degree of tilt of the screen grader machine*