

Title Some Physical Properties of Green Gram
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Abstract

Various physical properties of green gram were evaluated as a function of moisture content in the range of 8.39 to 33.40% d.b. The average length, width, thickness and thousand grain mass were 4.21 mm, 3.17 mm, 3.08 mm and 28.19 g at moisture content of 8.39% d.b. The geometric mean diameter increased from 3.45 to 3.77 mm, whereas sphericity decreased from 0.840 to 0.815. Studies on rewetted grains showed that the bulk and true densities decreased from 807 to 708 and 1363 to 1292 kg m⁻³, whereas the corresponding bulk porosity increased from 40.77 to 45.16%. The terminal velocity increased from 10.1 to 12.1 m s⁻¹. The static coefficient of friction varied from 0.344 to 0.625 over different material surfaces, while angle of repose varied from 26.6 to 31° within the studied moisture range.