Title Some physical properties of edible squash (*Cucurbita pepo* L.) seeds

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Abstract

Some physical properties of squash seeds at different moisture content (6.4–52.9%) were estimated. The role of moisture content was also studied. The results revealed that the mean values of seed length, width, thickness, geometric mean diameter, sphericity %, mass and volume were 18.16, 9.80, 2.67 mm, 43.0%, 0.29 g and 0.73 cm³, respectively. As moisture content increased from 6.4% to 52.9%, bulk density, true density, porosity %, projected area and terminal velocity increased from 350 to 475, 450 to 625 kg/m³, 22.2% to 24.0%, 1.45 to 1.88 cm² and 4.37 to 6.13 m/s, respectively. The corresponding values for squash kernel were 406–460, 615–657 kg/m³, 33.98–29.71%, 2.45–2.86 cm², and 5.02–6.57 m/s, respectively. In contrast, the rupture strength of squash seeds decreased as the moisture content increased. The static coefficient of friction of squash seeds fluctuated from 0.18 to 0.64 over the surfaces of different materials.