Physical properties of sweet basil seeds (ocimum basilicum l.)

J. KHAZAEI, T. RAZM - University of Tehran, Iran

In order to design equipment for improved processing of sweet basil seeds (Ocimum basilicum L.), some of the physical properties were determined at moisture content of 5.4%w.b. The average dimensions of ellipsoid shaped basil seed viz., large and small diameter were 1.26 and 0.67 mm, respectively.
The average geometric mean diameter, sphericity, surface area, volume, and true density were 0.83 mm, 65.7%, 2.2 mm2, 0.3 mm3, and 1220 kgm-3, respectively.
The average coefficient of friction was about 0.39 on galvanized steel, while the static angle of repose was 22.5o. The average dynamic angle of repose, bulk density, and porosity varied from 9.6-23.5o, 711-742 kgm-3, and 39.2%-41.7%, respectively depend on falling height.
Water absorption property of the seed has been also discussed.