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RESEARCH ARTICLE

Analysis of physical and chemical properties of dill seed

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ABSTRACT : The different physical properties of dill seeds, namely size in term of length, breadth and thickness; sphericity; bulk density; porosity; angle of repose and co-efficient of static friction against different surfaces (wood, steel and glass) were determined at 5.9 per cent moisture content. The average length, breadth and thickness of the dill seeds as 5.06 mm; 2.07 mm and 1.17 mm, respectively. The size and sphericity of the dill seeds found to be 2.28 mm and 0.451, respectively. The average value of bulk density and porosity at 5.9 per cent (d.b.) were found 444.88 kg/m^3 and 60.04 per cent, respectively. The average value of angle of repose was 38.22^o. The co-efficient of static friction against wood, steel and glass were found to be 0.740, 0.591 and 0.464, respectively. The average values of the chemical composition such as moisture content, crude fat, crude fibre, protein, carbohydrate and total ash were 5.9 per cent (d.b.) 2.63, 32.61, 12.25, 51.25 and 7.66 per cent, respectively.

KEY WORDS : Dill seed, Essential oil, Distillation

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