

Research Paper :

Studies on engineering properties of different varieties of sunflower (*Helianthus annuus* L.)

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ABSTRACT

An experiment “Studies on engineering properties of different varieties of sunflower was carried out in the Department of Agricultural Engineering at GKVK Campus of the University of Agricultural Sciences, Bangalore. Among the varieties of sunflower seeds studied for their engineering properties minimum and maximum length of 10.28 mm and 11.80 mm was observed in Sandoz-275 and ITC-104 varieties, respectively. Similarly, minimum and maximum breadth was observed in SHS-909 (4.18 mm) and ITC-104 (5.46 mm) varieties. Varieties Jaikisan and KBSH-44 recorded minimum and maximum seed thickness of 3.22 and 3.95, respectively. Single seed weight was maximum in KBSH-44 (0.075 g) and minimum in Sandoz-275 (0.050 g). Minimum and maximum size was observed in KBSH-41 (5.656 mm) and PASH-553 (6.291 mm) varieties. Pod sphericity was minimum and maximum in ITC-104 (0.462 mm) and PASH-553 (0.584 mm) varieties, respectively. Similar trend was also followed in bulk density. Maximum surface area was with PASH-553 (124.31 mm²) and minimum was in SHS-909 (99.90 mm²).

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