### Research Paper

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# Variability and physico-chemical studies in snap melon (*Cucumis melo* var. momordica)

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ABSTRACT: The resent investigation was carried out in the DAPS (Horticulture), Babasaheb Bhimrao Ambedkar University, Lucknow for periodical evaluation of various physico-chemical parameters viz., length of fruits (cm), diameter of fruits (cm), size of fruits (cm), weight of fruits (kg), colour of skin/rind of fruit, weight of seeds/fruit, shape of fruits, colour of flesh, total soluble solid (TSS), acidity (percentage), compactness of fruits, aroma of fruits and taste of fruits. The genotypes of Snap melon i.e. Local-1, 2, 3,  $4,5,6,7,8,9 \text{ and } 10 \text{ were designated as } \boldsymbol{V}_{1},\boldsymbol{V}_{2_{1}}\boldsymbol{V}_{3}\boldsymbol{V}_{4},\boldsymbol{V}_{5_{1}}\boldsymbol{V}_{6}\boldsymbol{V}_{7},\boldsymbol{V}_{8_{1}}\boldsymbol{V}_{9} \text{ and } \boldsymbol{V}_{10}, \text{respectively during the } \boldsymbol{V}_{10},$ investigation. In each treatment/genotype, two-ten fruits were randomly selected for recording the observations on various parameters. Genotype V<sub>s</sub> had maximum fruit length (27 cm) whereas, V6 had highest fruit diameter (24cm), fruit size (600cm), weight (3kg), seeds weight (23kg), TSS content (50 Brix) and acidity content (6.8%). The minimum fruit length was recorded in genotypes  $V_{\tau}$  (12cm) whereas, minimum fruit diameter and fruit size was recorded in genotype V<sub>o</sub> (8cm and 112 cm, respectively). The minimum fruit weight was recorded in V, (0.90 kg). Minimum seed weight was recorded in genotype V, (4.0 g). Lowest TSS was observed in  $V_{\varepsilon}(40 \text{ Brix})$  while, minimum acidity in  $V_{\varepsilon}(3.5\%)$ . Snap melon Local-1, 2, 6, 8 and 9 were found compact in nature whereas, Local-3 and 10 were found less compact. Melon Local-1 and 8 had banana like aroma rather than snap melon Local-2 and 5 having light banana like aroma. The study evaluated that snap melon Local-1, 2, 8 and 10 have acidic taste whereas, snap melon Local-3, 4, 6 and 9 have sweet taste. Genotypes snap melon Local-5 and 7 found tasteless. The overall studied suggested that genotype V<sub>6</sub> performed better for its bigger size fruits with good aroma and taste.

KEY WORDS: Snap melon, Fruits characters, Cucumis melo

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