

Promising Dragon fruit varieties

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The systematic work of dragon fruit improvement was initiated at ICAR- IIHR, Bengaluru. Four varieties viz., CHESH-D1, CHESH-D2, CHESH-D3, CHESH-DE were identified.

CHESH- D1

Selection was made from open-pollinated progeny of Hiriyur Red cultivar. The time taken between bud initiation and anthesis is 23 days and anthesis to maturity is 34 days. Fruits are round with red pulp, having dense bracts with medium apical bract length (5.70 cm). The individual fruit weight is striking character ranging from 507.71 g with pulp weight of 404.52 g and TSS 14.50 °Brix. The betalain content is 20.4 mg BCE and antioxidant potential was $467 \pm 32 \mu\text{mol TE}$. It is photo insensitive with average of 39.50 kg/pole.



CHESH-D1

CHESH- D2

It is an open pollinated variety of Vietnam Red, yielding oval fruits with red pulp. It takes 22 days from bud initiation to anthesis and 33 days from anthesis to maturity. Individual fruit weighs 442.25 g having pulp weight of 353.74 g with pH -5.04 and TSS of 15.35 °Brix. The highest total sugar content is 5.95 g. The betalain content in fruits is 21.2 mg BCE with an average fruit yield of 19 kg/pole.



CHESH-D2

CHESH-D3

It is selection from open-pollinated variety of Vietnam Pink cultivar. Fruits are round with pink pulp; medium dense bracts on surface; average individual fruit weighs 422.00 g with yield per pole 22 kg. Fruits have TSS of 14 °Brix. The pH of fruit juice is 5.32, total sugar content 5.45 g and the reducing sugar 4.21 g. The pulp is pink with betalain content of 19.00 mg BCE.



CHESH-D3

CHESH - DE

The seeds of dragon fruit cultivar Hirehalli Red were treated with 2.5 % EMS (Ethyl Methane Sulfonate). The mutant progeny of M2 generation was evaluated for its morphological and yield traits. Fruits have less to medium number of bracts with smooth surface, round shape. It bears fruits of pale pulp with pink blush. The average fruit weight is 379.18 g with pulp weight of 260.11 g and TSS of 14.80 °Brix. The total sugar content is 5.75 g and the reducing sugar is 4.66 g. The intensity of seeds is medium.



CHESH-DE

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