

Newly Released Guava Hybrids: Pusa Aarushi and Pusa Pratiksha

GUAVA is one of the important fruit crops in the country and known for its high nutraceutical and medicinal value. Guava fruit is a rich source of various bioactive compounds like carotenoids, lycopene, and vitamin C, which act as natural antioxidants. Guava fruits are also rich in mineral and fiber content. Besides, guava is a very hardy, regular, and prolific bearer, requires less care for its cultivation, and is readily amenable in the kitchen garden. Therefore, it is a highly remunerative crop for the farmers and fit for nutritional security in the country. Due to its high health benefits, the demand for guava fruits is increasing day by day. In the past decade, the area and production of guava have risen significantly in India. In India, guava is cultivated in almost all states except a few regions where the temperate climate prevails. Presently, India is the world's top guava-producing country, with a growing area of 3.14 lakh ha and 4.92 Million tons of production. The different guava varieties are preferred for commercial cultivation in the different guava-growing regions in Indian states. However, various deficiencies were observed in available commercial guava cultivars. Therefore, developing guava varieties with targeted traits like good fruit shape, size, fewer seeds with soft seed coats, and good shelf life is a key objective for the guava genetic improvement programme in India. Following these guava breeding goals, ICAR-Indian Agricultural Research Institute, New Delhi, has bred two new guava hybrids and recommended by the State Seed Sub Committee for Agricultural & Horticultural Crop, Govt. of NCT of Delhi vide No. F.10 (1) (2)/SI/TA/Sub-Committee /2017 - 18/220-266 Dated: 17/01/2023. The specific features of the newly bred guava varieties are given hereunder.

Pusa Aarushi: This hybrid is developed from the cross between *Pant Prabhat* and *Arka Kiran*, released for commercial cultivation in NCT Delhi and NC Region. Pusa Aarushi is a pink-fleshed, low-seeded guava hybrid having excellent nutritional and fruit quality traits over commercial variety Allahabad Safeda. Large fruit size (190-240 g), high total soluble solids (12.50 to 13.6 °Brix), ascorbic acid (156.82-179.23 mg/100 g of pulp),



and titratable acidity (0.39- 0.41 %), high total flavonoids (94.53-110.22 µM TE/g FW) and antioxidant activity (7.9-8.9 µ Mol Trolox/100g) with yield potential of 37 to 39 MT/ha. It is a medium maturing variety, particularly suitable for North and Central India.

Pusa Pratiksha: This hybrid is developed from the cross between *Hisar Safeda* and *Purple Guava* and released for commercial cultivation in NCT Delhi and NC Region. Pusa Pratiksha is a large-fruited, soft-seeded and white-fleshed guava hybrid having excellent nutritional and



fruit quality traits over the commercial variety Allahabad Safeda. It has a large fruit size (176-190 g), high total soluble solids (12.50 to 13.6 °Brix), and ascorbic acid content (156.82-179.23 mg/100 g of pulp) with minimum seed core having yield potential of 40 to 43 MT/ha. It is medium maturing, particularly suitable for North and Central India.

For further interaction, please contact:

Division of Fruits and Horticultural Technology, ICAR-IARI, New Delhi-11001 email: amit.tkg@gmail.com, amitk@iari.res.in