



Influence of Planting on Their Survival and Growth Parameters of Two Cultivar of Jamun (*Syzygium Cumini*) cv. Goma

Priyanka and Ra Jamun

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The Jamun, *Syzygium cuminii* Skeels is a nutritious fruit with a variety of uses. It is one of the most hardy fruit crops and can easily be grown in neglected and marshy areas where other fruits plants cannot be grown successfully. The fruit is good source of iron, sugars, minerals, protein and carbohydrate etc. Fully ripened fruits are eaten as fresh fruit and can be processed into beverages like jelly, jam, squash, wine, vinegar and pickles. A little quantity of jamun fruit's syrup is much useful for curing the diarrhoea. Small jamun fruits, which are not suitable for table use, can be used in the beverage industry as they contained a high amount of acidity, tannins and anthocyanins (Anonymous, 1986). Jamun seeds contain alkaloids like jam bosin and glycoside, which reduce the diastatic conversion of starch in to sugars. Fruits are used as an effective medicine against diabetes, heart and liver trouble (Singh, 2001). The powder of seeds has high value being useful in the treatment of diabetes, Oral administration of an aqueous jamun seed extract for 6 weeks caused a significant decrease in lipids, thiobarbituric acid reactive substances and an increase in catalase and superoxide dismutase in the brain of diabetic rats (Prince et al., 2003). Leaf extract of jamun reduces the radiation induced DNA damage in the cultured human peripheral blood lymphocytes. Therefore, the jamun fruits are having high value in terms of therapeutic and nutrition.

Two different cultivars

1. **Goma priyanka** - It is semi dwarf and having spreading type growth pattern. During year, it recorded tree height of 5.35 m. rootstock girth 69.00 cm. plani spread (NS) 5.10 and (EW) 5.30 m, leat area 109.13 cas. Leaves are opposite, simple, mostly firm and glossy, elliptic, pinnately veined with lateral veins close together. New vegetative shoots in its plants emerge in 2 distinct flushes from February to May and from August to October. Budded plants start flowering during fourth year of budding Flowering takes place in February March. Flowers are hermaphrodite. The inflorescence is terminal or lateral and develops mostly on one-year old shoots and older branches Flowers are regular, bisexual with five free sepals Before opening, flower bud attains a size of 5.2 mm in length and 5 mm in diameter and requires 28-30 days from appearance of flower bud till opening of flowers. Peak period of anthesis is between 8.00 AM and 1.00 PM. Peak period of dehiscence is between 9.00 AM and 2.00 PM. Self and cross-pollination result in fruit setting.
2. **Ra-jamun** - Common cultivar grown under North Indian condition is "Ra-Jamun". It produces big sized (length 2.5-3.5 cm) and diameter (1.5-2.0 cm), oblong fruit, deep purple colour at fully ripe stage, Juicy and sweet in taste. Fruit ripens in June-July possesses small stone. Another late maturing variety bears a small sized (length 1.5-2.0

and diameter 1-1.5 cm), slightly round fruit, deep purple or blackish in colour at full ripe stage. The stone present in these cultivars is comparatively large in size. Fruits ripen in the month of August. The jamun is a fruit, which offers a good scope for selection of better varieties out of the innumerable seedling strains that are existence in this country.

Methods

Planted 100 saplings in total of both Goma priyanka and Ra jamun transported from Central Horticulture Experiment Station Vejalpur Godhra Gujarat. Among which 25 saplings of Goma priyanka had survived in tropical climate of Prayagraj and 20 saplings of Ra jamun has survived.

References

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2. <https://ciah.icar.gov.in> Sanjay Singh, A.K. Singh, H.K. Joshi – Jamun -A fruit for future