



Agroforestry Facts Jamun



Botanical Name	<i>Syzygium cumini</i> (L.) Skeels
Name in English	Jamun
Name in Kannada	Neerale
Family	Myrtaceae
Seeds Collection	Fruits ripen in June - August. Seed usually 1 per fruit, which is 1 to 2 cm long. Fresh ripe fruits are heaped in the shade to rot and then washed in water to clean the pulp and get the seeds which are dried in the shade. Seeds lose viability quickly within 15 days and hence to be used immediately.
Seeds Processing & Treatment	No pre-treatment required. 650 to 750 seeds accounts for 1 kg.
Nursery	Propagated both by seeds and vegetative technique, the most common being by seeds. The seeds have no dormancy; hence fresh seeds can be sown (within 10-15 days) 4-5cm deep at a distance of 25cm×15cm. The seeds germinate 10-15 days after sowing. The seedlings become ready for transplanting in spring or next monsoon.



	<p>Seedlings plants bear fruits of variable size and quality. Therefore, vegetative method is desirable for propagation of improved or selected types. Budding is most successful for commercial raising of plants. It is done on one-year root stock having about 10mm thickness. In low rainfall area, July-August is ideal time.</p>
<p>Plantation Management</p>	<p>Since Jamun is a hardy fruit crop, it can be grown under adverse soil and climatic conditions. It thrives well under both tropical and subtropical climates. It requires dry weather at the time of flowering and fruit setting. Early rains are beneficial for better growth, development and ripening of fruit. Young plants are susceptible for frost.</p> <p>The Jamun trees can be grown on a wide range of soils-calcareous, saline sodic soils and marshy areas. Deep loam and well drained soils are ideal. It does not prefer very heavy and light sandy soils. Pits of 1m×1m×1m size are dug 10m apart for seedling trees and 8m apart for budded plants in a properly cleaned field. Pit digging should be completed before the onset of the monsoon or spring season. They should be filled with a mixture of top soil and well rotten farmyard manure or compost in a 3:1 ratio. Monsoon season (July-September) is ideal time of planting. But it can also be planted with a good survival rate in spring (February – March) if irrigation facilities are available. About 100-150 plants are required for planting a hectare land.</p> <p>Training and pruning: Young plants need training for development of framework. Keep the main stem or trunk clean up to a height of 60-90cm from the ground level by removing the basal branches and sprouts. Jamun plants do not require any pruning except removing diseased and dry and crisscross twigs.</p> <p>Manuring and fertilization: In pre-bearing period, 20-25kgs well rotten farmyard manure/plant/year should be applied. For bearing trees, this dose is increased up to 50-60kg/plant/year. The ideal time for giving the organic manure is a month before flowering. Grown up trees should be applied 500g N, 600g P and 300g K /plant/year. This should be spread near the canopy of the plant and mixed in soil by hoeing.</p> <p>Aftercare: Green manuring can be done during rainy season. Sprouts arising from base of its plants should be removed timely and the plantation should be kept weed free. Jamun is a cross pollinated crop hence</p>



	<p>raising of honey bees near the plantation is desirable for maximum fruit set and productivity.</p> <p>Irrigation: Young plants require 6-8 irrigations for better growth. In bearing trees, irrigation should be given from September to October for better fruit bud formation and from May to June for better development of fruits. Normally 5-6 irrigations are required.</p>
Model/Spacing	8 – 10 m is ideal spacing
Pests, diseases and Management	No pests and diseases
Plant Rotation	Once in 10 – 12 years
Yield	Fruits 80-100kg /tree/year.
Uses	Fruits edible. Fruits can be used to prepare local drinks and preparation vinegar. Seeds medicinally important. Wood is used for agricultural implements, in bullock carts, in tradition wells (as basal platform), boats preparation, constructions and as fuel wood.
Buyers /Industries	Local consumption
Harvesting	<p>Trees from seedlings start bearing at the age of 9-10 years, whereas budded one take 5-6 years. Fruits ripen during June-July or with onset of rains. It takes 3-5 months to ripen after full bloom. Fruit change colour from green to deep red or bluish black. Fruit does not ripen after harvesting. Fully ripe fruits are harvested daily by hand picking or by shaking and collecting the fruits on a polythene sheet. Jamun trees needs number of pickings, since all fruits do not ripen at a time. The average yield of fully grown budded and seedling tree is 50-70kg and 80-100kg/plant/year. Jamun fruits are highly perishable. They can be stored only up to 2 days at ambient temperature. Precooled fruits packed in perforated polythene bags can be stored for 3 weeks at 8-10C and 85-90% humidity. Jamun fruits can be processed into excellent quality fermented beverages such as cider and vinegar, and non-fermented ready to serve beverages and squashes. A good quality jelly can also be prepared from its fruits. The seeds can be processed into powder which is very useful to cure diabetes. The problem of flower and fruit drop can be minimized by spraying of GA3 (60ppm) twice, one at full bloom and other 15 days after fruit set</p>
Economic Returns	Rs.6400-8000/Tree/Year.
Current Market Rate	Ripen fruits Rs.80 per kg.