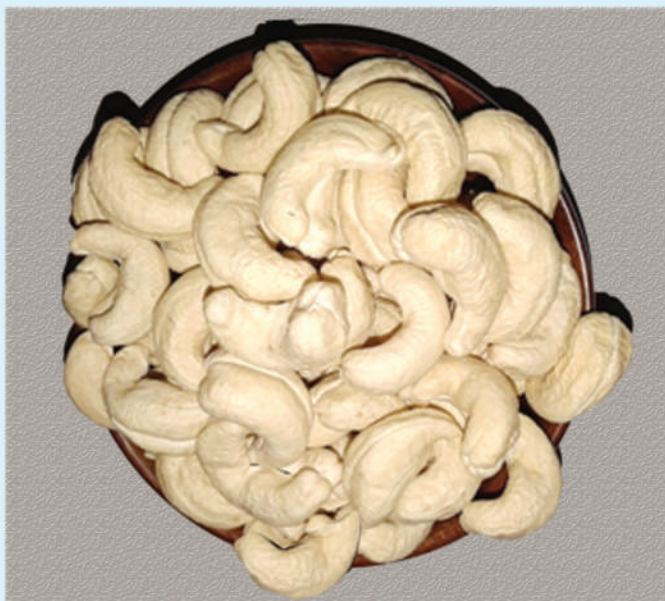


The kernels contain good amount of proteins (21 %), sugars (15.6 %) and total fat content (47 %). The kernels are sweet in taste and uniform in size. The outturn of stored nuts is around 55 with a moisture content of 5.75%. The nut count of fresh nuts is 70 and the stored nuts are around 80-83.

Striking features of Nethra Jumbo - 1 :

- ❖ Jumbo sized nuts with uniform size
- ❖ Cluster bearing
- ❖ W-130 kernel grade
- ❖ Higher market price
- ❖ 50 % reduction in man power for harvest
- ❖ Easy peeling of testa



Economics in terms of profit : Nethra Jumbo -1 can save about Rs. 16,000 on labour cost (50% saving on man days) and fetch a premium of Rs.10,000 for bigger size per ton of nut yield, giving an additional revenue of Rs. 26,000 for farmers on every ton of nut yield which can substantially make cashew cultivation a profitable venture under rain-fed horticulture.

Cultural requirements : Nethra Jumbo -1 is suitable for wider density at a spacing of 7m x 7m accommodating 200 plants per hectare. The manure and fertilizer requirements are similar to other varieties with an adult tree (three years and above) requiring 500g:250g:250g N, P and K per tree per year. It is recommended to dry the nuts under full sun for 3 days to ensure better storability and market price from processors.

Plant protection tips : As Nethra Jumbo -1 produces new shoots early in the season, the care from insect pests, especially, tea mosquito bug is very important. The timely spray of recommended insecticides during flushing, flowering and fruit set is essential to harvest a good crop.



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Nethra Jumbo - 1 : A New Cashew Hybrid for Higher Income



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Introduction : The process of harvesting through picking of fallen nuts accounts for a major share of expenditure to the tune of nearly 40 percent in cashew cultivation. Developing jumbo nut varieties would significantly reduce the manpower requirement for harvesting of nuts apart from fetching premium price from processors as it leads to production of premium sized kernels with higher market price. The bigger nuts also improve processing efficiency in the factory as it would also save labour in processing apart from getting higher outturn. Hence, a new jumbo nut cashew hybrid Nethra Jumbo-1 (H-126) was identified and released in 2021.

Nethra Jumbo-1 has a special character of jumbo nut (12 g), precocious bearing, cluster bearing habit and higher yield. It also saves the labour on harvesting and ensures about 10% higher price for the farmers due to bigger nut size. The added advantage of this hybrid is uniformity in nut size, wherein, more than 90% of nuts are uniform in size. As this hybrid is an early flowering type, the advantage of higher market price in the beginning of cashew season can be exploited. This hybrid can also escape severe pre monsoon moisture stress as compared to late varieties.

Tree Habit : The tree is vigorous, having extensive branching pattern with open and spreading habit. The young leaves are yellow red in colour while the mature leaves are large and dark green with obovate shape.



Flowering and Fruit set : The flowers are produced from second year after planting. Nethra Jumbo - 1 is an early season bearer with short flowering duration. The flowering starts from December and continues up to March and the peak flowering will be in January and February. The panicles are broadly pyramidal in shape with large size. The hermaphrodite to male flower ratio is high (0.21) which helps to increase to fruit set and responsible for cluster bearing. The colour of peduncle of tender nuts is purple and tender nuts are slightly purple.



Cashew Apple : It bears attractive red coloured apples which weigh around 100g per apple with conical to obovate shape. The apples have TSS of 13° Brix with 72 percent of juice content.



Harvesting and Yield : The season of harvest starts from January and continues till March-end. The duration of the harvesting period is less which helps to save the labour on picking of nuts. The early availability of raw nuts will help to catch high market prices prevailing during the early part of cashew season. The cumulative nut yield of eight harvests under unreplicated trials was 42.44 kg/plant with an average yield of 5.31 kg per plant per year. A ten-year-old tree has the potential to yield around 10 kg per tree.



Nut and Kernels : The nut weight ranges from 11 to 13 g with an average nut weight of 12g per nut. The nuts have high shelling percentage (29.1) with 3.66 cm nut length, 2.73 cm nut width and 2.41 cm nut thickness with 18.5 % of CNSL content in the shell. The kernels are bold with a 3.4g average weight and fit into kernel grade W130.