Durian, hailed the 'King of Fruits,' is a highly prized fruit in the world. The genus Durio is native to Southeast Asia with its centre of origin in Borneo. As a rainforest tree, it typically attains heights of 30 to 40 m and diameters of 2 to 2.5 m, but the cultivated varieties in an orchard, especially when grafted, grow no higher than 12 m. Durian has immense potential to be developed into a viable fruit crop in the wet tropical regions of South India.

You will love durian or hate it, but you will never be indifferent to it. The smell can be extremely repulsive for some, while irresistible for others. Interestingly, you will grow to love the experience of eating a durian with repetitive exposure. Some describe durian as the food of love, creating such levels of euphoria that you may get “addicted” to it. However, there are no side effects to durian addiction other than bliss and happiness, and high nutrition.

HEALTH BENEFITS
Durian is exceptionally rich in calcium, iron, magnesium, phosphorus, potassium, zinc, copper and manganese, thiamin, riboflavin, niacin, pantothenic acid, vitamin B-6, folic acid, vitamin A etc. Durian has a compound called phyto-estrogen, which is known to boost fertility in humans.

Durian is exceptionally high in protein and fat, and 100% cholesterol free. While it helps build strength by providing excellent calories, it also helps lose weight with its strong detoxifying effects on the body. Homegrown Biotech has been working extensively on the improvement and propagation of durian.

WHERE TO GROW
Durian is an evergreen tree with its canopy taking conical to semi-elliptical shape. The plant thrives in a hot, humid tropical climate characterized by high humidity of over 80%, rainfall of 200 to 300 cm evenly distributed throughout the year, and uniform temperatures of 22°C to 33°C. Durian has a protracted juvenile period of 6 to 8 years, monoseasonal annual flowering and slow turnover of generations.

PLANTING MATERIALS
The preferred planting material is budling. The budling is easy to spot. It is shaped like a large Christmas tree and the branches grow out from the main trunk in every direction.

HOW TO PLANT
Durian grows best in fertile, deep soils with abundant organic matter and a pH of 5 to 6.5. About 30 or 35 budlings can be planted in one acre of land. Pits should be dug out, 3x3x3 ft in size, and should be filled with top soil mixed with 3 or 4 pots of well-decomposed cow-dung manure or compost. A kilo of dolomite is also recommended to be mixed with the top soil to correct the pH of the soil based on soil test. After filling the pit, make a planting hole of the size of the budling ball, and plant with the bud patch above the soil level. Additional fertilizers can be given after four months of planting. As a general recommendation, give 2 or 3 pots of organic compost or farmyard manure twice per year. For growing plants, provide a split dose of 250 g of 18 Complex just before or during the monsoon in June/July and after the monsoon in September/October. A mature, yielding tree can receive 2 or 3 kg of complete fertilizer per year. Fertilizer application should be followed based on soil test and/or leaf tissue analysis.

Durian trees generally live for 80 to 150 years, but are capable of living for several centuries. Budlings begin to bear fruits in 4 or 5 years. Trees are considered young from 6 to 15 years, middle-aged from 15 to 25 years, and older after 25 years. Fruit production decreases in very old trees, but fruit quality increases with age. Hence fruits from older trees are priced high.

FLOWERING AND POLLINATION
The flowering season of durian is from February/March with a peak in mid March. Durian flowers are mildly fragrant. A minimum of 3 or 4 weeks of dry weather is needed to stimulate flowering. It takes about 6 weeks for a durian flower to develop from a tiny bud to an open flower. Durian flowers are normally open from around 3 pm to midnight. They are mainly pollinated by bats. Usually 1 or 2 durian fruits develop from each flower cluster. Durian fruit is round to oblong in shape, greenish or yellowish tan brown and covered with sharp spiny rind. Rind is so tough that when a fruit falls to the ground, no major damage is caused to the edible portion.

POPULAR VARIETIES
Durian has several excellent varieties. The most popular ones are Musang King, Sultan, D24, Red Prawn, Mon Thong, Phuang Manee, Chanee, Black thorn, D101, D99 etc.
MAJOR DISEASES

Root and Stem Rot: This is caused by Phytophthora palmivora. The durian roots will rot and become brown. If rot is serious, the leaves at the tip of branches become yellow, stop their development, and fall off. The leaves at the base of the branch fall down later than the leaves at the end of the branch. A juicy spot may develop with water runoff at the foot of the tree. If this spreads around the entire foot of the tree, all leaves will fall off and eventually the tree will die. Under humid conditions with frequent rain, the fungus will spread to big branches where it will cause juicy spots, change of tissue colour, and yellowing of leaves.

How to prevent: Apply fertilizer and dolomite to adjust pH and to optimize nutrition provided to the trees. Preferably apply adequate amount of FYM and organic manure-culture such as “Jeevamrutham” to improve soil quality and development of beneficial microorganisms. Apply Trichoderma-enriched FYM to antagonize soil borne diseases. The disease prefers humid conditions. Pruning of branches will allow more air movement, which will lower the humidity. Improve drainage to avoid flooding or extreme wetness of the soil.

If there is infection, prune infected branches and fruits, and burn them to destroy the microbes. Remove rotted fruits that fall on the ground and burn them. Apply Metalaxyl (Ridomil Gold) fungicide on the wounds on the pruned areas.

Leaf Spot: This is caused by Rhizoctonia solani.

How to control: Spray 0.5 ml/l Tilt (Propiconazole) every seven days for three times.