Botany durian

Business, Industries



Durian: Genus: DurioFamily: Malvaceae Kingdom: Plantae Tribe: Durioneae Order: Malvales Subfamily: Helicteroideae Scientific Classification: • There are 30 recognized Durio species • Nine of them produce edible fruit 1. Durio zibethinus 2. Durio dulcis 3. Durio grandiflorus 4. Durio graveolens 5. Durio kutejensis 6. Durio lowianus 7. Durio macrantha 8. Durio oxleyanus 9. Durio testudinarum • Durio zibethinus is the only species available in the international market • Other species are sold in locally Species Durian: It is a large-sized tropical fruit tree.

The tree can reach a height of 35 – 45m if grown from seeds. Durian trees that are planted on a smooth level of land are smaller in size (10-15m in height). Climate: Climate Condition • Soil: It grows best in fertile, deep soils with abundant organic matter and a pH of 6-7 • Temperature: 25 -30 C; evenly distributed. The trees may survive occasional changes in temperature as low as 10? C and as high as 46 C. • Needs tropical warmth, abundant moisture, and sunshine to thrive. • If coconut can grow and bear well in some climate, except for seaside areas (durians are not salt-tolerant), durians may be possible too.

Soils: The durian needs Loamy to sandy loamy is the most suitable soil. This soil is mostly found at the slopes of hills. Soil like "bris" soil, sulphuric acid and peaty soil is not suitable for durians. Roots: Durian roots have primary taproot going directly down from the trunk and secondary roots growing out from it. Durian Flowers • Durian flowers are strongly fragrant and having nectar • 50-70 mm long and grow in clusters of 1 to 45 individual flowers per cluster • Flower clusters hang from the main and smaller branches, or directly from the trunk of the tree. Period of 3 to 4 weeks of dry weather is

needed to stimulate flowering • It takes about one month for a durian flower to develop from first appearance as a tiny bud to an open blossom. • Each flower has 5 sepals and 5 petals • Colour of the flower matches the color of the edible pulp that will develop inside the fruit; - Yellowish petals produce yellow-fleshed Durians (the most common) - White or Reddish petals will produce white or reddish fleshed Durians. • Durian flowers are normally open from around 3 p. m. to midnight • Durian flowers are hermaphrodites, each having a stamen and pistil in the same flower. Self-pollination rarely happens because the pistil and the stamen do not appear at the same time. • Durian flowers are primarily pollinated by Bats when they visited flowers for nectar • No evidence for any durian pollination happens via the wind • It has been demonstrated that durian fruit-set will greatly increase by human handpollination • Usually only 1 or 2 durian fruit develop from each flower cluster Flowerbud and flower: The nocturnal durian flower blooms when night falls and is at its peak at midnight. Usually, no pollen can survive until the next morning, so active pollination occurs during the night. Bats are pollination agents. Durian Leaf • leaves are about 8 - 20 cm long and 2. 5-7. 5 cm wide • Elliptic to oblong in shape • Upper surface is shiny smooth, light or darkgreen • Bottom surface is somewhat scaly, sometimes brown but more often with a golden shine. • Leaves are folded at their mid-rib when they first appear, then stretch out as they mature. Durian Fruit • Durian fruits' Weight commonly ranges from 2-5 kg, up to 8 kg is also possible. • Thai varieties are generally the largest, as 200 mm long by 175 mm in diameter • Fruits from Philippines and most other regions are sually smaller and lighter • The weight of the fruit and its spiky armor make a durian grove a hazardous

place during ripening season, unless the fruits have all been pre-tied with strings or ropes to prevent their fall to the ground, or large safety nets positioned to catch them. Durian Fruit • Inside each fruit there are 5 compartments containing the arils and 1 to 7 seeds of 2-6 cm long with glossy, red-brown seedcoat • The aril or pulp varies extensively between cultivars and different seedlings in aroma, flavor, texture, thickness, and color, usually ream yellow to deep orange, but also rarely in some varieties white and even bright red. • Durians from trees aged 50, 60 years and more have enhanced qualities of flavor, aroma, and texture • Fruits of older trees can be identified visually by having very wrinkled skin on the fruit sections. • Durians are highly perishable. They are fully ripe 2 to 4 days after falling and lose eating quality in 5 or 6 days • The fruit is attractive to a great variety of animals and insects as well as people, including monkeys, gibbons, orangutans, apes, birds, dogs, pigs, rhinoceros, ears, squirrels, tapirs, deer, elephants, tigers, and even the domestic cat. Odor/Smell of Durian -- Smell of Durian is a mixture of - Unwashed socks - Rotten fish - City dump on a hotsummer's day- Carrion in custard - Decayed onion - Turpentine - Garlic Taste of Durian • Taste of the Durian is a mixture of - Custard - Almonds -Cream cheese - Sherry wine - Ice cream spices - Banana Medicinal Properties • Parasitic worms are said to be expelled by eating durian • Fevers are said to be reduced by drinking a tea of the leaves and roots, or applying durian leaf juice to the head. Swellings and skin diseases are said to be healed by applying a tea of the leaves and fruits • People with high blood pressure or pregnant women are traditionally advised not to consume durian • Durian is not recommended for consuming with alcoholic beverages, as the

combination of natural substances is a powerful producer of internal gas. Facts About Durian: -The durian is commonly known as the "king of the fruits." The name comes from the Malay word duri, meaning "thorn." - Durians cannot be plucked from the tree. You have to wait for durians to drop. The fruit usually drops at night.