



Jackfruit

Gerry McMahon, Senior Technical Officer, DPIFM Darwin

Name: Jackfruit *Artocarpus heterophyllus* (Moraceae).

Origin: Jackfruit is indigenous to South Western India. Believed to be from the rainforests of the Southern Ghats Mountains.

Distribution: Jackfruit was introduced into Malaysia, South East Asia and into East Africa by the Arabs. Now it is grown in most tropical lowland regions around the world.

Australian Distribution: Mostly tropical regions of north Queensland and around Darwin in the Northern Territory.

Preferred Climate and Soil Types: Jackfruit prefers a warm humid tropical climate, mostly lowland coastal areas below 1000 m, with more than 1500 mm rainfall, without a prominent dry season. It has poor cold, drought and flooding tolerance, but can tolerate moderate winds and salinity. Performs best on deep well drained alluvial, sandy or clay loam soils with pH 6.0-7.5.

Description: Jackfruit is a medium size evergreen tree from 10-20 m, with deep green shiny leaves. They are monoecious and individual male and female flowers are very small and grouped into a tightly packed inflorescence. Female flowers are found on short stalks on the trunk and older branches and even on exposed roots. Male flowers are found near the branch terminals. The fruit are syncarps and are the largest of all cultivated fruits and can weigh up to 50 kg, and contain 100-500 seeds enclosed in a strong smelling, sweet edible flesh.

Varieties: Jackfruit is cross-pollinated and mostly seed propagated therefore much variation exists. Some commercial varieties have been selected in different areas, but generally two main types exist - soft flesh and crisp flesh.

Culture: Not often grown as an orchard tree but more as a few trees with another fruit crop. Spacings generally 6-12 m, and seedling trees take 5-6 years to produce fruit. Seedlings are difficult to transplant having a long tap root that is easily damaged. Air layering, inarching, epicotyl grafting and bud grafting are methods of propagation that have varying degrees of success, depending on time of year and tree selection. At seedling and fruiting stage an application of a mixed fertiliser is beneficial.

Pests and Diseases: Some of the major pests and diseases include shoot borers, bark borers, mealy bugs and scale insects, blossom and fruit rots, pink disease and bacterial dieback can be a problem. Most of these do not cause economic damage to any great extent, and regular monitoring and appropriate control measures will reduce any problems.

Fruiting Season: Around Darwin, jackfruit is available most of the year, from June to April.

Harvesting: The fruit is mature when there is a change in colour, from pale green to brownish-yellow. The spines also flatten out and there is a characteristic odour. The stalk must be cut with a sharp knife and the fruit carefully lowered to the ground.

**DEPARTMENT OF PRIMARY
INDUSTRY, FISHERIES AND MINES**

Crops, Forestry and
Horticulture Division
GPO Box 3000
Darwin NT 0801
Tel: 08 8999 2357
Fax: 08 8999 2049
Email: horticulture@nt.gov.au
Web: www.horticulture.nt.gov.au

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Storage Conditions: Jackfruit can be kept wrapped in polyethylene bags and stored at 12°C for 20 days. Temperatures lower than this will cause chilling injury.

Culinary Use: Immature fruit can be cut up, used as a vegetable, pickled or canned in brine. Ripe fruit is eaten fresh or can be made into chutney, jam, jelly. It can also be preserved as candies by drying and mixing with sugar, honey or syrup. The pulp is used to flavour ice cream and beverages.