STAR APPLE

FACT SHEET NO. 14

J.R. Marshall

BOTANICAL NAME: Chrysophyllum Cainito

FAMILY: Sapotaceae

ORIGIN: Tropical Central Americas — West Indies.

TREE DESCRIPTION:
Handsome, densely foliated evergreen with graceful pendant branches. Leaves are elliptical, to 15 cm in length with glossy topsides and golden copper undersides. Wind exposes leaf undersides giving the tree a striking golden appearance. Trees laden with purple fruit present a picture of exotic beauty. HEIGHT — Seedlings to 15 metres, grafts and cuttings to 10 metres.

FRUIT DESCRIPTION AND FLAVOUR:
Ripe fruit vary in colour from light green to greenish gold to deep purple depending on cultivar. Fruit shape is round to oblate and 5 to 10 cm in diameter. When cut cross-sectionally, the centre is star shaped. The exocarp (skin) is smooth and shiny. There are 3 to 5 seeds approximately 2 cm in length. Edible flesh recovery is 50 to 80%. The semi-translucent white flesh is soft and juicy. Flavour is sweet and delicious.

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POLLINATION:
Many different kinds of native insects are attracted to the flowers for pollination but fruit set appears to be dependent on the presence of suitable weather conditions and sufficiently high levels of carbohydrates. Observations in North Queensland have found fruit set occurs particularly after 1 or 2 weeks of rain. In very humid areas, fruit set may occur continuously throughout the six month flowering season. Many seedling trees produce only small crops. This can be due to absence or sterility of pollen or self-incompatibility and so require cross-pollination.

FRUIT DEVELOPMENT:
Fruit drop seldom occurs and the fruit develop slowly over a period of 4 to 5 months. Constant soil moisture and nutrition ensure a well developed crop.

FIELD PLANTING:
Plant in spring and summer in previously ploughed and manured soils. Spacing at 8 metres between trees and 10 metres between rows. 120 trees per HA.

PRUNING:
Remove inside branchlets and water shoots. Maximum heights should be kept to manageable levels of 4 to 5 metres.

YIELD:
3 year old cultivars can yield up to 50 kg of fruit in one season and mature trees can produce up to 500 kg of fruit per season.

PROPAGATION:
Tip cuttings on heated beds under intermittent mist are quite successful. Approach grafts are also popular. Top wedge and side veneer grafts have poor success rates.

HARVESTING:
Maturity is gauged by colour and taste. Ripe fruit should be picked individually by hand. The harvesting season may last from mid-winter to mid-summer.

POST HARVEST TREATMENT:
Star apples resist fungal attacks and treatment is usually unnecessary. Some fruit develop with skin blemishes and should be graded out to maintain market standards.

TRANSPORTABILITY AND PACKAGING:
The fruit travel well if individually wrapped. Bruising has minimal effect on flesh and skin colour but should be avoided. 5 or 10 kg tray packs are recommended.