

# ATEMOYA

*Annona squamosa* x *Annona cherimola*

Annonaceae

## ECHO® PLANT INFORMATION SHEET

### Description

The atemoya is a hybrid of the cherimoya (*Annona cherimola*) and the sugar apple (*Annona squamosa*), two members of the Annona family. The name comes from an old Mexican word "ate" for sugar apple combined with "moya" from cherimoya.

### Uses

Atemoyas produce delicious-tasting fruits that resemble the cherimoya in flavor. The fragrant, snow white flesh is both sweet and subacid at the same time. The fruits are usually eaten fresh out of hand or made into ice cream. The toxic black seeds can be used to make an effective pesticide through crude water extraction.

### Common Names

- Spanish
  - Atemoya

### Cultivation

The Atemoya is somewhat frost-resistant reflecting the high altitude tolerance of the Cherimoya parent, but it is still limited to tropical or near-tropical lowlands. Atemoya seedlings exhibit combinations of traits from the hybrid parent species, thus commercial growers use grafted plants to ensure genetic uniformity. Home gardeners growing atemoya from seed are advised to select seedlings with the best fruit and growing characteristics for further propagation. Best selections may be propagated by budding or by veneer, cleft, or whip grafting.

Atemoya trees may be grown from seed and generally will produce good tasting fruit in three years in humid tropical climates. Periodic pruning (heading back) of shoots may be required to keep trees at a manageable size for easy harvest. Atemoyas are pollinated successfully by sap beetles (family *Nitidulidae*), but may require hand pollination if suitable pollinators are unavailable. Flowers rarely self-pollinate. The female part of the flower opens and matures between 2 and 4 pm the first day while the male part of the flower (the pollen) matures the following day between 3 and 5 pm. Consequently hand pollination is usually important. (Further information about hand pollination can be found in ECHO Development Notes issue 94, January 2007, available online at [www.echotech.org](http://www.echotech.org).) No fertilizer is applied until after the tree is established, since the young roots are very sensitive.

Recommended fertilization of young trees is bimonthly 100 g (0.2 lb) additions of 6 3 5 NPK. Heavier quarterly applications (500 g/lb or more per tree) of fertilizers with higher proportions of N and K are recommended for mature trees. The trees are deciduous, losing their leaves once a year.

- Germination: 14-21 days; A pre soak period of 24 hours is recommended prior to planting.
- Soil: well-drained
- Temperature: somewhat frost-resistant
- Rainfall: Plants should be irrigated during bloom and fruit set if flowering coincides with the dry season. Irrigation during fruit maturation may cause fruit splitting.

### Harvesting and Seed Production

About 100 - 120 days are required from flowering to fruit maturity. The fruiting season lasts approximately one month. Harvest fruit when creamy lines appear between the areoles on the outside of the fruit. The fruit is best eaten just prior to fruit drop. Very young green fruits will not ripen off the trees; however, well developed green fruits may be picked and held at room temperature until the fruit darkens slightly and splits at the stem end. If the fruit yields to gentle finger pressure it is ready to eat.

### Pests and Diseases

Mealy bugs, Philephedra scale, and the Annona seed borer are reported Annona fruit pests. Leaves are subject to scale insect attack and stems can be attacked by Ambrosia beetles. Annona fruits are subject to anthracnose disease. Rust fungus diseases are reported causes of out-of-season defoliation. A fungal caused tree decline disease has been reported especially in atemoya groves with wet soil.

### Cooking and Nutrition

The delicious fruits may be cut longwise and eaten fresh from the half shell or cut horizontally into thick slices. The fruits can also be peeled to obtain pure fruit pulp for use in fruit salads, ice cream, and other desserts or blended to prepare beverages. The small black seeds are toxic but are removed easily from the pulp with a knife point.

### References

Morton, J. 1987. Atemoya. p. 72-75. In: Fruits of warm climates. Julia F. Morton, Miami, FL.

<http://ecocrop.fao.org/ecocrop/srv/en/cropView?id=2465>

