**Cultivation Process for Custard Apple**

* Custard apple is one of the finest fruits introduced in India from tropical America. It is also found in wild form in many parts of India. Custard apple cultivation in Andhra Pradesh, Maharashtra, Karnataka, Bihar, Orissa, Assam, and Tamilnadu.
* Another country like China, Philippines, Egypt and Central Africa also the cultivation of Custard Apple. Custard Apple is a tropical fruit. Custard Apple Fruit Test is like creamy what makes the fruit so popular among masses. Also, it’s a beautiful aroma.
* Custard apple Cultivation is very easy and quickly growing Fruit. Also, you can easily earn a lot of fruits for selling Custard apple fruit.
* Growing from the fruits after the bark, leaves, and seed have lots of uses. It is Use in Ayurveda and Herbal Treatment. Custard apple fruit itself has a delicious taste and unique smell to compare to other Fruits.
* The main use of Custard apple fruits generally makes ice creams and Custard Powder. The main thing as this fruit provides high nutritional value there be it is very popular.
* Most of the Custard apple fruits are used as fresh and some product or mix fruits like custard powder, ice- creams are prepared from the fruits.
* You think cultivation of Custard apples you don’t need of each and every detail. These Plants can grow almost any soil condition and weather.
* Custard apple fruits are low in saturated fat, Cholesterol and sodium and high in Vitamin C, Iron, Manganese, and Potassium.

**Grown Areas of Custard apple In India**

* In India, Custard apple fruit is grown commercially Cultivate in the Andhra Pradesh, Maharashtra, Karnataka, Bihar, Orissa, Assam and Tamil Nadu.
* Also, it is popular to besides India.

**Nutritive and Medical Value of Custard apple**

* Custard apples are mainly used as a flavouring agent in sweets and desserts.
* The ripe fruit itself is in huge demand and is very delicious.
* Custard Apple fruit has used a hard skin with a soft edible flesh. The texture of the flesh is grainy and creamy.
* There are multiple seeds inside the fruit which are not edible
* Custard apple Fruit is very rich in Vitamin-C.
* Vitamin C increases the iron absorption capacity of your body and strengthens your immune system so this fruit is used increase the immune system.
* Also, the use of the Outer skin of Custard Apple to treat oral problems.
* Use of Gum problems, you can use the skin of the fruit as a remedy.
* Also, this fruit includes Vitamin A. It is used to protect your eyes from infections and weakness.
* If you possible the one Custard apple daily use in your dirt much more useful.
* You can Daily be eating is good for your skin and premature graying of hair.
* Custard Apple Fruit also contains very high nutrition so keeps your heart healthy.
* It prevents various cardiovascular diseases and also decreases the chance of having those diseases.
* Advice for Pregnant women to include one Custard Apple in the daily diet.
* It is used decrease morning sickness, provides high nutrients to grow fetus and aids in overall development.
* The latex from the bark of custard apple trees can be used to treat minor skin infections.
* Also, the Custard apple tree leaves have antibacterial, anti-inflammatory and antimicrobial properties so you can use have leaves juice for any infections.
* Also, it is rich in iron. So, you can use blood relate conditions problems.
* Custard apple fruit is rich in copper and high fiber.
* The micronutrient makes it easier for the body to utilize.
* It prevents indigestion and also helps in the easier movement of bowel.
* Custard apple tree leaves are used to decrease the sugar absorption capacity of your body.
* Diabetic patient consumption of the leaves is very useful.

**How Can Grow Custard apple…?**

* Custard apple Cultivation is very hardy, medium in growth and deciduous in nature.
* Custard apple fruits are rich in high nutritive value so it has also a high medicinal value.
* All the varieties of Apple fruits are tropical in origin and grow well in hot and dry climate with varying degrees of difference.
* Custard apple trees requires **hot and dry climate** during flowering and high humidity at fruit set.
* Flowering comes during a dry climate of May but fruit setting takes place onset of monsoon.
* Main is important to low humidity is harmful for pollination and fertilization.
* The Custard apple withstands drought conditions cloudy weather and also when the temperatures go below 15 degrees.
* Satisfy rainfall is 50-80cm is optimum, it can withstand higher rainfall.
* The Custard apple is not very particular about soil conditions and flourishes in all types of soils.
* All the soil like shallow, sandy, but fails to grow if the subsoil is ill-drained.
* Custard apple Cultivation well in deep black soils provide they are well drained soil.
* A little salinity or acidity does not affect it but alkalinity, chlorine, poor drainage or marshy-wet lands hamper the growth and fruiting.
* Custard apples are commonly propagated by seeds.
* Recently some researchers have developed some techniques in vegetative methods and budding can be adopted for multiplication.
* The seedlings of local custard apple have proved a good rootstock for many improve varieties and hybrids.
* Seeds treated with 100 ppm for 24 hours germinate quickly and uniformly planting is done during rainy season.
* The pits of 60 x 60 x 60 cm at spacing 4 x 4 or 5 x 5 or 6 x 6 depending on soil type are dug prior to monsoon and fill with a good quality FYM.
* Also, mix single super phosphate and neem or Karanj cake under dry conditions and with drip irrigation system planting at 6×4 meters has given good growth and better fruit setting.
* Some farmers call that they get a very good yield from grafted plants.
* You can also try inarching, which also gives excellent results.
* Other methods of propagation are budding, layering and cutting.
* It is better if you soak the seeds prior to sowing.
* The custard apple seeds have a tough coat and prior soaking helps to germinate better.

**Varieties of Custard Apple in India:**

* Custard apple fruit varieties in India are different in states like Red Sitaphal, Hybrid, Balanagar, Washington, Purandhar, Atemoya, Pink’s Mammoth, etc.

**Growing Requirement of in Custard apple Cultivation:**

* All Custard Apple Varieties are tropical in origin and grow well in hot and dry climate with varying degrees of difference depending on climate conditions.
* The main point is always to keep in your mind is Custard apple requires hot dry climate during flowering and high humidity at fruit set.
* Flowering comes during a hot dry climate of May but fruit setting takes place on the onset of monsoon.
* Low humidity is harmful for pollination and fertilization.
* The Custard apple manages to cloudy weather conditions and also temperatures go below 15-degree cent.
* Maximum rainfall of 50-80 cm is required, in case higher rainfall occurs apple custard withstand.
* Custard Apple is growing any type of soil conditions and all type of soil like sandy, shallow but fails to grow of the subsoil is an ill drain.
* Custard Apple can grow well in deep black soils provides they are well grain.
* A little salinity does not affect it but alkalinity, poor drainage or marshy-wet lands hamper the growth and fruiting.
* If possible, avoid soils that have previously grown these crops are tomatoes, potatoes, eggplant, capsicums, and ginger.

**Fertilizers and Nutrition requirements for Custard apple Cultivation:**

* Generally, no manures or fertilizers are applying to rainfed crop.
* For early and bumper harvest with a good keeping quality, the following dose is recommended to a fully-grown tree.
* Bimodal 10 kg, 5:10:5 1 kg Ormichem micronutrient mixtures 0.250 kg at the time of flowering.
* Another dose of 10:26:26 or 19:8:12: 24:4 10 gm/lit, twice setting.
* Foliar spray with occasionally, zinc or iron or both deficiencies are notice and can be taken care of by spraying chelae zinc or Ferrous.
* Nitrogen should be applied in the form of FYM and oil cakes each at 25%and the remaining 50%with chemical fertilizers.
* While p2o5 in the form of superphosphate and k2o in the form of sulfate of Potash.
* Manures are applied in 2 to 3 does like the First dose in December to January, 2nd dose in June to July and last dose in September.
* Adopt the ring method of fertilizer application.
* A mixture of zinc sulfate 0.5%, manganese sulphate 0.2%, boric acid 0.1%, urea 1% and Lime 0.4% has to spray two or three times in a year to control chlorosis in leaves.
* Potassium contains fertilizer may be applied as a single dose in a year like January.
* After weeding and manuring application of dry leaf mulch or paddy husk to a thickness of 8 cm in the basin keeps down the weed growth and decreases the number of irrigations and improve the fruit quality.
* In the initial years of planting, intercrops like groundnut, minor millets, linseed, and gram should be grown easy.

**Water supply/Irrigation in Custard apple Cultivation:**

* In general Custard apple is grown as a rain-fed crop, and no irrigation given.
* However, for early and bumper harvest of the crop.
* Maybe irrigation on flowering from ought to be given till regular monsoon starts.
* Better flowering and fruit set, mist sprinkling is better over food or drip system of irrigation as it keeps to lower down the temperatures and to increase in the relative humidity.
* The gap filling is to done as early as possible.
* Stage of water during the first monsoon should be taken care of if the plant is done on impervious soils or ill drain soils.
* Most of Custard apple trees does not require and prefer semi-arid conditions.
* For Atemoya after manuring irrigation may be given.
* If you improve the fruit size and yield you should be done one or two irrigation when fruits are developing.

**Pests:**

* **Silver Leaf**: Leaves develop a silvery sheen, cut branches revel red staining. Prune from the end of June until the end of August or in rare spring. Keep pruning cuts to a minimum, pruning regularly so cut surfaces are small.
* **Bacterial Canker**: This disease occurs of sunken, dead areas of bark often accompanied by the gummy ooze. It can kill off entire branches. Also, burn or landfill the pruning.
* **Glasshouse red spider**: Leaves become mottle, pale and cover in webbing on which the mitts can be clearly seen, leaves also drop prematurely. Use biological control in the greenhouse.
* **Birds**: Birds in Pigeons mostly affects the apricot fruits. It can cause an array of problems including eating seedlings, buds, leaves, fruits, and vegetables. Avoid this problem by protecting the plants from birds by covering netting.
* **Drills**: These are a worm’s type. It is attacked by drill device galleries that trace the host trees.
* **Big-headed Worm**: It is a pest that affects many fruit trees. The main damages are caused by the larvae that build galleries in weakling the plant roots which eventually die.
* To avoid this pest, use as biological traps feronomas.

**Diseases:**

* **Rust:** A disease caused primarily by fungi of the genus Puccini and Melampsora, which use the excess humidity to thrive. It means as spots of orange or brown on the leaves. Then a yellow color in the part of the beam.
* **Moniliasis or Flower Blight:** This affects flowers that dry. Also, produce a blacking of the fruits that are dry on the branches without falling. Apricot tree is infecting by the appearance of cankers on the branches and the sticky liquid oozing out of some parts of the plants.
* **Powdery Mildew:** This Disease is caused by fungus or Podosphaea Sphaerotheca rate. The first attacks the fruit in summer and leaves in spring. It is produced by a white spider web on fruits, leaves, and stems. Over time these stains by infection with order plants that keep fungus in the winter and spread their spoors in spring.
* Watering the tree itself will help prevent the disease because the water may be able to clean the spores.
* In some location using a biological fungicide call AQ10.
* It is the parasitic fungus Ampelomyces quisqualis that feeds at the expense of podosphere.
* Do not use sulphur on trees.
* **Gummosis:** It is a gummy substance oozing from the bark. Also causes from diseases to excessive pruning, failure of any component in the substrate, adverse weather conditions, injuries etc.
* In many cases, the gumming is an adaptation of the plant itself that covers wounds to prevent invasion of external agents.
* To avoid such an event should be sought and address the cause that produces it.
* **Eutipiosis:** Most common disease also attacks the vine are often sudden fractures of branches in old trees and the sudden wilting leaves.
* It is a cause that produces gummier in the wounds heal pruning.
* Around the same is, in general, a lot of resin oozing chancre.
* Then this disease center of the plant and ends up killing her.
* Try to do the pruning day days to prevent the growth of these fungi and seek to reduce pruning old trees.
* The solution is to use a fungicide paint that covers the injuries on the tree after pruning.
* Peach Blight: It is affected by the almond and peach trees but sometimes affects in the plum and apricots Tress.
* It is produced by Fusicoccum amygdale that causes brown and elongate cankers’ at the base of the knots and yolks branches of the year, lead to the strangling of them and then death by the action of the toxins of the fungus.
* Also attacks the leaves large brown spots.
* Infection occurs through spores spread by rain penetrating wounds more or less large each of the parts of the plant or directly the young trees.
* The solution of this disease removes the affected part of the plant and the use of Fungicides.

**Inter-cropping Custard apple Cultivation:**

* For good plant growth, the wedding should be done to keep away the weeds.
* During Pre bearing period short growing crops like groundnut, ragi, bajra wheat, pulses, and vegetables can be profitably grown in the interspaces.
* Also, Green manure crops like sun hemp, green gram, cowpea, peas, beans etc are grown.
* Normally in winter, any crop is not starting.
* Point that intercropping into the soil during the monsoon period.
* Timely intercultural and hand weeding should be done with hand tools for initial 5 years.

**Storage/Harvest of Custard apple:**

* Harvesting should be done at the proper stage of maturity.
* Fruits are harvest when the color is light green, segments become flat, and the interspaces between segments become yellowish white and initiate cracking of the skin between the carpel.
* Fully mature fruits ripen in 2-3 days after harvest.
* The temperature between 15-30 C and low relative humidity require the process of ripening.
* If you post harvesting Custard apples require store at 15-20 C temperature and 85-90% relative humidity, low oxygen and ethylene tension and 10% co2, was emulsion at 8% also extends the storage life.
* Swallowing some apical buds- showing inner pulp is also an indication of maturity.
* A were grown tree yield above 100 fruits weighing 300 to 400 gm.
* The season of harvest is from August to October.
* The fruits do not withstand cold storage as well as handling after ripening.
* Such fruits lose aroma and attractiveness and also develop some cupid taste.
* Mostly the Farmers are producing by the orders of contractors.
* Then these fruits send the nearby markets and order places.
* Some Fruits Instead of attaining full size remain very small and become brown and dry up.
* These are known as stone fruits which are retained on a tree for a long period.
* Competition among the developing fruits and high temperatures are supposed to cause stone fruit formation.
* They usually happen from a heavy rainfall or irrigation after a prolong day spell.
* Evenly distribute the irrigation schedule and constant and uniform moisture level in the soil will reduce this problem.
* Large productions of Custard apple fruits are direct to the markets.