

Handbook on Good Agricultural Practices (GAP)

Sapota





Contents

Cultural practices

Backward Integration (Good Agricultural Practices)

Crop

Quality

Integrated Pest Management

Harvesting

Post Harvest Management

Processing and Exports

Sapota: An Overview

Scientific name: *Manilkara achras*

Family: Sapotaceae



- Native to Central and South America, specifically from Yucatan Peninsula of Mexico
- India is one of the major producers of sapota fruit
- Gujarat, Andhra Pradesh, Maharashtra, Karnataka are the country's major sapota producing states (more than 80% of the production share).



India production of Sapota (2021-22)

Source: NHB

Sr No.	State	Production	Share(%)
1	Gujarat	273.87	32.84
2	Andhra Pradesh	202.20	24.24
3	Maharashtra	109.10	13.08
4	Karnataka	102.00	12.23
5	West Bengal	47.38	5.68
6	Tamil Nadu	29.43	3.53
7	Haryana	22.16	2.66
8	Telangana	20.58	2.47
9	Orissa	13.52	1.62
10	Madhya Pradesh	6.68	0.80

State

Growing belts

Maharashtra Palghar, Pune, Ahmednagar, Osmanabad

Sapota Varieties

Variety	Shape of fruit	Fruit Characteristics	Tree Features
Cricket ball	Large, Round	<ul style="list-style-type: none"> Gritty, granular pulp Taste not very sweet. 3-5 seeds per fruit. 	<ul style="list-style-type: none"> Branches are less dense. Shy bearer when grown singly but gives good performance when planted with Kalipatti. Average fruit yield is 157 kg/tree.
Kalipatti	Oval	<ul style="list-style-type: none"> High yielding table variety. Sweet, mellow flesh. Singly-born fruits, contain 1-4 seeds per fruit. 	<ul style="list-style-type: none"> Thick, broad, dark green leaves and spreading branches. Average fruit yield is 166 Kg/ tree.

Commercially cultivated varieties in India: CO1, CO 2, CO 3, PKM 1, PKM 2 , PKM 3, PKM 4, PKM (sa)-5, Kalipatti, Cricket Ball, Pala, Guthi, Kirtibarathi and Oval.

Maharashtra varieties: Cricket Ball & Kalipatti

GI Certified Variety:
 Dahanu Gholvad Sapota

- District:** Palghar district
- Distinctive characteristic:** sweet and unique taste, derived from the calcium rich soil of Gholvad.





Cricket Ball



Kalipatti



Culture Practices

Good Agricultural Practices (GAP)

Using disease free and quality plant material of improved cultivars.

Adoption of high planting density.

Proper canopy management.

Integrated nutrient and water management.

Keeping proper load of fruits on the tree.

Timely control of pests and diseases by adopting IPM/ IDIPM practices.

Agro-Climatic Conditions

Sapota is a perennial tropical crop but can be grown under sub-tropical conditions as well.

Can be grown up to 1200 m. above MSL



Requires warm and humid climate

- Coastal climate is best suited for its cultivation.



Optimum temperature range: 15- 38 °C

- High temperatures cause flowers and fruits to drop.



Optimum Relative humidity: 70%



Soil and Land Preparation

- It can be grown on wide range of soils ranging from sandy loam to clay loam. Alluvial, sandy loam, red laterite and medium black soils with good drainage are ideal for cultivation of sapota.
- Optimum soil pH: 6.0-8.0
- It can tolerate salty conditions to a great extent.
- Sapota is a hardy plant and can tolerate scarcity of soil moisture fairly well.
- Avoid cultivation in shallow clayey soil and in high calcium content.
- For sapota farming, well prepared land is required. To bring the soil to fine tilth, ploughing is done 2-3 times followed by leveling.

Planting

- Ideal Planting Season: June to December.
- Spacing
 - Square system of planting
 - Plants are spaced at 8x8 m (156 plants/ha), 10x10 m or 12x12 m distance depending on the variety and soil type
 - Adopt high density planting with closer spacing of 8x8, 8x4 (312 plants/ha) or 5x5 for high productivity.
 - The trees may be thinned after they start overlapping.
- Planting
 - Dig pits of 1 m x 1 m x 1 m size
 - Fill pits with top soil mixed with 10 Kg of FYM, 1 Kg of neem cake .
 - Plant the grafts at the center of the pit with ball of earth intact.
 - The graft joint must be at least 15 cm above the ground level.
- Post-planting Care
 - Stake the plants properly to avoid bending or damage to graft joint during heavy winds.

Methods of Propagation

A. Approach grafting (Inarching) (bhet kalam- Marathi)

- Approach grafting is done at the onset of monsoon, or during February-March.
 - Grafting during February-March is more economical as the grafts will have to be maintained in nursery for a shorter period of time, also the success rate of these plants is higher.
 - Inarched plants are ready within six months of inarching.
- **Rootstock:**
 - Pala/ Khirnee or 'Rayan' plants (*Manilkara hexandra*) are used due to their strong root system.
 - Use 2-3-year-old plants raised in polythene bags to ensure disease-free planting material.
- **Ideal characteristics of planting material:**
 - Seedlings should be at least 45-60cm in height and 1 cm in diameter at the time of grafting.
 - Use 10-15 year-old, vigorous, true-to-type mother plant for grafting.

Approach Grafting Process

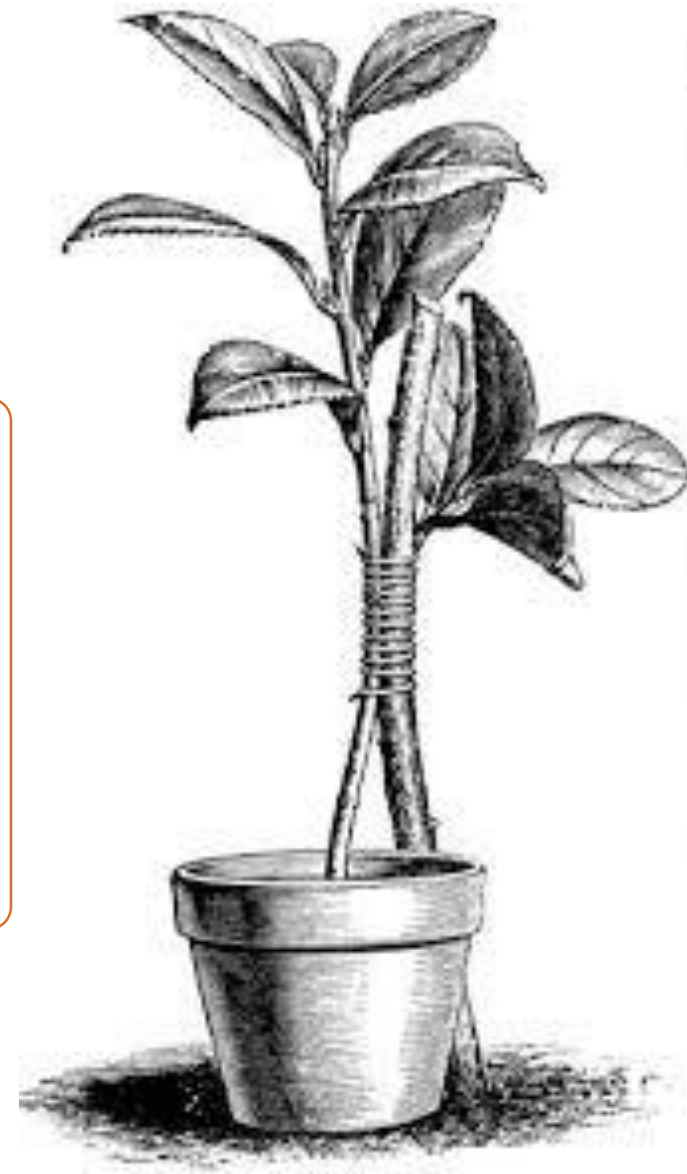
The lowermost branches are bent and tied to a peg near the ground. 1-1/2 year old branch (scion) of pencil thickness is selected for grafting.

The seedling of 'Khirni' (rootstock) is brought closer to the branch near the ground.

Expose one side of the cambium layers of the rootstock by making a 5-6 cm long and 0.5cm wide cut at 10-15 cm from the base of the plant with a sharp knife.

Similar cut is taken on the selected branch of the mother plant.

The exposed portion of both the plants are brought together and secured firmly with polythene strip. Care should be taken to avoid gap between the joints.



Approach Grafting Process (contd.)

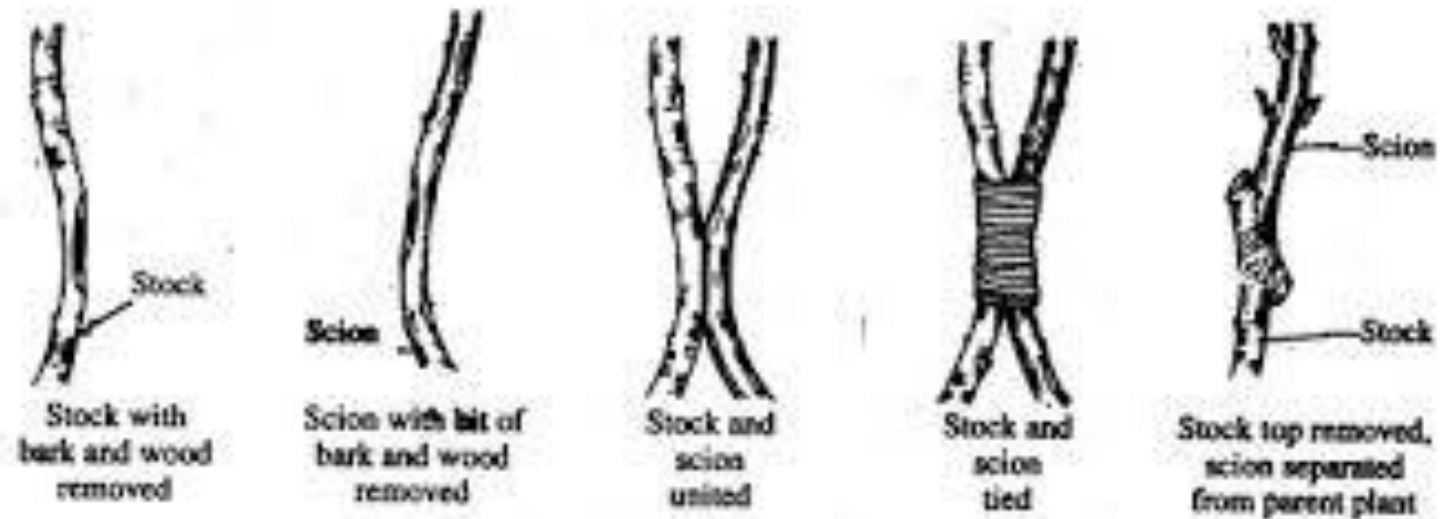


Fig. 3.1.3.4 Approach grafting

The union of the scion and the stock takes place in about 2-2.5 months.

However, the scion should not be separated for at least 3-4 months.

During this period the 'Khirnee' plant should be watered every day for the first 15 days and thereafter, at an interval of 3 days till the graft is separated from the mother plant.

The rooted graft is slowly detached by giving 2-3 successive cuts 2cm below the union over a period of month before finally detaching from the parent plant.

The grafts are maintained in a nursery under shade for few days.

B. Softwood grafting

- Softwood grafting is done in the rainy season.
- 3-4-month shoots are used for grafting.
- Rootstock: 'Rayan' is mostly used.
- **Ideal characteristics of planting material:**
 - The scion should be a terminal non-flowering shoot of 3-4 months maturity with the same thickness as the rootstock.

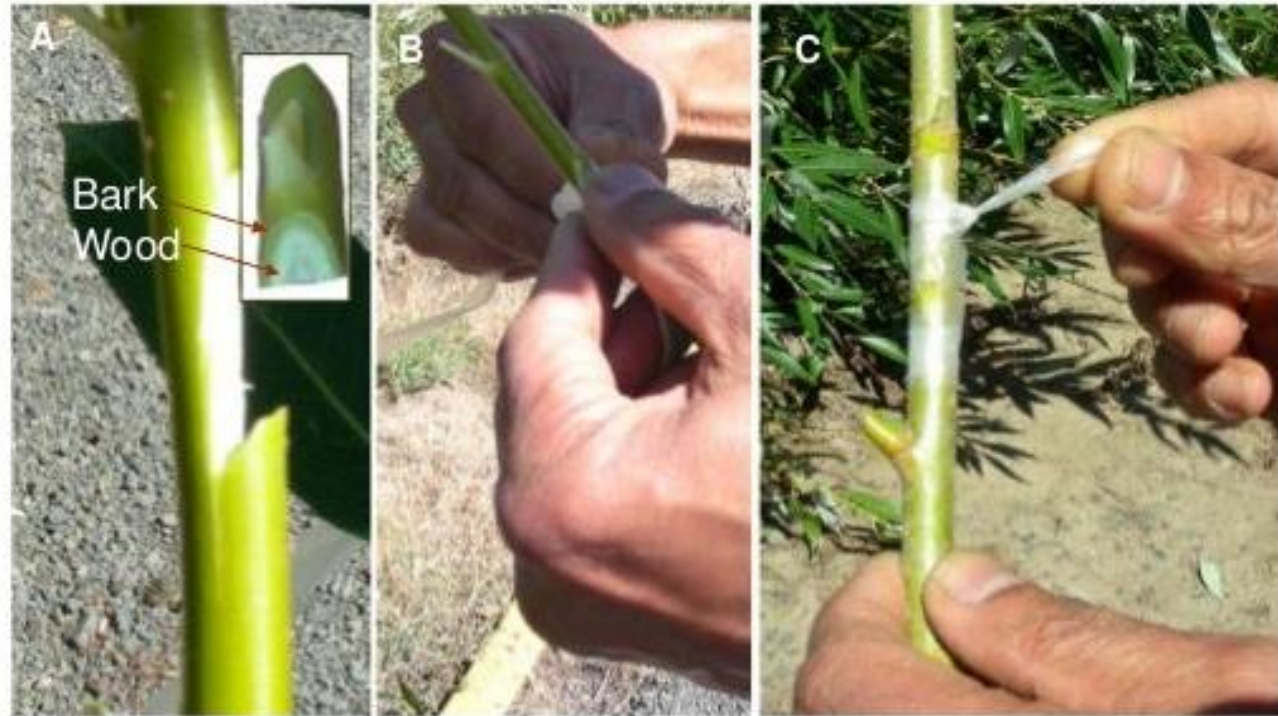


Fig. 19. Chip budding method. A) Removal of the bud along with the bark. B) Preparation of the rootstock by giving an incision to remove the bud from the scion. C) The bud is held in place with parafilm. Chip budding ensures better cambial contact and thus high union success rates.

The selected scion should be defoliated while on the mother plant at least 7 days before grafting, keeping a part of petiole intact on the selected shoot.

Make a wedge-shaped cut is made on lower part of the scion stick.
Similarly, 4-6cm long cut is made in the middle portion on the rootstock.

The scion stick is then inserted in the cleft of the rootstock and tied with polythene strip.
Vigorous sprouting of the scion indicates the successful union of the graft joint.

The grafts are further maintained in the shade for some time before transferring them in the field.

C. Air layering

- It is done during monsoons (July-August).
- Success in air layers can be improved by applying 100 to 200ppm of Indole butyric acid.
- In this method a 1-2-year-old, healthy, vigorous, mature shoot of 45-60 cm in length and pencil thickness is selected.
- Sapota plants prepared from air-layering are susceptible to damage by strong winds and cannot withstand drought, as their root system does not penetrate very deep into the soil.



A circular strip of bark about 3 cm wide just below a bud is completely removed from the selected shoot.

Rooting hormones like IBA & NAA 50mg each in Lanoline paste are applied over this portion.

Moist sphagnum moss is packed around this portion and tied with polyethylene sheet to prevent moisture loss.

Light brown roots are visible through the polythene wrap within 4 months. The rooted shoot is slowly detached by giving 2-3 successive cuts over a period of week before finally detaching from the parent plant.

These are planted in pots and kept in nursery under shade. Top of the shoot is cut back to maintain a proper ratio of leaves to roots.

Intercropping

- Raising of intercrop serve as additional income and enriches the soil fertility by fixing the atmospheric nitrogen.
- Legumes and short duration vegetable crops may be raised as intercrop during pre-bearing stage.
- Papaya and guava may can be planted as a filler crop.
- Care should be taken that root system and scaffolds are not damaged during ploughing.

Irrigation

- Irrigate copiously immediately after planting and on the third day and once in 10 days afterwards till the graft establishes.
- For good growth and high yield, plants may be irrigated at an interval of 7- 10 days in summer and 20-25 days in winter.
- **Drip irrigation schedule:**
 - Fully grown plants of 8-10 years need 40 to 50 litres of water in summer months.
 - Quantity may be reduced by 50% in other seasons depending on climatic conditions.

Nutrition

- A well grown tree should be supplied with 40 kg FYM, 10 kg Biomeal 2.5 kg, 5:10:5; 1 kg ormichem or any other micronutrient mixture.
- The foliar sprays of NPK, Mg & Zn are useful to increase the fruit set and improve the size of fruit. Nitrophoska 8:12:24:4 at the rate of 100 gm/tree has proved beneficial.
- **Recommended Fertilizers (RDF) (g NPK / plant/year):**
 - 1-3 years : 250:125:125; 4-6 years: 500:250:250; 7-10 years : 1000:500:500; 11 years and above : 1000:500:750
- **Fertigation with water soluble fertilizers*:**
 - 60% RDF in the ratio 2-1-0 (July- August) 2-2-2 (Sept- November), 0-1-1 (Dec-January) and 0-0-2 (February-April).
- **Biofertilizers /others:**
 - 300g Biofertilizer consortia
- **Additional care:**
 - 5-10 kg neem cake need to be applied per plant per year. Foliar spray of micronutrients will enhance the growth and productivity.

Manures and fertilizers may be applied in September-October at 45 cm away from the trunk upto the leaf drip and incorporated. The trees should be fertilized twice in a year during June and January.

Manures and fertilizers (Kg/tree)

	1 year old	Annual increase	6th year onwards
FYM	10	10	50
N	0.2	0.2	1
P	0.2	0.2	1
K	0.3	0.3	1.5

Source: <https://www.iihr.res.in/sapota>

Training and Pruning

- Sapota tree is perennial, has well distributed branches and assumes uniform shape. Thus annual pruning is not needed.
- Flowers and fruits appear in the leaf axils in the new growth & hence pruning of branches should not be done.
- After cultivation of fruits, remove the rootstock sprouts, water shoots, crisscross, and lower branches for higher productivity of trees.
- For strong trunk frame, training of the Sapota plants is done by removing the lower branches on the trunk up to 90 cm. The lowest scaffold should be selected at least 90cm above the ground level.

Flowering

- Sapota flowering almost throughout the year under tropical conditions. There are two or three main seasons of peak flowering from February to March and September to October.
- Flower bud development complete within 34 to 36 days.
- Duration of flowering is 29 to 30 days.
- Sapota takes about 160-180 days from fruit set to maturity.



Fruit bearing

- Very slow flower bud development– takes 32-40 days from flowering to anthesis.
- Cross pollination enhances the fruit set depending upon source of pollen. Open pollination resulted in 5% fruit set highest percent fruit set 20 to 34%.
- Fruit set can be improved by spraying GA2 @ 100ppm at full bloom and after fruit set.



Fruit Growth and Yield

- Sapota fruit size: 5 to 9 cm in diameter, 75 to 200 g in weight.
- Appearance: Round to egg-shaped, rough brown skin, and soft, sweet, light brown to reddish-brown Pulp, which may sometimes be gritty. Fruit bears 3 to 12 flat, smooth black seeds.
- Time taken from fruit set to maturity varies from 4-10 months.
- Fruits are available in two seasons i.e. from February to June and September to October.
- Depending up on the variety the fruit yield ranges from 20 - 25 tons/ha/year.
- A seven-year-old tree yields 700 fruits and a 10-year-old tree yields 1000 to 1100 fruits per year.



Integrated Disease and Pest Management (IPM)

Stage	Product	Benefits
Vegetative Growth Stage (Fertilizer Application)	<p>Foundation 5 kg per acre through Soil application</p> <p>OR</p> <p>Ultramax 20 kg per acre thorough Soil application</p>	<ul style="list-style-type: none"> • Provides nutrients required for seedling growth. • It gives strength to plant in stress condition. • Enhances photosynthesis activity of plant. <p>OR</p> <ul style="list-style-type: none"> • Strengthens the plant to increase lodging resistance. • Provides nutrients required for seedling growth. • It improves the uptake of nutrients from the soil and increases their efficiency.
At Flowering Stage 15-20 Days	<p>Nano Vigore 1 gm + Balance Nano 50 gm + Nano fert 17-44-00 200 gm per 200 lit of water (Per Acre) through foliar spray (Repeat After 6 month)</p>	<ul style="list-style-type: none"> • Nano Vigore helps in inducing new flowers and ensures maximum flower growth. • It helps in transformation of plant from vegetative stage to reproductive stage. • Balance Nano helps to fulfill the nutrient hunger of plants and it's special technology helps in reducing flower drop.
Pre Flowering Stage (Fertilizer Application)	<p>Vigore Raja 250 gm/per acre through Soil application (Repeat After 2-3 month)</p>	<ul style="list-style-type: none"> • Improves mobilization of micronutrients in soil. • It maximizes growth of white root and uptake of nutrients from soil. • Provides resistance against water stress during dry period.
	<p>Bactogang 500 ml per acre through Drip and Drenching (Repeat After 2-3 month)</p>	<ul style="list-style-type: none"> • Solubilizes and mobilizes all nutrients and makes them available to plants. • Sustains Soil health by decomposing plant residues and by stabilizing major nutrients. • Improves microbial population in soil.
fruit development stage 15-20 Days	<p>Vigore Fruit Size Enhancer 10 gm + Natural Cab 50 gm + Nano fert (00-00-50) 200 gm/150- 200 lit of water (Per Acre) through foliar spray (Repeat after 15 Days)</p>	<ul style="list-style-type: none"> • It helps for increasing fruit size to the optimum level. • It also maintains uniformity of size with top most quality and taste. • It thickens the cell wall and improves shelf life. • Natural Cab prevents cracking and rotting of fruits.

Plant protection: Pests



Hairy caterpillars

Control: Spraying

- Chloropyriphos 20 EC (or)
- Quinalphos 25EC (or)
- Phosalone 35 EC 2 ml/lit of water.



Chikoo moth/ sapota leaf webber

The larvae of Chikoo moth feed on leaves, buds, flowers and tender fruits and makes a web of leaves.

Control: Removal and destruction of infested leaves and affected fruits by sapota moth

Apply 0.05% chlorpyriphos. Spray quinolphos 25EC @2 ml/lit of water or Phosalone 35 EC 2 ml/lit.



Green scale

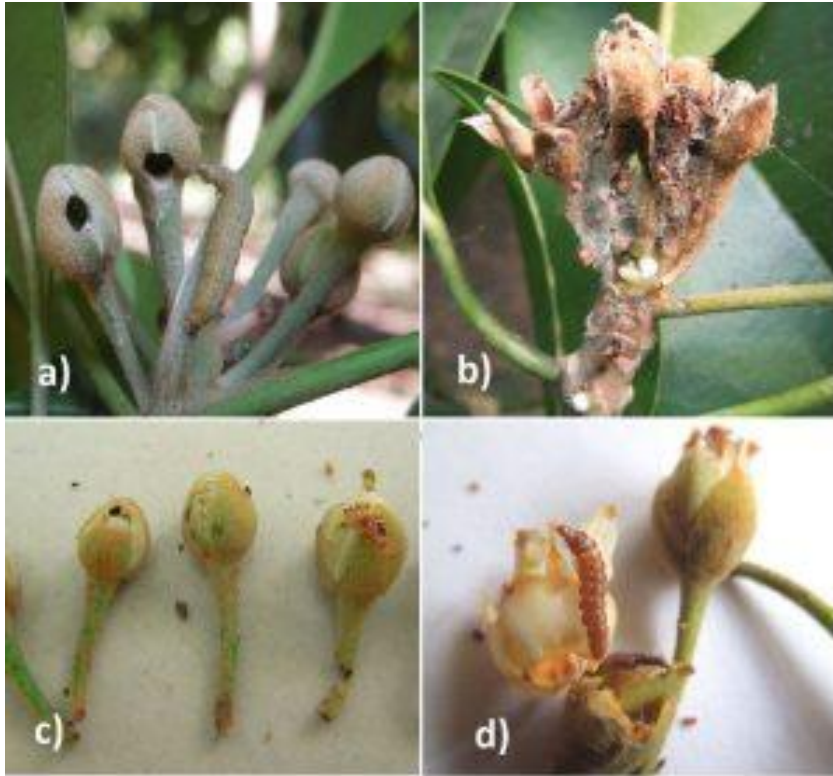
Nymphs and adults suck the sap from leaves resulting yellowing of leaves.

Control:

- Prune and destroy the infested shoots at initial stage of infestation.
- Spray monocrotophos (1ml/l) or phenthoate (1ml/l)

Bud borer

The insect bores into the flower buds, causing considerable bud and flower drops.



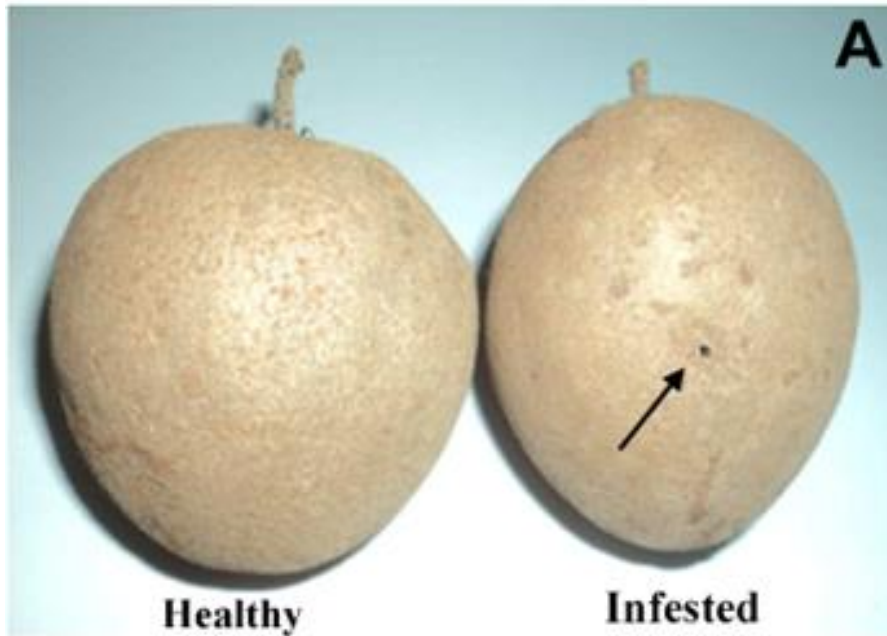
Control: Spray

- Phosalone 35 EC 2 ml/lit or
- Phosphamidon 40 SL 2 ml/lit or
- Quinalphos 25EC 2 ml/lit or
- Carbaryl 50 WP @1 g/lit or
- Neem Seed Kernel Extract 5%
- Two sprays of Monocrotophos @ 0.05% at 15 days interval
- Application of polytrin C44 (profenphos and cypermethrin) @1ml/l or
- Emamectin benzoate 5 SG @ 0.45 gm/lit. or
- Deltamethrin 2.8 EC @ 1 ml/ lit. or

- Lambda cyhalothrin 5 EC @ 1 ml/lit. or
- Profenofos 40 EC @ 1 ml/ lit of water at the initiation of damage and subsequent two sprays at an interval of one month.
- Spray of azadirachtin 0.15 EC at the rate of 40 ml/10 liters of water.

The precaution should be taken to avoid immediate repetition of any insecticide in the subsequent spray.

- Erecting Blue light trap for monitoring population of bud borer.



Sapota seed borer

Newly hatched larva feeds on the pulp and bores through the endosperm of immature sapota seed. It is difficult to distinguish between infested and intact fruits prior to the emergence of larvae through exit holes. These holes may invite fungus and ants, rendering the fruit unfit for consumption.

Control:

- **Maintain orchard sanitation** to eliminate the sources of seed borer infestation. Collect and destroy off-season stray mature fruits after main harvest till November.
- **Erect light traps** in the field during cropping season to attract adult moths and will minimize the incidence.
- **Spray Intervention:** First spray intervention should be made when the fruits are of small lime size and thereafter the sprayings should be repeated at fortnightly interval during main cropping season. Alternating the sprays of
 - deltamethrin 2.8 EC @ 1 ml/lit or
 - profenophos 40 EC @1ml/lit or
 - lambda cyhalothrin or profenofos 50 EC @1.5 ml/ lit or
 - indoxacarb 14.5SC @ 0.5 ml/lit or novaluron 10EC @0.5 ml/lit or BT @ 1 ml/lit



Loranthus

Loranthus is a genus of parasitic plants that grow on the branches of woody trees like sapota and mango. It ingests minerals and water from host plant through sucking roots called Haustoria, resulting in death of branches.

Sapota fruitfly (*Bactrocera dorsalis*)

- Symptoms
 - Peak period of infestation is between March and July.
 - The female punctures the outer wall of the mature fruits and lays egg inside the fruit.
 - Maggots feed on the pulp of the fruit, which appears normal from outside. The affected portion/ fruit finally drops down and rot.
- Management practices
 - Collection and disposal of fallen infested fruits, undersized fruits left on the tree should be picked and destroyed. If the trees are few in number, bagging the fruit with cloth or paper bags can be resorted.
 - Rake up the soil below the tree and drench with chlorpyrifos 20 EC @ 5 ml/lit.
 - Monitoring of the population of adult fruit fly through methyl eugenol traps @ 10 /ha. This also helps in mass trapping and if done on large scale on community basis, it can reduce the pest densities to appreciable level.

Plant protection: Diseases

- Sooty mould
 - Sooty mould is a fungal disease that grows on plants and other surfaces covered by honeydew, a sticky substance created by certain insects. Sooty mould can be controlled by spraying starch solution. The required concentration can be prepared by boiling 1 Kg maida or starch with 5 lit of water. After cooling, dilute the solution with 20 litres of water. Avoid spraying during cloudy weather.
- Leaf spot
 - This main disease of sapota and small round spot develops on leaves. This can be controlled by application of Diathane M-45 or copper fungicide (3g/l)
- Flattened branches
 - This is caused by mycoplasma. The branched get flatten with reduces leaf size. The removal of infected shoots should be removed to control.
 - The suitable control measures are to be adopted. Clean and well-nourished orchard is affected less. Caryaryl, Malathion, Dimithods, Bavistin, Kuman.L,etc. should be sprayed alternatively apart from following clean cultivation.



Harvesting and Storage

Harvest

- A mature Sapota fruit when scratched slightly with nail shows a yellow streak instead of the green streak.
- The mature fruits are harvested by hand picking.
- Sapota grafts start yielding from third to fourth year of planting.
- Sapota is a climacteric fruit hence, should be harvested at full maturity. It takes about 10 months to mature Sapota fruit.
- The mature fruits shed off the brown scaly scurf from skin. Mature fruits do not show green tissue or latex underneath the brown skin of the epicarp.

Ripening

- Ripen the fruits by keeping a beaker containing 5000 ppm Ethrel + 10 g NaOH pellets in an air tight chamber. (5 ml Ethrel in one lit of water is 5000 ppm).

Physiological Problems in Sapota

Misshaped fruits

- Shape of fruit is related with number of seeds and it again depends on the proper pollination at anthesis.
- Presence of high temperature or rainfall at the time of flowering causes oblong shape of fruits.

Fruits develop a depression or furrow towards calyx end:

- This occurs immediately after heavy rainfall and is intensified by high frequency of irrigation.
- Over irrigation should be avoided in such conditions.

Corky tissue in fruits:

- Characterized by partially desiccated pulp with a hard lump occurring close to the skin of the ripe fruit and is rather sour to taste.
- In the advanced stages of the malady, corky tissue adversely affects the edible quality making the fruit unfit for consumption.
- Fruits exposed to intense sunlight do not ripen properly and they later show corkiness during winter.
- **Control:** Spray treatment of developing fruits and canopy with the spray formulation during period of drought stress



Postharvest Management

Short postharvest life !!

Fruit Variety	Optimum Storage Temperature (°C)	Optimum Relative Humidity (%)	Shelf Life
Black sapote	13 - 15	85 - 90	2 – 3 wks
Mamey sapote	13 - 15	90 - 95	2 – 3 wks
Sapodilla	15 - 20	85 - 90	2 wks
White sapote	20	85 - 90	2 – 3 wks

- Sapota fruit is highly perishable and is also sensitive to cold storage.
- Commercial processing is negligible due to the sensitivity of the fruit to heat (changing the flavour & colour of the pulp), high labour requirement in peeling, removal of seeds etc.
- Sapota is handled at ambient climatic conditions causing considerable post-harvest losses. Due to mishandling of produce about 25-40% is being wasted.

Cold Storage Conditions

- 14°C: storage potential is 2-4 weeks (depending on cultivar and ripeness stage).
- Optimum Relative Humidity: 90-95%
- Packaging in perforated plastic bags or box liners reduces water loss at lower relative humidity.

Important causes of deterioration

- Mechanical damage due to mismanagement along the supply chain;
- Loss of moisture
- Ethylene production and action (senescence and short life)
- Injury / senescence when stored at temperatures above optimal or below optimum (cooling temperatures)
- Decay due to the invasion of pathogens and insects.

Chilling Injury

- Exposure to temperatures below 5°C for more than 10 days causes chilling injury as indicated by dark-brown spots on the peel, failure to ripen, off-flavor development, and increased decay incidence after transfer to higher temperatures.

Sapota: Uses and Processed Products

- Therefore, bulk of the produce is used for table purpose
- Nowadays dry segments and flakes of the fruit are being processed but to a limited extent.
- Processed food items viz. jam, jelly, squashes and fruit drinks are produced from sapota after blending it with other fruits.

Maturity Indices

- Skin color change from light-brown with a tinge of green to light-brown to dark-brown.

Quality Indices

- Appearance: size, shape, color, freedom from defects, and freedom from decay
- Firmness (firm-ripe sapotes are preferred)
- Flavor: soluble solids content (13-26%) and acidity (0.2-0.3%)



Diseases

- Anthracnose: Caused by *Colletotrichum gloeosporioides* can be a serious problem in humid production areas.
- Effective pre-harvest control strategies, reduce postharvest lesion development.

Sorting and Grading

- The harvested fruit are graded into large, medium and small sizes. The fruits are packed in wooden carts which are padded with paper cuttings, straw or banana leaves.
- After ripening, fruits become very soft and can but be kept for long. Ripe fruits can be stored at 2-3°C with 85-90% RH for a month or so.

Do's

- Ensure good drainage in the field.
- Prepare pits and fill it with the mixture as recommended.
- Select high yielding, disease and pest tolerant variety suitable for each location.
- Practice drip irrigation from the beginning of the orchard.
- Follow fertigation schedule as recommended.
- Compulsorily apply organic manure as per recommendation.
- Apply micronutrient as and when needed.
- Compulsorily weed/ intercultivate, timely operation helps in crop growth.
- Follow disease and pest control measures timely and effectively.
- Apply sprays in the evening or early morning only.
- Keep the farm machineries well-maintained and operative.
- Regular field visit and scouting of the farm should be done.
- Use protective clothing and gloves by field workers/farmers while handling chemicals and fertilizers.

Don't's

- Don't over irrigate the crop at anytime.
- For fertigation don't mix solid fertilizers and dissolve them together. Prepare individual solutions and mix them for application.
- Don't use the fertigation unit for bulky organic manure and fertilizers that are not soluble in water
- Don't add solid fertilizer from the gunny bag directly to the fertilizer tank. Prepare solution separately and pour the solution to the fertilizer tank. Prepare solution only in plastic buckets. Don't use metal container.
- Don't stir the solution with naked / unprotected hand. Use wooden spoon or stick.
- Don't heat the fertilizer solution to increase solubility.
- Do not spray pesticide under hot sun.

Important Notice:

The information on performance of recommendations given in this handbook holds good only when used under optimum conditions. Their performance may either change in due course of time due to several factors or can vary under different systems of management. Mishandling/negligence of the user can also result in damage/loss/non reproducibility of results.

The user is advised to contact their nearest KVK and refer to the latest Ad-hoc list for information on banned chemicals and other nationally-issued directives.

महत्वाची सूचना:

या हँडबुकमध्ये दिलेल्या शिफारशींच्या कामगिरीची माहिती इष्टतम परिस्थितीत वापरली जाते तेव्हाच चांगली राहते. त्यांची कार्यक्षमता एकतर अनेक कारणांमुळे योग्य वेळी बदलू शकते किंवा व्यवस्थापनाच्या वेगवेगळ्या प्रणालींमध्ये बदलू शकते. वापरकर्त्यांच्या चुकीच्या हाताळणी / निष्काळजीपणामुळे परिणामांचे नुकसान / पुनरुत्पादन न होणे देखील होऊ शकते. वापरकर्त्यांस त्यांच्या जवळच्या केव्हीकेशी संपर्क साधण्याचा आणि प्रतिबंधित रसायने आणि इतर राष्ट्रीय-जारी निर्देशांच्या माहितीसाठी नवीनतम तदर्थ यादीचा संदर्भ घेण्याचा सल्ला देण्यात आला आहे.

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