YEAR of HORTICULTURE 2012

Checklist of COMMERCIAL VARIETIES of FRUITS

सत्यमेव जयते

Government of India
Ministry of Agriculture
Department of Agriculture and Cooperation

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Compiled and edited by

Dr. Gorakh Singh
Horticulture Commissioner

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ASHISH BAHUGUNA
SECRETARY

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कृषि एवं सहकारिता विभाग
Government of India
Ministry of Agriculture
Department of Agriculture & Cooperation

FOREWORD

Fruits play an important role in securing food and nutritional security. Fruits account for about 30 per cent of the total production of horticulture crops. Although India is the second largest producer of fruits in the world, our productivity levels are abysmally low. Nevertheless, during the past few decades, phenomenal developments have taken place in the production technology of fruits.

Fruit crops, mostly perennial in nature, require very careful selection of high yielding varieties. Several hybrids and improved varieties of fruit crops have been developed and are being promoted through National Horticulture Mission, Horticulture Mission for North East and Himalayan States and Rashtriya Krishi Vikas Yojana. There is, however, still sufficient potential for enhancing the present level of quality production and productivity of fruits through the introduction of improved high yielding varieties to meet increased demand for domestic consumption, processing and export.

In this backdrop, the **"Checklist of Commercial Varieties of Fruit Crops"** containing salient features, recommended areas, major production belts, ecological requirements, etc., of various fruit crops that has been brought out by Horticulture Division will serve as an extremely useful guide for orchardists, extension functionaries and all other stakeholders. I hope this publication will have a positive impact on production and productivity of quality fruits and help us meet our food and nutritional requirements. I complement Dr. Gorakh Singh, Horticulture Commissioner, for this endeavour.

Date: 14th November, 2012

Secretary (A&C)

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FRUITS

Introduction

A large variety of fruits are grown in India. Of these, banana, mango, citrus, papaya, grape, guava, sapota, pomegranate, pineapple, aonla, litchi, apple, peach, pear, plum, walnut, etc. are important.

India account for 13.0 per cent of the total world production of fruits and leads the world in the production of mango, banana, papaya, sapota, pomegranate, acid lime and aonla. Fruit production increased 14 times from 5.5 million tonnes in 1952-53 to 76.4 million tonnes in 2011-12. The leading fruit growing states are Maharashtra which accounts for 16.0 per cent of production followed by Andhra Pradesh (13.0%), Gujarat (10.0%), Karnataka (9.0%), Uttar Pradesh (8.0%), Tamil Nadu (7.0%) and Bihar (5.0%), altogether contributes for about 68.0 per cent of the total fruit production in the country.

Banana is the major fruit accounting for 35.0 % of total production followed by mango (21.0%), citrus (11.0%), papaya (6.0%), guava (3.3%), grape (3.0%), apple (3.0%) and others (17.7%) in the country.

COMMERCIAL VARIETIES OF FRUITS

Fruits play an important role in providing food and nutritional security as well as sustainable income to farmers. Presently, area under fruit crops is at 6.7 million hactare with a production of 76.4 million tonnes, which contributes to about 30% share in total production of horticulture produce. Production of fruit is expected to reach about 115 million tonnes by 2017. Fruit crops, mostly being perennial in nature, call for utmost care in selection of varieties and quality planting material. Mistakes committed during the initial establishment of orchard cannot be corrected and will cause serious loss to production and productivity.

Most of the fruit varieties have been selected from the naturally occuring superior chance seedlings taking into their earliness or lateness and qualitative attributes. There are innumarable number of varieties in fruit crops out of which only a few happen to be of commercial important. Different regions of the country have their own commercial varieties because of wide range of adaptability. Of the various hybrids assessed so far, only a few have been found to be promising.

Crop wise popular fruits varieties alongwith their salient features and recommended areas are as under:

ALMOND

Name of Variety	Salient Features	Recommended Areas
Shalimar	Trees are medium and spreading, nuts are long in size and bold with tapering at curved pointed apex. Nut colour is creamy brown to slightly whitish, soft shelled and mid season maturity.	Jammu & Kashmir, Uttarakhand
Mukhdoom	Trees are large and spreading, mid blooming, nuts are broad at shoulder with bold and slightly curved at apex. Nut colour is brown, soft shelled and mid to late season maturity.	Jammu & Kashmir, Uttarakhand
Waris	Trees are upright in growth and medium in vigour, mid blooming. Nuts are medium in size, bold and bulged at shoulder with sharply pointed apex. Nut colour is brown to creamy whitish, soft shelled and mid to late season maturity.	Jammu & Kashmir, Uttarakhand

Name of Variety	Salient Features	Recommended Areas
Non-Pareil	Trees are moderately vigourous, upright to spreading, mid blooming, nuts are medium, bold and light brown in colour, thin shelled and early season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
Drake	Trees are low in vigour, spreading, mid blooming. Nuts are small to medium in size, bold and roundish with pointed apex and light creamy whitish brown in colour. Semi soft shelled and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
Ne-Plus Ultra	Trees are vigourous and spreading, mid blooming, nuts are medium to large flattened, bold and light brown in colour, paper shelled and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
Merced	Trees are medium in vigour, upright, mid blooming, nuts are medium, bold, slightly flattened and light brown in colour. Paper shelled and mid to late season maturity.	Jammu & Kashmir, Uttarakhand
Pranyaj	Trees are moderate in vigour and spreading, mid blooming, nuts are medium, brown and flattened to bulge, kernel is medium to large. Papery shelled and mid season maturity.	Jammu & Kashmir, Uttarakhand
Primorskij	Trees are spreading and moderately vigorous, mid to late blooming, nuts are medium to large, bold, slightly flattened and brown in colour, kernel medium to large. Soft paper shelled and late season maturity.	Jammu & Kashmir, Uttarakhand
California Paper Shell	Trees are upright and medium in vigour, mid blooming, nuts are long, light brown in colour, Paper shelled and mid to late season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
IXL	Trees are spreading and intermediate in vigour, mid bloomer, nuts are medium, bold, brown in colour, kernel is medium, soft shelled and mid to late season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand

AONLA

Name of Variety	Salient Features	Recommended Areas
Kanchan (NA-4)	A seedling selection from Chakaiya. It is heavy and regular bearer with medium sized fruits and higher fibre content. It is mostly preferred by industries for pulp extraction and manufacturing of various products.	Bihar, Jammu & Kashmir, Uttarakhand, Uttar Pradesh, West Bengal, Punjab, Rajasthan, Haryana, Karnataka, Tamil Nadu, Andhra Pradesh, Gujarat, Maharashtra, Chhattisgarh, Jharkhand, Himachal Pradesh, Madhya Pradesh
Krishna (NA-5)	A seedling selection from Banarasi. It is an early bearere (October - November). It has large fruit, smooth skin and whitish green to apricot yellow surface with red spot on exposed surface. Flesh pinkish green, less fibrous. It is an ideal variety for preserve, candy and juice.	Assam, Bihar, Jammu & Kashmir, Uttarakhand, Uttar Pradesh, West Bengal, Punjab, Rajasthan, Haryana, Karnataka, Tamil Nadu, Andhra Pradesh, Gujarat, Maharashtra, Chhattisgarh, Jharkhand, Himachal Pradesh, Madhya Pradesh
NA-6	A seedling selection from Chakaiya. It is prolific and heavy bearer. The fruits are attractive and shining, medium to large sized, flattened and less fibrous. It is ideal for preserve and candy, owing to low fibre content.	Assam, Bihar, Jammu & Kashmir, Uttarakhand, Uttar Pradesh, West Bengal, Punjab, Rajasthan, Haryana, Karnataka, Tamil Nadu, Andhra Pradesh, Gujarat, Maharashtra, Chhattisgarh, Jharkhand, Himachal Pradesh, Madhya Pradesh
NA-7	A seedling selection of Francis. It is precocious, prolific and regular bearer. This is an ideal variety for preparation of prodcuts and has a great promise.	Rajasthan, Bihar, Madhya Pradesh, Uttar Pradesh, Uttarakhand, Andhra Pradesh, Tamil Nadu, Chhattisgarh, Madhya Pradesh, Maharashtra, Himachal Pradesh
NA-10	This is a selection from Banarasi. It is an early maturing and its fruits are medium to large sized, flatten with roundish styler end. It has heavy bearing capacity and suitable for dehydration and pickle.	Bihar, Jammu & Kashmir, Uttarakhand, Uttar Pradesh, West Bengal, Punjab, Rajasthan, Haryana, Karnataka, Tamil Nadu, Andhra Pradesh, Gujarat, Maharashtra, Chhattisgarh, Jharkhand, Himachal Pradesh, Madhya Pradesh
NA-20	This is clone of Chakaiya. Trees are spreading in nature, medium to tall, fruits are bold and shining. It has very less fiber content.	Uttar Pradesh, Bihar, Uttarakhand
Goma Aishwariya	It is an early and drought tolerant. It has low fiber content and is suitable for processing and export.	Rajasthan

APPLE

Name of Variety	Salient Features	Recommended Areas
(Early Season)		
Michal	Trees are spreading and medium in vigour, very low chilling, fruits are medium in size and globose to slightly conical in shape with smooth calyx end, striped red coloured skin over green yellow ground and very early maturing.	Jammu & Kashmir, Uttarakhand, Tamil Nadu (Ooty and Kodaikanal), Arunachal Pradesh, Nagaland, Mizoram, Sikkim
Mollies Delicious	Trees are medium to large in vigour, early blooming, fruits are globose to conical, lobes are present but not prominent, red stripped skin over greenish yellow ground, early to mid in maturity.	Jammu & Kashmir, Uttarakhand, Tamil Nadu (Ooty and Kodaikanal), Arunachal Pradesh, Nagaland, Mizoram
Shlomit	Trees are upright and medium in vigour, very low chilling, fruits are medium in size and globose to conical in shape with smooth calyx end, light to medium dark red coloured skin over green yellow ground and very early maturing.	Jammu & Kashmir, Uttarakhand, Tamil Nadu (Ooty and Kodaikanal), Arunachal Pradesh, Nagaland, Mizoram
Maayan	Trees are spreading and medium in vigour, very low chilling, fruits are medium in size and globose to slightly conical in shape with smooth calyx end, striped red coloured skin over green-yellow ground and very early maturing.	Jammu & Kashmir, Uttarakhand, Tamil Nadu (Ooty and Kodaikanal), Arunachal Pradesh, Nagaland, Mizoram, Sikkim
Anna	Trees are medium in vigour, low chilling, fruits are oblong to conical with smooth calyx end, yellowish with red blush and early season maturity.	Himachal Pradesh, Jammu & Kashmir, Uttarakhand, Tamil Nadu (Ooty and Kodaikanal), Nagaland, Mizoram
Chaubattia Anupam	Trees are medium to vigourous, fruits are medium in size and oblong conical with lobes at calyx end, red striped over greenish yellow back ground and early in maturity.	Jammu & Kashmir, Uttarakhand, Nagaland, Mizoram
Tydeman's Early Worcester	Trees are medium vigorous, fruits are roundish to slightly conical towards the base with smooth calyx end, bright dark red skin over yellow ground, early season maturity (second week of July), very good pollinizer for early to mid flowering apple cultivars.	Himachal Pradesh, Jammu & Kashmir, Uttarakhand, Tamil Nadu (Ooty and Kodaikanal), Arunachal Pradesh, Nagaland, Mizoram, Sikkim
(Mid Season)		
Royal Delicious	Trees are vigorous, fruit oblong to conical and dark red stripped, firm texture, mid maturity (mid August), biennial bearing and self unfruitful.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand

Name of Variety	Salient Features	Recommended Areas
Rich-e-Red	Trees are vigorous, fruits are oblong to conical with prominent lobes, red blush over greenish ground, firm texture, matures in 3rd week of August.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Red Delicious	Trees are vigorous, fruits are oblong to conical, calyx end prominently lobed and red stripped over yellow, firm texture, maturity mid to late (ending August), biennial bearing and self unfruitful.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Starkrimson	Trees are medium in vigour, fruits are prominently conical, calyx end distinctly lobed, dark red solid stripped, blushed completely covering the fruit skin, heavy bearing, mid maturity (ending July to 2nd week of August).	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Red Chief	Trees are compact and spur type, spur density is very high, fruits are slightly oblong to sharp conical, calyx end distinctly lobed, solid stripped dark red covering the whole fruit, develop full colour even under mid hills, mid maturity (ending July to second week of August).	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Well Spur	Trees are compact and spur type, spur density very high, fruits are conical with prominent calyx end which is lobed, dark red colour stripped washed on the whole fruit, develops full colour even under mid hills and mid maturity (2nd week of August to last week of August).	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand, Sikkim
Oregon Spur	Spur type, fruit oblong to conical, completely dark red blushed, calyx end prominently lobed and mid in maturity (2nd week of August).	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand, Sikkim
Red Spur	Trees are medium in vigour, spur type, fruits are medium to large, oblong to conical in shape, dark red and mid in maturity (late August).	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand, Sikkim
Gala	Trees are vigorous, semi spur type, fruits are medium and oval to globose in shape, precocious and regular bearer, solid blush of red colour on slightly golden yellow ground, mid in maturity. Various strains of Gala are Scarlet Gala, Royal Gala, Galaxy Gala, Gal Gala and Imperial Gala.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Granny Smith	Trees are is moderately vigorous, fruits are roundish globose to slightly conical, calyx end smooth, bright green in colour and sometimes slight yellow tinge appears upon the green blush and mid in maturity. It also acts as a pollinizer.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Gala Must	Trees are medium in vigour, fruits are large and globosely round, calyx end smooth, red blush/ strips over yellow ground and mid in maturity.	Jammu & Kashmir, Arunachal Pradesh, Uttarakhand

Name of Variety	Salient Features	Recommended Areas
Bright-N-Early	Trees are medium in vigour, good spur development, precocious, fruits are prominently conical with distinct lobed calyx, solid red colour on whole fruit and mid in maturity.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Cooper-4	Trees are compact to medium in vigour, good spur development, fruits are medium to oblong to conical with prominently lobed calyx end, solid dark colour covering whole fruit skin, very firm texture and maturity in mid season.	Jammu & Kashmir, Arunachal Pradesh, Uttarakhand
Vance Delicious	Trees are vigorous, fruits are medium to large and conical in shape with lobed calyx end, striped red skin on yellow ground and early to mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Skyline Supreme	Trees are vigorous, large and conical shaped, fruits are lobed calyx end, striped red colour on greenish yellow ground and mid in maturity.	Jammu & Kashmir, Himachal Pradesh
Silver Spur	Trees are compact to medium in vigour, high spur density, fruits are medium to large conical in shape with prominent lobes, deep red skin with stripes and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Golden Spur	Trees are is compact to medium in vigour, spur type, fruits are large and globose oblong in shape with smooth calyx end, fruit colour is golden yellow with pink orange tinge and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
CITH Lodh Apple-1	Trees are medium in vigour, mid season flowering, bearing mainly on spurs as well as on shoots, large fruit size and globosely oblong conical and smooth lobes, red striped/blushes over yellow ground and early to mid season maturity.	Jammu & Kashmir, Arunachal Pradesh
(Late Season)		
Firdous	Trees are vigourous, fruits are large in size, oblong conical in shape with prominent calyx end, dark red blush on yellow ground, resistant to scab and mid to late season maturity.	Jammu & Kashmir, Arunachal Pradesh, Uttarakhand
Lal Ambri	Trees are vigorous, fruits are large oblong to conical in shape with prominent calyx end, dark red blush on yellow ground, mid to late season maturity.	Jammu & Kashmir, Arunachal Pradesh, Uttarakhand
Top Red	Trees are medium to vigorous, fruits are medium to large in size and conical in shape with prominent calyx end, striped red coloured skin over greenish ground and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Sunhari	Trees are vigorous, fruits are large oblong globose to slightly conical in shape with smooth calyx end, dark golden yellow with orange to pink blush on green ground maturity in mid to late season maturity.	Jammu & Kashmir, Arunachal Pradesh, Uttarakhand

Name of Variety	Salient Features	Recommended Areas
Golden Delicious	Trees are vigorous, roundish oblong fruit, greenish yellow to golden yellow in colour, late season maturity (last week of September). Best pollinizer for mid and late flowering groups.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Red Gold	Trees are medium in vigour, fruits are round to slightly oblong, medium in size, dark to dull red in colour, early to mid season maturity (mid to late July to first week of August), very good pollinizer.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand
Ambri	Trees are vigorous, fruits are oblong to slightly conical towards calyx end. Lobes are not prominent, red streaks over greenish to yellow ground colour and late in maturity (last week of September).	Jammu & Kashmir, Uttarakhand
Fuji	Medium to high in vigour and develops good spurs, fruits are medium to large and round oblong to globose in shape, calyx end smooth, dull red strips or blushes on light green yellow ground and mid in maturity. Other strains are Red Fuji and Coe Red Fuji.	Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Uttarakhand

APRICOT

Name of Variety	Salient Features	Recommended Areas
Kaisha	Trees are vigourous and spreading, medium sized fruit with roundish flattened shape and prominent suture, skin pale lemon yellow with red blush, free stone and early season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
New Castle	Trees are vigourous and spreading, fruits are medium to large size with roundish shape, skin is lemon/barium yellow in colour and early season maturity.	Uttarakhand, Jammu & Kashmir, Himachal Pradesh
Harcot	Trees are upright to spreading and vigourous. Fruits are medium to large with roundish heart shape. Skin yellow orange and red blushed, sweet kernel and early to mid season maturity.	Uttarakhand, Jammu & Kashmir
Turkey	Vigourous and spreading tree. Fruits are medium in size and almost round shape, skin deep yellow, brownish orange in colour with dots, free stone and sweet kernel and mid season maturity.	Uttarakhand, Jammu & Kashmir
Halman	Spreading and vigourous tree, fruits are large with roundish is shape, skin deep yellow golden in colour, sweet kernel, suitable for drying and early to mid season maturity in cold arid zone.	Jammu & Kashmir (Leh and Kargil), Himachal Pradesh, Uttarakhand
CITH Apricot-1	Self fertile and mid season blooming, fruits are very large (79 g), round symmetrical and smooth distal end, yellowish orange and reddish blemishes, early maturing and toleran to major pests and diseases.	Uttarakhand, Himachal Pradesh
CITH Apricot-2	Self fertile and early to mid season blooming is type, fruits are very large in size, oblate, asymmetrical with slightly pointed beak, yellowish orange with reddish on exposed surface, early maturing and tolerant to leaf curl and stigmina blight.	Jammu & Kashmir, Uttarakhand, Himachal Pradesh
CITH Apricot-3	Self fertile and early to mid season blooming type, fruits are medium in size, oblate in shape, asymmetrical with slightly pointed beak, yellowish orange with very little reddish tinge, early mid season maturing and good quality and tolerant to major pests and diseases.	Jammu & Kashmir, Uttarakhand, Himachal Pradesh
Rokchey Karpo	It is an early cultivar, ripens in end July to mid August. Fruits are medium to large in size, round with compressed pedicel end. Pulp light pale, juicy, sweet and mild acidic with pleasant flavour.	Jammu & Kashmir (Ladakah)

Name of Variety	Salient Features	Recommended Areas
Tokpopa	The fruits are ripe late and available in the month of August. Fruits are medium in size, round in shape, compressed with smooth skin, dull yellow in colour, juicy and acidic to sweet in taste.	Jammu & Kashmir (Leh)
Rogan	Fruits are small, highly juicy, round in shape, glossy skin straw yellow, very soft, juicy and slightly acidic sweet pulp. It bears smallest fruit among all cultivated varieties.	Jammu & Kashmir (Leh)
Safaida	Fruits are large in size, round in shape, skin is glossy, smooth, light yellow in colour, flesh soft maize yellow in colour, very sweet, less acidic with pleasing flavour.	Jammu & Kashmir (Leh & Ladakh), Himachal Pradesh
Nari	It is a late ripening variety available after mid August. Fruits are medium in size, oblong in shape, elliptical with truncate base, skin greenish to light yellow with red and blush towards the sun exposed surface. Pulp is light yellow in colour, sweet/acid ratio is good and pleasant flavour.	Jammu & Kashmir (Leh & Ladakh), Himachal Pradesh
Australian	It ripens in end July to late August. Fruit size is extra large and highest among the cold arid cultivars. Fruits are round in shape with acute apex, structure distinct, mid flavour and medium sweet and acidic. Not liked for table purpose and good for processing.	Jammu & Kashmir (Leh & Ladakh)
Shakar Para	Fruits are sweet with pleasant aroma. It can be used for table purposes. Ripening period is late July mid August. Fruits are medium in size, round in shape, skin is glossy, creamish yellow with rosy blush, pulp soft, light yellow in colour, sweet and less acidic and pleasant flavour.	Jammu & Kashmir (Leh & Ladakh), Himachal Pradesh
Charmagz	It is a self incompatible cultivar and needs a pollinizer. The fruits are medium in size and roundish flat in shape. The skin is straw yellow with a light yellow flesh which is very sweet and highly flavoured. It is suitable for dessert and drying purposes.	Jammu & Kashmir (Leh & Ladakh), Himachal Pradesh

BAEL

Name of Variety	Salient Features	Recommended Areas
Narendra Bael (NB)-4	Trees are spreading and oblong fruit in shape, fruit quality excellent and heavy bearer.	Uttar Pradesh
Narendra Bael (NB)-5	Prolific bearer and fruits are medium in size, round with thin skull, low fibre and seed content.	Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Uttarakhand
Narendra Bael (NB)-7	Fruits are very large in size, flattened round, yellowish green in colour.	Uttar Pradesh
Narendra Bael (NB)-9	Prolific bearing, fuits are medium to large size with oblong in shape, low fibre and seed content.	Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Uttarakhand
Narendra Bael (NB)-16	Fruits are elliptical round, pulp yellow, average weight 1.3 kg, T.S.S. 31%, and low fibre content.	Uttar Pradesh
Narendra Bael (NB)-17	Fruits are attractive, average weight 1.75 kg, fibre content low.	Uttar Pradesh
CISH B-1	It is a mid season variety which matures during April-May. Trees are tall, vigorous with dense canopy, erect growth habit, precocious and heavy bearer. Fruit shape is oval to oblong. Average fruit weight 1.0 kg. Suitable for canning and slices preparation.	Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Rajasthan
CISH B-2	Trees are dwarf with medium spreading habit. Foliage is sparse and almost thornless, precocious with moderate bearing habit. Fruits are oblong to round in shape. Suitable for processing with pleasantly aromatic pulp.	Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Rajasthan
Goma Yashi	Good quality fruits with large in size. Ovate in shape, greenish yellow in colour. Flesh colour is straw.	Rajasthan
Pant Aparna	Its trees are dwarf with drooping foliage, almost thornless, precocious and heavy bearer. The leaves are large, dark green and pear shaped. Fruits are globose in shape with average weight 1.0 kg.	Uttar Pradesh, Uttarakhand
Pant Shivani	It is an early mid season variety. Trees are tall, vigorous, dense, upright growth, precocious and heavy bearer. Fruit weight range from 2 to 2.5 kg.	Uttar Pradesh, Uttarakhand
Pant Sujata	Trees are medium dwarf with drooping and spreading foliage, dense, precocious and heavy bearer. Fruit weight varied from 1 to 1.5 kg.	Uttar Pradesh, Uttarakhand
Pusa Urvashi	It is mid season variety. Trees are tall, vigorous, dense, upright growth, precocious and heavy bearer. Fruits are ovoid, oblong. The fruit weight range from 1.5 to 2.5 kg.	Uttar Pradesh, Uttarakhand

BANANA

Name of Variety	Salient Features	Recommended Areas
Dwarf Cavendish	Also known as Basrai Dwarf, Kullan, Kabuli, Varmanakeli, Pachavazhai, Mauritius, Moris, Bhusaval, Kuzhi vazhai, Kallu vazhai and Nila vazhai. It is a short statured variety and needs no staking of the plants. Dark black brown blotches appear all along the stem. The duration of the crop is 11 months and produces an average bunch weight of 20 kg with 8-10 hands that are compactly arranged with 140-160 fruits/bunch.	Maharashtra, Gujarat, Bihar, Jharkhand, West Bengal, Tamil Nadu, Karnataka, Andhra Pradesh, Odisha, Chhattisgarh, Madhya Pradesh, Assam, Nagaland, Meghalaya
Robusta	Also known as Bombay Green, Pedda Pacha Arati, Harichhal and Borjahaji. The plants bear potential bunches weighing 25-30 kg each with good sized, slightly curved fruits. It is highly susceptible to leaf spot disease which limits its cultivation in highly humid tropical regions but is resistant to Fusarium (Panama) wilt.	Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Maharashtra, Bihar, Jharkhand
Grand Naine	It is the most important and internationally accepted variety of Giant Cavendish sub group with commercial significance and has occupied the premier export market. Internationally, it is acceptable both for dessert and processing purposes. It has a better pulp to peel ratio and has more market acceptability. In India, its popularity has increased and replacing varieties like Shrimanti and Robusta. It is a medium to tall statured variety and is a heavy yielder with long cylindrical bunch. On an average, it produces a bunch weighing 25-35 kg and the highest weight goes even up to 60-65 kg in crop duration of 11-12 months. The number of hands per bunch varies from 9-12 with 200-220 fruits. The length of fruit is 14-15 cm and girth is 12-13 cm.	All over India
Rasthali	Also known as Amritpani, Malbhog, Mortman, Rasbale, Kulfiait, Sabri and Poovan. This is so far the most pried and choice banana cultivar for table purpose with its tasty, crisp, pleasantly flavoured fruits with excellent sugar acid blend. Plants are medium statured and the crop takes 13-15 months to come to harvest with bunches weighing 15-18 kg each. Hard lumps and fruit cracking (or peel splitting) and it is susceptibility to fusarium wilt disease are limiting factors in cultivation of this cultivar.	Tamil Nadu, Andhra Pradesh, Karnataka, Bihar, West Bengal, Assam, Mizoram, Meghalaya

Name of Variety	Salient Features	Recommended Areas
Poovan	Also known as Mysore, Alpan, Champa, Chini Champa, Dora Vazhal, Karpura Chakrakeli and Palayankodan. It is distinguished from other cultivars by its pink pigmentation on the ventral side of the midri of young leaves. Under optimum crop management conditions, it bears heavy bunches weighning 20-24 kg each having 150 to 300 fingers.	Tamil Nadu, Andhra Pradesh, Kerala, Karnataka, Assam, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland, Sikkim, Tripura, Bihar, Jharkhand Odisha, Andaman & Nicobar Islands (Port Blair)
Nendran	Also known as French Plantin, Rajeli and Bhorot. The processed banana products exported till date to the gulf countries are exclusively prepared from this cultivar. Bunch weight varies from 8-15 kg having 30-50 fingers. Fruits have a distinct neck with thick and green peel which turns buff yellow on ripening.	Kerala, Tamil Nadu
Red Banana	Also known as Lal Kela, Chenkadali, Chevvazhai, Yerra Arati, Anupam, Chandrabale, Kembale and Agniswar. This is an elite banana cultivar and grown for red peeled delicious fruits of unique taste. The plants are bold, robust, very tall ranging from 2.5 to 3.0 m in height. It produces bunches to the tune of 20-30 kg in weight under optimum crop management conditions with 70-90 roust fruits.	Tamil Nadu, Karnataka, Kerala, Andhra Pradesh, Maharashtra, Gujarat, Madhya Pradesh, Chhattisgarh, Andaman & Nicobar Islands (Port Blair)
Monthan	Also known as Bontha, Karibale, Batheesa, Kanchkel and Madhurangbale. It is fairly tall and robust, growing to a height of 2.5 to 3.0 m. Since male flowers and pseudo stem piths are highly relished as vegetables and owing to its heavy yielding capacity.	Tamil Nadu, West Bengal, Bihar, Jharkhand, Odisha, Kerala
Ney Poovan	Also known as Njali Poovan, Elakki Bale, Ney Kadali, Hoobale, Vadakkan Kadali, Deva Bale, Putta Sugantha and Safed Velchi. It is a slender, medium to tall cultivar and completes first crop cycle in 12-13 months. The bunch orientation is horizontal. Average bunch weight varies from 18-20 kg with 150 fruits/bunch.	Karnataka, Tamil Nadu, Kerala
Karpurvalli	Also known as Kanthali, Jammulapalem Collection, Pisang Awak, Bharat Moni, Chinali, Pey Kunnan, Kosta Bontha and Jhurmani Kanthali. It is one of the hardiest cultivars and has gained popularity for cultivation under marginal soil conditions. Tolerance to drought, salt and wind, ease of cultivation and high productivity has favorured its commerial cultivation at larger scale in marginal soil conditions of south India. Its plants are tall, about 3.0 m tall, robust with light pink streaked pseudostem. It takes about 16 months to complete first crop cycle with bunches of 25-35 kg wieght under optimum crop management conditions.	Tamil Nadu, Andhra Pradesh, Assam

Name of Variety	Salient Features	Recommended Areas
Udhayam	It is a single plant selection with an average yield of 37 kg with high TSS (32° Brix) with a potential to yield up to 45 kg, which is 40% higher than local Karpuravalli. The plants are comparatively dwarf in stature with a duration of 13-14 months.	Tamil Nadu, Kerala, Andhra Pradesh, Karnataka, Tripura
Pachanadan	Also known as Kali, Gali Bale, Bargi Bale. It is tall statured with 2.6 to 3.1 m height and 50-55 cm circumference at the base. The duration of the crop is 11 to 12 months. The average weight of the bunch is 15 kg with 8-9 hands and 100-120 fruits/bunch.	Tamil Nadu
Virupakshi	Also known as Malavazhai, Hill Banana and Sirumalai. It is a tall statured variety. The height of the pseudostem is 2.5-3.0 m with 50-55 cm circumference at the base. It is a vigorous and hardy variety. The duration of the crop is 14 months. The average bunch weight is 12 kg and 6-8 hands with 80-90 fruits/bunch. The length of the fruit is 10-12 cm with a girth of 8-10 cm. Fruits possess pleasant aroma and good taste.	Tamil Nadu, Karnataka, Andhra Pradesh, Kerala, Himachal Pradesh

BER

Name of Variety	Salient Features	Recommended Areas
Thar Savika	It is an early maturing variety. Fruits are juicy, sweet with a TSS of 22-24%. Fruits do not cause throat soaring after consumption, which is common in other cultivars.	Rajasthan, Haryana, Gujarat, Madhya Pradesh
Thar Bhubhraj	It is an early maturing cultivar. Fruits are very juicy and sweet.	Rajasthan, Haryana, Gujarat, Madhya Pradesh
Narendra Ber -1	Trees are spreading type, heavy yielder, fruits are round to oblong, yellowish green in colour.	Uttar Pradesh
Narendra Ber - 2	Trees are medium in height, semi spreading, fruits are obviate with yellowish green skin.	Uttar Pradesh
Gola	Also known as Delhi Gola, Nazuk, Akrota, Seo, Laddu, Chhuhara, Rashmi, Bekata Varanasi, Thornless, Chonchal, Noki, Sanaur, Banarasi, Banarsi Pewandi and Rasmi. It is an early variety. Fruits are round in shape, greenish yellow in colour, smooth and high yielding. Suitable for extremely dry area.	Haryana, Maharashtra, Punjab, Rajasthan, Uttar Pradesh, Gujarat, Andhra Pradesh, Himachal Pradesh, Delhi, Jammu & Kashmir, Karnataka
Seb	Fruits are like apple shape. It is an early variety and suitable for extremely dry area.	Rajasthan, Haryana, Gujarat, Madhya Pradesh, Jammu & Kashmir, Chhattisgarh, Karnataka, Maharashtra
Umran	Also known as Katha, Kotho, Ajmeri, Chameli and Madhuri. It is mid season and high yielding variety. Fruits are oval in shape. Suitable for dry regions.	Andhra Pradesh, Punjab, Haryana, Maharashtra, Rajasthan, Himachal Pradesh, Jammu & Kashmir, Chhattisgarh, Madhya Pradesh, Karnataka
Banarsi Kadaka	Suitable for dry region. It is mid season variety.	Haryana, Uttar Pradesh, Chhattisgarh, Madhya Pradesh
Mundia	Suitable for extremely dry area. It is mid season variety.	Rajasthan, Haryana

CHERRY

Name of Variety	Salient Features	Recommended Areas
Black Heart	Vigourous trees, mid season flowering, fruits are medium in size and heart shaped with compressed apex, skin colour deep shiny blackish purple and early to mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Guigne Noir Gross	Trees are medium to large in vigour, mid season flowering, fruits are medium in size and roundish obtuse heart shaped, skin colour dark red and early season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Bigarreau Napolian (Double)	Trees are medium to vigourous, early season flowering, fruits are longish large, medium to large and heart shaped, skin colour creamy red yellow and early to mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Bigarreau Noir Grossa (Mishri)	Trees are medium to large in vigour, fruits are with obtuse heart shape, skin dark red colour which finally changes to blackish purple and mid to late season maturity.	Jammu & Kashmir, Uttarakhand, Arunachal Pradesh
Guigne Noir Hative (Makhmali)	Trees medium to vigourous, late flowering, very large sized fruit with ovoid obtuse heart shape, skin shining dark blackish brown to full black, small stone and mid to late season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Lambert	Trees are medium in vigour, mid flowering, fruits are large, round in shape, skin deep ruby red blackish in colour, susceptible to rain cracking and mid to late season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Bing	Trees are upright to spreading and vigourous, mid flowering, very large sized fruit with roundish to slightly heart shape, skin maroon or deep red in colour.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Stella	Trees are medium spreading in vigour and precocious in bearing, mid to late flowering, very large fruit with heart shape, dark red skin turning black at maturity, small stone and mid to late season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Cherry - 01	Trees are semi spreading, precocious, regular and prolific bearing cultivar selected from Bigarreu Napolion (Double Gilass) cherry orchard. Fruits are large, ovoid in shape, attractive, dark red colored with long pedicels. Fruits have good acid/ sugar balance and high in TSS.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Cherry - 02	Trees are upright, precocious, prolific and regular bearer selected from Local Mishri. Fruits are large with attractive red and high in TSS as compared to Mishri and mature 10 days earlier than 'Mishri.	Jammu & Kashmir, Uttarakhand, Arunachal Pradesh

CHESTNUT

Name of Variety	Salient Features	Recommended Areas
Nankings	Trees are vigorous and spreading, nuts are medium to large, dark brown and mid season cultivar.	Jammu & Kashmir, Uttarakhand, Arunachal Pradesh
Meiling	Trees are vigourous, upright and spreading, nuts are medium to large and dark brown.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Orrin	Trees are vigourous, upright spreading, prolific bearer, early season blooming, nuts are medium to large and dark mahogany to almost black in colour with slight pubescent tip, maturity mid to late season.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Crane	Trees are vigourous, spreading and precocious in bearing, nuts are medium to large, dark cherry coloured, mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Jersey Gem	Trees are vigourous and round topped, kernels are sweet, crunchy and yellowish in colour.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Kashmir Seedling Selection	Seedling selection from Kashmir valley are found to be very promising in terms of their nut quality, blooming period range from March to April with duration of 25-34 days.	Jammu & Kashmir, Uttarakhand, Arunachal Pradesh

CUSTARD APPLE

Name of Variety	Salient Features	Recommended Areas
Arka Sahan	Fruits are light green in colour, moderately thick (0.5 cm) with large, flat eyes. The edible pulp is remarkable for its sweetness with 22.8% total sugars.	Rajasthan, Chhattisgarh, Madhya Pradesh, Maharashtra
Balanagar	Fruits are very large and heart shaped, very good pulp and heavy bearer.	Maharashtra, Rajasthan, Chhattisgarh, Gujarat, Madhya Pradesh, Uttar Pradesh

DATE PALM

Name of Variety	Salient Features	Recommended Areas
Halawy	An early cultivar, suitable for raw eating and processing as soft dates. Tolerant to rain. Fruits are small to medium, oblong with rounded apex and yellow at doka stage.	Rajasthan, Gujarat, Punjab
Khadarawy	It is comparatively dwarf and mid season cultivar. Fruits mature slightly later than Halawy. Fruits are small to medium, oblong ovate and greenish yellow at doka stage.	Rajasthan, Gujarat, Punjab
Shamran (Sayer)	A mid season cultivar, slightly tolerant to high humidity. Fruits are medium to large, oblong oval and yellow at doka stage with faint longitudinal streaks of red near the base.	Rajasthan, Gujarat, Punjab
Medjool	A late ripening cultivar, it is suitable for preparation of dry dates. The fruits are large and broadly oblong-oval to somewaht ovate, orange yellow with a fine reddish brown stippling and highly astringent at doka stage.	Rajasthan, Gujarat, Punjab
Barhee	A mid season or late cultivar. Fruits are small to medium in size, ovate to nearly round in shape, golden yellow and almost free from astringency even at green stage. Hard ripe doka fruits are very sweet and suitable for raw eating.	Rajasthan, Gujarat, Punjab
Zahidi	A mid seson and prolific bearer, slightly tolerant to rain or high humidity because of smooth and hard surface. Furits are small to medium in size, ovate shape and yellow in colour, astringent at doka stage.	Rajasthan, Gujarat, Punjab
Khalas	It is a mid season cultivar. Fruits are small to medium in size, oblong-oval, yellow and sweet at doka stage, it has an oblique base and irregular outline. Suitable for raw eating and for processing as soft dates.	Rajasthan, Gujarat, Punjab

FIG

Name of Variety	Salient Features	Recommended Areas
Poona	Seeds are hollow without inner kernels and the embryo. It is high yielding variety and very popular in fig grown area.	Maharashtra, Gujarat, Karnataka, Tamil Nadu, Himachal Pradesh

GRAPE

Name of Variety	Salient Features	Recommended Areas
Anab-e-Shahi	It is late matuting and high yielding variety (35 t/ha), but highly susceptible to downy mildew disease. Berries are enlongated, medium to large in size. Juice is clear and sweet with TSS 18 to 20%. Fruits have a good keeping quality and used for table purpose.	Andhra Pradesh, Punjab, Tamil Nadu, Karnataka
Dil Kush	It is a mutant of Anab-e-Shahi. White colour seeded fruits, sweet in taste with few seeds.	Karnataka, Andhra Pradesh
Bangalore Blue	Berries are small in size, dark purple, seeded with thick skin. Juice is clear and pleasantly flavoured with TSS 16-18%. Good keeping quality and used for making juice and wine.	Karnataka, Mizoram
Thompson Seedless	It has wide adaptability, berries are seedless, elongated, golden yellow with medium-thin skin. The juice is straw coloured, sweet with a TSS of 20-22%. Good keeping quality and used for table purpose and raisin making. Average yield 20-25 t/ha	Maharashtra, Andhra Pradesh, Tamil Nadu, Karnataka, Himachal Pradesh, Manipur
2A Clone of Thompson Seedless	It is a late maturing type, white seedless, suitable for fresh eating and for making into raisins. This variety is highly responsive to hormonal treatments for increased berry size and bigger clusters. Average yield 25 t/ha of fresh fruit/4-5 tones of raisin yield per hectare.	Maharashtra, Karnataka, Andhra Pradesh
Tas-e-Ganesh (Clone of Thompson Seedless)	Tas-e-Ganesh is similar to Thompson Seedless in all respect except in the size of the berries and the clusters are larger than those of Thompson seedless. This mutant responds more to girdling, resulting into a better quality fruit than Thompson Seedless.	Maharashtra
Sonaka	It is also similar to Thompson Seedless (clone of Thompson Seedless). The berry elongation is better and the berry skin is thin but it is more susceptible to berry cracking and rotting if it rains at harvest.	Maharashtra, Tamil Nadu, Karnataka
Manik Chaman	This is clone of Thompson Seedless. It is like a variety of sonaka known for drought and salt tolenrance.	Maharashtra, Tamil Nadu, Karnataka
Sharad Seedless	It is a mutant of kishmish chorni (black seedless). Fruits are black to purple in colour with medium sized berries. This is early grape variety, availability is from December to February.	Maharashtra, Tamil Nadu

Name of Variety	Salient Features	Recommended Areas
Flame Seedless	Early ripening and red seedless, berries are very crisp and uscat flavoured. Berries are susceptible to crack due to rains or to morning humid weather during ripening. Average yield 25 t/ha of fresh fruit.	Maharashtra, Haryana, Tamil Nadu, Punjab
Red Globe	Naturally bold red seeded table grape. Due to good keeping qualities and bold berries, it has good market demand. Average yield 25 t/ha.	Maharashtra, Karnataka, Tamil Nadu
Fantasy Seedless	Fruits are medium in size, obviate, purple black berries. Vines are vigorous hence proper nutrient and water management is required. Average yield 24 t/ha. Over bearing to be avoided during initial years.	Maharashtra, Karnataka
Pusa Seedless	It is a selection from Thompson Seedless.It resembles with Thompson Seedless with regard to most of the characters, but its berries are more elongated. The berries have high TSS content and are suitable for both table purpose and raisin making.	Punjab, Karnataka, Himachal Pradesh
Manjri Naveen	Early ripening, white seedless with naturally bold crisp & mildly Muscat flavoured berries. Average yield 25 t/ha.	Maharashtra, Karnataka
Perlette	Berries are seedless, small sized, spherical to slightly ellipsoidal and yellowish green in colour. The juice is clear with 16 -18% TSS. Keeping quality is good and is used for table purpose. Variety is not suitable for raisins due to compactness of clusters. It is highly susceptible to anthracnose. Average yield is up to 35 t/ha.	Punjab, Haryana, Himachal Pradesh
IARI, New Delhi (*Hybrid*)		
Pusa Navrang	This hybrid is a cross between Madeleine Angevine and Rubired an early ripening (1st week of June), basal bearer and fruits having red pigment both in peel and pulp. The bunch is loose, medium in size with round and medium sized berries. It is ideally suited for coloured juice and wine making and is resistant to anthracnose disease.	Punjab, Andhra Pradesh, Karnataka, Mizoram
Pusa Urvashi	This hybrid is an early ripening (1st week of June) and basal bearer. Its bunch are loose and medium in size with seedless berries of greenish-yellow colour. It is suitable for table purpose and raisin making.	Punjab, Andhra Pradesh, Karnataka
IIHR, Bangalore (*Hybrid*)		
Arka Kanchan	A hybrid between 'Anab-e-shahi' and 'Queen of the Vineyards'. Clusters large in size, golden yellow, ellipsoidal to ovoid, sweet (TSS 17-20°B) and pleasant muscat flavoured seeded berries. Very good for fresh table purpose and for making dry white table and dessert wines.	Andhra Pradesh, Karnataka, Tamil Nadu

Name of Variety	Salient Features	Recommended Areas
Arkavati	A hybrid between 'Black Champa' and 'Thompson Seedless. Clusters are medium in size, yellowish green, ellipsoidal to spherical, sweet (TSS 22-25°B) and seedless berries. Suitable for raisin making, fresh table use and dessert wines.	Andhra Pradesh, Karnataka
Arka Shyam	A hybrid between 'Bangalore Blue' and 'Black Champa'. Clusters are medium in size, bluish black, spherical to ovoid, sweet (TSS 20-25°B) and mild foxy flavoured seeded berries. Resistant to anthracnose. Very good for making dry table and dessert wines.	Andhra Pradesh, Karnataka, Tamil Nadu
Arka Hans	A hybrid between 'Bangalore Blue' and 'Anab-e-Shahi'. Clusters are medium in size, yellowish green, ellipsoidal to spherical, sweet (TSS 18-21%) and pleasant foxy flavoured seeded berries. Resistant to anthracnose. Very good for quality wines by suitable acid amelioration.	Andhra Pradesh, Karnataka, Tamil Nadu
Arka Neelamani (Black Champa x Thompson Seedless)	The plants are vigorous with a yield potential of 28 t/ha and 25 kg/vine. The bunches weigh on an average of 360 g/bunch, black, seedless and average berry weight is 3.2 g with crispy pulp. TSS varies from 20-22°B.	Andhra Pradesh, Karnataka
Shweta Seedless (Anab-e-Shahi x Thompson Seedless)	The plants are moderately vigorous with a yield potential of 31 t/ha and 28 kg/vine. The bunches are well filled, weighing an average of 260 g/bunch, greenish yellow in colour.	Andhra Pradesh, Karnataka
Arka Majestic (Angur Kalam x Black Champa)	The plants are vigorous with a yield potential of 38 t/ha and 34 kg/vine. The bunches are well filled, weighing an average of 370 g/bunch, deep tan coloured, uniform round berries, having 2-3 small seeds per berry and bold roundish berries weighing on an average 7.7 g.	Andhra Pradesh, Karnataka
Arka Chitra (Angur Kalam x Anab-e-Shahi)	The plants are moderately vigorous with a yield potential of about 38 t/ha and 34 kg/vine. TSS varies from 20-21°B and acidity from 0.4-0.6 per cent. This hybrid is tolerant to powdery mildew. It is good for table purpose.	Andhra Pradesh, Karnataka
Arka Krishna (Black Champa x Thompson Seedless)	The bunches are well filled, weighing on an average of 255 g/bunch, dark coloured, seedless. TSS varies from 20-21°B and acidity from 0.6-0.7 per cent. This hybrid is good for juice purpose.	Andhra Pradesh, Karnataka
Arka Soma (Anab-e-Shahi x Queen of Vineyards)	The bunches are well filled, weighing an average of 410 g/bunch, greenish yellow in colour, round to ovoid in shape and average berry weight is 3.8 g. TSS varies from 20-21°B and acidity 0.5 per cent. It makes very good white dessert wine.	Andhra Pradesh, Karnataka

Name of Variety	Salient Features	Recommended Areas
Arka Trishna **(Bangalore Blue x Convent Large Black)**	It is an improvement over Bangalore Blue cultivar. The bunches are well filled, weighing an average of 130 g, deep tan coloured, round to ovoid in shape and average berry weight is 3.34 g. TSS varies from 22-23° Brix and acidity from 0.3-0.4 per cent. It is a male sterile hybrid resistant to anthracnose and tolerant to downy mildew disease and good for wine.	Andhra Pradesh, Karnataka

GUAVA

Name of Variety	Salient Features	Recommended Areas
Sardar (L-49)	Also known as Sardar, its fruits are large, roundish ovate in shape, skin prim-rose-yellow and white pulp, very sweet and tasty. The TSS and vitamin 'C' contents are high. The plants are vigorous.	All over India
Allahabad Safeda	It is the most important variety of guava used for table and processing purposes. The tree is medium to tall in size, upright growth habit, heavy bearer, dense foliage and has a tendency to produce long shoots. Crown is broad and compact, often dome-shaped and rarely loose. Fruits are of medium in size, round shape with smooth skin and white flesh. The fruits are relatively soft with less seeds. Its keeping quality is good.	All over India
Chittidar	The fruits are characterized by numerous red dots on the skin, high sweetnes, and small and soft seeds. It is otherwise similar to Allahabad Safeda fruits in size, shape and pulp. It has higher TSS content than Allahabad Safeda and Lucknow 49 but lower vitamin 'C' conternt. The tree characters resemble to those of Allahabad Safeda.	Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand
Apple Colour	Fruits are medium in size and pink in colour. Fruits are sweet in taste with good keeping quality.	Uttar Pradesh
Lalit	It is a selection from half sib population of Apple Colour. A variety with wide adaptability in different agro ecological zones of the country. The fruit yield is 100 kg/plant at the age of 6 years, which is higher than any other commercial guava variety. Fruits are of saffron yellow in colour with red flash and weighing 185-200 g/fruit, flesh firm and pink with good blend of sugar and acid. The content of vitamin 'C' in fruit is 250 mg/100 g. It is suitable for both table and processing purposes. The pink colour in the beverage remains stable for more than a year during storage.	All over India

Name of Variety	Salient Features	Recommended Areas
Shweta	It is a selection from half sib population of Apple Colour. Trees are semi vigorous with medium height and prolific bearer. The fruit yield is 90 kg/plant at the age of 6 years. It is a variety with medium size globous fruits, weighing 225 g/fruit, creamy white epicarp having snow white flesh, TSS 12.5-13.2° B, vitamin 'C' content 300 mg/100g pulp and good keeping quality. The variety is suitable for cultivation in all guava growing areas. It is a high yielder. Fruits are attractive and have good nutritive value.	All over India
Allahabad Surkha	It is an outstanding variety of large uniform pink fruit with deep pink flesh. The plants produce up to 120 kg fruits in the sixth year of fruiting. Trees are vigorous, dome shape and compact. Fruits are sweet and strongly flavoured with few seeds.	Uttar Pradesh
Arka Mridula	It is a seedling selected from Allahabad Safeda variety, Fruits are smooth, medium sized (180-200 g) with soft seeds, pulp is white and sweet with good pectin content. Keeping quality is good.	Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra
Dhareedhar	Trees are vigorous with erect and upright branching. Fruits are medium to large in size, roundish-ovate in shape, greenish in colour, soft seeded with 5-7 raised lines on the surface of mature fruits.	Chhattisgarh, Madhya Pradesh
Pant Prabhat	Plants are upright with broad leaves, higher yield (100-125 kg per tree), fruits are round in shape with medium in size, Ascorbic acid content varies from 125 mg (rainy season) to 300 mg per 100 g/pulp (winter season).	Uttar Pradesh, Uttarakhand
IIHR, Bangalore (*Hybrid*)		
Arka Amulya	A progeny from the cross of Allahabad Safeda x Triploid. Plants are medium in vigor and spreading type. Fruits are round in shape. Skin is smooth and yellow in colour.	Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Punjab
Arka Kiran	Fruits are medium sized weighing 180-200 g, pulp is pink in colour, TSS is about 12-12.5° Brix and seeds are soft.	Karnataka, Andhra Pradesh, Maharashtra
HAU, Hissar (*Hybrid*)		
Hisar Safeda	This is cross between Allahabad Safeda x Seedless guava developed at CCS HAU, Hisar. Tree growth upright with compact crown, leaves oblong in shape. Fruits are round in shape, medium in size, smooth and yellowish green surface, pulp creamy white with few soft seeds.	Haryana, Punjab
Hisar Surkha	This is cross between Apple Colour x Banarasi Surkha. Trees are medium in height with broad to compact crown, leaves oblong in shape. Fruits are medium in size, round shape, smooth and yellowish green surface with pink pulp.	Haryana, Punjab

HAZELNUT

Name of Variety	Salient Features	Recommended Areas
Tonda Giffani	Trees are medium in vigour, stone hard and kernel weight 1.8 g, nut flat with brownish colour prominent towards stem end and brown streaks towards tip.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
Tonda Romaana	Tree are medium in vigour, stone moderately hard, kernel weight 1.98 g, kernel filling partial with dark brownish colour at stem end turning brownish towards end.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
Gentille Delle Langhe	Trees are medium in vigour, stone are comparatively soft, kernel weight 2.4 g with complete kernel filling, kernel colour creamy white, prominent brownish streaks with pointed beak.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
Kashmir Selection	Trees are mostly large in vigour and single to multi branched, kernel weight ranges from 0.48-055g.	Jammu & Kashmir, Uttarakhand

JACKFRUIT

Name of Variety	Salient Features	Recommended Areas
Palur 1 Jack (PLR-1)	It is a clonal selection from Panikkankuppam local from Panruti taluk, in South Arcot district of Tamil Nadu. It is high yielding with medium height, less spreading and suitable for high density. In addition to regular bearing season (March-June), it produces fruits during off season (October-December) also. The annual yield per tree is about 80 fruits weighing around 900 kg.	Tamil Nadu, Karnataka
PP-1 Jack	It is a clonal selection from Ulagumoodu Local near Pechiparai. It is a medium to tall tree, yields 105 fruits per tree per annum (each weighing 17 kg) which accounts for 40.8% more yield than local. The fruit bearing occurs twice annually (April-June and November-December) and produces high quality crisp carpels with high TSS and ascorbic acid content.	Tamil Nadu, Karnataka
PLR (J)-2	It is a clonal selection from Pathirakkotai Local. It possesses good quality and bigger fruit size and highly palatable and edible flakes and fetch more price due to attractive characters and better keeping quality.	Tamil Nadu, Karnataka
Swarna	It is a very good yielder that bears fruits in bunches on the trunk, primary branches and also on the secondary branches. Fruits are medium in size (6.8 kg). The fruit lets are golden brown in colour, juicy with a TSS of 25-26° Brix, with thick flakes and a very thin rind (<1.0 cm).	Karnataka
Konkan Prolific	It is a selection with an average yield of 420 kg/ tree producing 73 fruits/tree/year with individual fruit weight of 5.0 to 6.0 kg.	Maharashtra

KIWI

Name of Variety	Salient Features	Recommended Areas
Abbot	Early blooming and maturity, purely pistillate cultivar, medium size fruit, weight (45-60 g), oblong in shape, fruit skin covered with dense hairs, fruits are sweet and slightly tapering at distal end in comparison to peduncle attachment.	Arunachal Pradesh, Sikkim, Himachal Pradesh, Mizoram, Uttarakhand
Allison	Both male and female flower organs are present, good pollinizer, fruits are slightly longer and broader than Abbot, slightly tapering at both ends, weight (70 g), bears profusely.	Arunachal Pradesh, Sikkim, Himachal Pradesh, Nagaland, Mizoram, Uttarakhand
Bruno	Good fruit bearing, purely pistillate, fruits are medium (45-60 g), slightly tapering shape towards stem end and low chilling requirement.	Arunachal Pradesh, Sikkim, Himachal Pradesh, Mizoram, Uttarakhand
Hayward	Purely pistillate cultivar, large fruit (38-120 g), good keeping quality, superior in flavour, very good keeping quality.	Arunachal Pradesh, Sikkim, Himachal Pradesh, Nagaland, Mizoram, Uttarakhand, Meghalaya
Monty	Late in flowering but short maturity period, purely pistillate cultivar, fruits are oblong in shape, medium in size, slightly tapering and flat at both ends, weight 40-65 g, prolific bearing habit.	Arunachal Pradesh, Sikkim, Himachal Pradesh, Mizoram, Uttarakhand
Tomuri	Staminate cultivar and good pollinizer, flowers usually appear in groups, bold and healthy in comparison to pistillate flowers.	Arunachal Pradesh, Sikkim, Himachal Pradesh, Mizoram

LIME

Name of Variety	Salient Features	Recommended Areas
Kagzi Lime	It is commonly known as Kagzi Nimboo. Average fruit weight 40 gm with smooth surface texture. Mainly two fruiting seasons are observed i.e. from May to June and November to December.	All over India
Pramalini	It bears fruits in clusters of 3-7 and yields 30% more than the normal kagzi lime. The fruits have 57% juice which is higher than Vikram (53%) and normal lime (52%).	Andhra Pradesh, Maharashtra, Gujarat, Bihar, Jharkhand, Karnataka, Tamil Nadu, Madhya Pradesh, Chattishgarh
Vikram	Fruit bears in clusters of 5-10 and some in off-season during September, May and June. It gives 30-32% more yield over the normal lime.	Andhra Pradesh, Maharashtra, Gujarat, Bihar, Jharkhand, Karnataka, Tamil Nadu, Uttar Pradesh, Madhya Pradesh, Chattishgarh, Uttarakhand
Jai Devi	Vigorous and produce fruits round the year. High yielder (36.98 kg per tree), Fruits are bigger in size and round shape with attractive yellow in colour, juice content (52.3%).	Andhra Pradesh, Maharashtra, Gujarat, Bihar, Jharkhand, Karnataka, Tamil Nadu, Uttar Pradesh
Sai Sharbati	This selection recorded the higher yield of 1205 fruits/tree in seventh year (without bahar treatment) with bigger fruit size.	Andhra Pradesh, Maharashtra, Gujarat, Bihar, Jharkhand, Karnataka, Tamil Nadu, Uttar Pradesh, Uttarakhand
Phule Sharbati	It is superior over cv. Sai Sharbati for better plant canopy, more fruits (52.19 t/ha, 11.28 % more than cv. Sai Sharbati).	Andhra Pradesh, Maharashtra, Gujarat, Bihar, Jharkhand, Karnataka, Tamil Nadu
Balaji (Tenali Selection)	Fruits are medium to big in size and high yielding. Resistant to citrus canker and bark eruption.	Andhra Pradesh, Madhya Pradesh, Chattishgarh
Rasraj **(IIHR Hybrid)**	It is a hybrid between Kagzi Lime and Nepali Round Lemon. Trees are vigorous and produce fruits with good quality. Moderately resistant to citrus canker.	Karnataka
Seedless Lime	It is a new selection of lime. Fruits are oblong in shape, skin thin, primrose coloured, prolific-bearer, yields double that of normal lime but late.	Andhra Pradesh, Maharashtra, Gujarat, Bihar, Jharkhand, Karnataka, Tamil Nadu

LEMON

Name of Variety	Salient Features	Recommended Areas
Eureka	Fruit colour is lemon yellow, surface slightly rugose, pitted, obviate to elliptical or oblong in shape, fruits are medium in size, base rounded, frequently necked, segments 9-10, pulp fine grained, pale, greenish yellow, juice abundant, very acid and excellent flavour.	All over India
Kagzi Kalan	Plants are semi vigorous, low spreading, prolific bearer and starts bearing after three years of planting. The fruits are medium to large in size and are extremely juicy. Few seeds to seedless in nature. Suitable for processing.	Uttar Pradesh, Bihar, Rajasthan, Punjab, Madhya Pradesh, Jharkhand, Uttarakhand, Himachal Pradesh, Chhattisgarh, Delhi
Assam Lemon (Nepali Oblong)	Fruits are oblong to ovate, lemon yellow, apex nippled and rounded base, rind medium thick, axis hollow, light yellow pulp and fine, juicy, good flavour, seeds absent to a few. The fruits ripen during December-January.	All over India
Pant Lemon-I	It is a selection of Kagzi Kalan. Fruits are medium in size, round and smooth, rind thin, juicy, tolerant to canker, tristeza and dieback. It is the best replacement for Kagzi Kalan.	Uttar Pradesh, Uttarakhand

LITCHI

Name of Variety	Salient Features	Recommended Areas
Shahi	Trees of this cultivar are very vigorous and produce fruits ranging from 100-150 kg/ plant and bear regularly. The fruits are medium in size. This cultivar is earliest maturity. Mature fruits are prone to cracking with low humidity and poor moisture content in the soil. Fruits are globous heart or obtuse in shape having rose madder and fuchsia purple background with red tubercles at ripening. Fragrant pulp is grayish white, soft, moderately juicy and sweet. It has large seeds with smooth, shining and dark chocolate seed coat. The fruits are known for excellent aroma and quality.	Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Sikkim, Chhattisgarh, Madhya Pradesh, Assam
China	It is an important cultivar in India that ripens when most of the other cultivars have been harvested. It is tolerant to hot winds, fluctuations in soil moisture and fruit cracking. Trees are dwarf and high yielders but prone to alternate bearing. Fruits are large in size, medium to heavy in weight, oblong in shape and tyrian rose in colour with dark tubercles at maturity.	Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, West Bengal, Nagaland, Assam
Elaichi	Trees are moderately vigorous, attaing an average heigtht of 6-7 m. It is a mid season variety which ripens in the first week of June, the variety yields of 50-60 kg/plant annually. Fruits are less suitable to sun burn and cracking	West Bengal
Rose Scented	Fruits have distinct aroma and hence called as Rose Scented. It is one of the most popular mid season cultivar. Trees are very vigorous and high yielders but mature fruits are prone to cracking. Fruits are medium to large in size, globosely heart or obtuse in shape with rough skin and having purplish rose colour with red tubercles at ripening. Pulp is grayish white, soft, moderately juicy and sweet.	Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Punjab, Tamil Nadu, Himachal Pradesh, Jammu & Kashmir
Bedana	It is a late maturing cultivar. Trees are vigorous. Fruits are medium in size with good flesh recovery. The fruits are conical with vermilion to carmine in colour having dark blackish brown tubercles at maturity. Pulp is creamy white, soft, juicy and sweet.	Bihar, Jharkhand, West Bengal, Uttar Pradesh, Uttarakhand

Name of Variety	Salient Features	Recommended Areas
Bombai	The trees are vigorous and regular bearers. Ripe fruits have attractive deep red colour, with gray white, soft, juicy and sweet flesh. The cultivar matures early. Fruits are large in size and bear in large bunches. This cultivar has a tiny under developed fruit attached to the fruit stalk of each fully developed fruit.	West Bengal, Assam
Dehradun	Also known as Dehra Rose. It is a medium vigorous tree which produces medium to high yield. The fruits start ripening by the third week of June.	Uttarakhand, Punjab, Uttar Pradesh, Jharkhand, Himachal Pradesh, Tamil Nadu, Jammu & Kashmir
Late Seedless	Also known as Late Bedana. It is a late maturity variety ripening in early to mid June. Fruits are medium to large in size.	Punjab, Uttar Pradesh, Bihar, Jharkhand, Tamil Nadu
Late Large Red	Also known as Muzaffarpur. It is most important variety grown in Bihar and its adjacent sates. This variety bears profusely every year with an average yield of 80-100 g/tree. Fruits are large in size, oval or oblong conical with crimson red tubercles.	Bihar, Jharkhand, West Bengal, Odisha, Chhattisgarh, Madhya Pradesh, Nagaland, Manipur, Tamil Nadu, Meghalaya
Purbi	Fruits are medium to large, oblong conical in shape, ripening at the end of May or first week of June.	Bihar, Jharkhand, West Bengal
Calcuttia	It is a late season variety and fruits ripen in the last week of June. It can be successfully cultivated even in hotter areas provided there is protection from strong hot winds and provision for plenty of water for irrigation. Fruits are large in size.	Punjab, Uttar Pradesh, Uttarakhand, West Bengal, Himachal Pradesh, Tamil Nadu, Jammu & Kashmir

LOQUAT

Name of Variety	Salient Features	Recommended Areas
Golden Yellow	Fruits are medium in size, oval to oblong in shape, golden yellow in colour. medium pulp, pale orange, smooth and soft, mild taste, sub acid, few seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh
Improved Golden Yellow	Fruits are large in size, oval to pyriform, orange yellow in colour. Thick pulp, orange in colour, smooth and crisp, mild taste, sub acid, moderately seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh, Jammu & Kashmir
Large Round	Fruits are medium in size, ovate globose, thin pulp, cremy white in colour, coarse and firm, mild taste, sub acid and few seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh
Pale Yellow	Fruits are large in size, oblong to pyriform in shape, corn in colour. Thin pulp, creamy white in colour, smooth and melting, pleasant taste, sub acid and moderately seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh
Fire Ball	Fruits are small in size, oblong to ovate in shape, saffron yellow in colour, thick pulp, corn husk in colour, smooth and crisp, taste mild, sub acid and moderately seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh
Improved Pale Yellow	Fruits are medium in size, oblong pyriform in shape, medium to thick pulp, cream in colour, smooth and soft, pleasant taste, sub acid and moderately seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh
Large Agra	Fruits are medium in size, oblong to ovate in shape, medium to thick pulp, pale orange in colour, smooth and firm, pleasant taste, sub acid and moderately seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh
Mammoth	Fruits are small in size, oblong pyriform in shape, snowshine in colour. Medium pulp, orange in colour, coarse and granular, pleasant taste, sub acid and few seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh
Matchless	Medium pulp, orange in colour, coarse and granular, pleasant taste, sub acid and few seeded.	Uttar Pradesh, Uttarakhand, Punjab, Himachal Pradesh
Safeda	Fruits are large in size, oblong pyrifom in shape. Thick pulp, creamy white in colour, smooth and melting, excellent taste, sub acid and moderately seeded.	Uttar Pradesh, Uttrakhand, Punjab, Himachal Pradesh
California Advance	Fruits are medium in size, oblong pyriform, pale yellow in colour. Thick pulp, smooth, melting, excellent taste, sub acid and few seeded.	Uttar Pradesh, Uttarakhand, Punjab, Himachal Pradesh
Tanaka	Fruits are small in size, ovate in shape, orange in colour. Medium pulp, coarse and firm, pleasant taste and sub acid and few to moderately seeded.	Uttar Pradesh, Uttarakhand, Punjab, Himachal Pradesh, Jammu & Kashmir

MANDARIN ORANGE

Name of Variety	Salient Features	Recommended Areas
Coorg Mandarin	The most important commercial variety in south India, it is particularly grown on a large scale in Coorg and Wynad tracts. The trees are very vigorous and upright with compact foliage, sparingly spines. Fruits are medium to large in size, bright orange in colour, oblate to globose in shape, base necked or depressed, rind thin to medium thick, easily peeled, segments 9-11, juice abundant, seeds 14-30, matures during February-March.	Karnataka, Tamil Nadu
Khasi Mandarin	It is a commercially grown variety of mandarin in North-Eastern states. It is locally known as Sikkim or Kamala mandarin. Its trees are medium to large with erect habit, dense foliage, both thorny and thornless. Fruits are depressed, globose to ovate, orange yellow to bright orange, surface smooth, base even occasionally short necked, segments 8-10, abundantly juicy, juice orange in colour, seeds are 9-25.	Assam, Meghalaya, Manipur, Arunachal Pradesh, Sikkim, Mizoram, Tripura, Nagaland
Nagpur Mandarin	Occupying a premier position among Indian mandarins, it is one of the finest mandarins grown in the world. It is also known as Ponkan. The trees are vigorous, spineless with compact foliage, leaves are narrowly lanceolate. Fruits are medium in size, sub globose, surface smooth, base slightly drawn out with glandular furrows, thin rind, loosely adherent, segment 10-11, juice abundant, saffron in colour, seeds are 6-7. It matures during January-February.	Maharashtra, Karnataka, Tamil Nadu, Madhya Pradesh, Punjab, Rajasthan, West Bengal, Odisha, Himachal Pradesh, Chhattisgarh, Uttar Pradesh, Gujarat, Jammu & Kashmir, Uttarakhand, Jharkhand
Kinnow	It is a first generation hybrid between King x Willow Leaf. First introduced in Punjab, it has performed well and gained commercial significance. Plants are medium to large, erect, symmetrical, dense foliage with a few scattered spines, leaves broadly lanceolate. Fruits are medium in size, oblate in shape, base flattened, deep orange yellow colour on ripening, thin rind, adherent to segments, segments 9-10, very juicy, seeds 12-24, fruit maturity in mid January.	Punjab, Maharashtra, Karnataka, Tamil Nadu, Madhya Pradesh, Rajasthan, West Bengal, Himachal Pradesh, Haryana, Chhattisgarh, Uttar Pradesh, Uttarakhand, Jammu & Kashmir, Delhi

MANGO

Name of Variety	Salient Features	Recommended Areas
Alphonso	It is a leading commercial variety of Maharashtra and one of the choicest varieties of the country. This variety is known by different names in different regions, viz. Badami, Gundu, Khader, Appas, Happus and Kadgi Happus. Fruits are medium in size, ovate to oblong in shape and orange yellow in colour. It has excellent keeping quality and fruits are good for canning purpose. It is mainly exported as fresh fruit to other countries. It is a mid season variety.	Maharashtra, Goa, Karnataka, Gujarat, Himachal Pradesh, Tamil Nadu, Kerala
Banganapalli	It is a commercial variety of Andhra Pradesh and Tamil Nadu and also known as Chapta, Safeda, Baneshan, Chapai. Fruits are large in size, obliquely oval in shape and golden yellow in colour with good keeping quality. It is mid season variety and is good for canning.	Andhra Pradesh, Kerala, Tamil Nadu, Karnataka, Odisha
Bombay Green	Also known as Malda in North India. It is commonly grown in North India due to its early fruiting. Fruits are medium in size, ovate to oblong in shape, spinach green in colour and having medium keeping quality. It is an early season variety.	Bihar, Jharkhand, West Bengal, Odisha, Chhattisgarh, Madhya Pradesh, Uttarakhand, Uttar Pradesh, Assam
Chausa	Also known as Summer Bahisht Chausa. This variety originated as a chance seedling in the orchard of a Talukdar of Sandila district Hardaoi, U.P. Fruits are large in size, ovate to oblong in shape and light yellow in colour with good keeping quality. It is a late seaon variety.	Uttar Pradesh, Uttarakhand, Punjab, Bihar, Jharkhand, Himachal Pradesh, Haryana, Jammu & Kashmir, Rajasthan, Delhi
Dashehari	This variety derives its name from the village Dashehari near Lucknow. It is a leading commercial variety of North India. The fruits are small to medium in size, oblong oblique in shape and yellow in colour. It is a mid season variety with good keeping quality and used for table purpose.	Uttar Pradesh, Punjab, Uttarakhand, Bihar, Jharkhand, Gujarat, Rajasthan, Haryana, Odisha, Himachal Pradesh, Chhattisgarh, Madhya Pradesh, Jammu & Kashmir, Delhi
Fazli	Fruits are very large in size, obliquely oval in shape with light chrome in colour and having medium keeping quality. It is a late season variety.	Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Madhya Pradesh, Chhattishgarh West Bengal

Name of Variety	Salient Features	Recommended Areas
Gulab Khas	It is indigenous to Bihar. Regular and heavy bearer, it is mid season mango. Fruits are small to medium in size. It has rosy flavour. Fruits are ambre yellow with reddish blush towards the base and on sides. Keeping quality is good.	Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, West Bengal
Himsagar	This variety is also indigenous to West Bengal. Fruits are of medium in size, ovate to oblong in shape and yellow in colour with good keeping quality. It is an early season variety.	West Bengal, Bihar, Jharkhand, Odisha, Tripura, Mizoram
Kesar	It is a leading variety of Gujarat, with red blush on the shoulders. Fruits are medium in size and oblong in shape with good keeping quality. It is an early season variety.	Gujarat, Maharashtra
Kishen Bhog	This variety is also indigenous to West Bengal. Fruits are of medium in size, oval to oblong in shape and yellow in colour and having good keeping quality. It is a mid season variety.	West Bengal, Bihar, Jharkhand, Rajasthan
Langra	It is indigenous to Varanasi area of Uttar Pradesh. Fruits are medium in size, ovate in shape and lettuce green in colour. Fruits are medium in quality but having good shelf life. It is a mid season variety.	Uttar Pradesh, Punjab, Uttarakhand, Bihar, Jharkhand, Odisha, West Bengal, Himachal Pradesh, Delhi, Chhattisgarh, Madhya Pradesh, Jammu & Kashmir, Haryana, Rajasthan, Gujarat
Mankurad	This variety acclaimed commercial importance in Goa and in the neighbouring Ratnagiri district of Maharashtra. Fruits are medium in size with yellow skin. Flesh is firm, cadmium yellow and fibreless. Keeping quality is good. It is a mid season variety.	Goa, Maharashtra (Ratnagiri)
Neelum	It is a commercial variety indigenous to Tamil Nadu and ideal for transportation to distant places owing to its high keeping quality. Fruits are medium in size, ovate oblique in shape and saffron yellow in colour with good keeping quality. It is a late season variety.	Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Gujarat
Pairi	A native to coastal Maharashtra including Goa, it is an early maturing, heavy and regular bearer. Fruits are medium in size with good quality. It has good flavour with sugar acid blend. Flesh is soft, primuline yellow and fibreless. Poor keeping quality.	Maharashtra, Karnataka, Kerala
Totapuri	Widely grown in South India. The common synonyms of this variety are Bangalora, Kallamai, Thevadiyamuthi, Collector, Sundersha, Burmodilla, Killi Mukku and Gilli Mukku. It is a regular and heavy bearing. Fruits are medium to large in size with prominent sinus. Fruit quality is medium. It has a typical flavour and flat taste. Flesh is cadmium yellow and fibreless. It is widely used for processing. It is a mid season variety.	Andhra Pradesh, Karnataka, Tamil Nadu, Odisha, Gujarat

Name of Variety	Salient Features	Recommended Areas
Mulgoa	It is a commercial variety of South India. Fruits are medium in size, ovate oblique in shape and saffron yellow in colour with good keeping quality. It is a late season variety.	Tamil Nadu, Kerala, Karnataka
Imam Pasand	The skin is dark green in colour, with distinct white highlights over the entire surface. Upon reipening, the fruit can attain a deep yellow blush on the shoulders and mid section. Properly harvested and ripened fruit have a fiberless, silky flesh with a deep, sweet flavour and distinct citrus overtones.	Andhra Pradesh, Kerala
Suvernarekha	This is a commercial variety of Vishakhapatnam district of Andhra Pradesh. Other synonyms of the variety are Sundari, Lal Sundari and Chinna Suvernarekha. Fruits are medium in size, ovate oblong in shape and light cadmium in colour with blush of jasper red. Fruit quality is medium and keeping quality is good. It is an early season variety.	Andhra Pradesh
Vanraj	It is highly prized variety of Vadodra district of Gujarat and fetches good returns. Fruits are medium in size, ovate oblong in shape and deep chrome in colour with a blush of jaser red on the shoulders. Fruit quality and keeping quality are good. It is a mid season variety.	Gujarat
Zardalu	This varity is indigenous to Murshidabad in West Bengal. It derives its name from Zardalu, a dry fruit popular in North West Frontier Province and Sindh in Pakistan owing to similarity in shape. Fruits are medium in size, oblong to obliquely in shape and golden yellow in colour. Fruit quality is very good. Keeping quality is medium. It is a mid season variety.	West Bengal, Bihar
CIHS, Lucknow (*Hybrid*)		
Ambika	This is a variety developed from a cross between Amarpali and Janardhan Pasand. It is a regular and prolific bearer. Fruits are medium in size having attractive skin colour with red blush. It is a late ripening hybrid and suitable for export.	Gujarat, Andhra Pradesh, Karnataka
IARI, Lucknow		
Mallika	This is a variety developed from a cross between Neelum x Dashehari. The plants of Mallika are semi vigorous with attractive fruits and has strong tendency to bear every year. The pulp is firm, fibreless with higher. Fruits are ready for harvest by the 3rd week of July. This hybrid has become a commercial cultivar of South India.	Uttar Pradesh, Bihar, Delhi, Jharkhand, Karnataka, Andhra Pradesh, Tamil Nadu, Odisha, Uttarakhand, Haryana, Punjab, Rajasthan, Chhattisgarh, Madhya Pradesh, Kerala, Tripura, Jammu & Kashmir

Name of Variety	Salient Features	Recommended Areas
Amrapali	Amrapali (Dashehari x Neelum) is precocious, distinctly dwarf, highly regular and prolific in bearing. The fruits are small to medium in size, fibreless, excellent in taste and has plentiful pulp. The variety is plate in ripening and is ready for harvest by the third week of July. Being dwarf in stature, this variety is ideally suited for high density planting. The hybrid has also the highest carotenoid content (16,830 ug/100g pulp) and its pulp can be used as colour additive for juices of other mango varieties.	Uttar Pradesh, Bihar, Delhi, Jharkhand, Andhra Pradesh, Tamil Nadu, Odisha, Madhya Pradesh, Chhattisgarh, West Bengal, Punjab, Uttarakhand, Tripura, Nagaland, Assam, Karnataka, Himachal Pradesh, Haryana, Delhi, Rajasthan, Jammu & Kashmir
Pusa Arunima	It is a hybrid, derived from a cross between Amrapali and Sensation. It ripens late in the season and fruits are ready for harvesting by 1st week of August. Fruits are medium in size having attractive red peel colour. It has medium total soluble solids (19.5%), rich in vitamin 'C' (43.6 mg/100 g pulp) and β-carotene content, and it has good flavour with very good shelf-life (10 to 12 days) at room temperature after ripening. It is suitable for domestic market.	Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Punjab, Andhra Pradesh, Tamil Nadu, Odisha, West Bengal
Pusa Surya	It is a regular bearer variety. Its plants are semi vigorous. It is less susceptible to mango malformation in comparison to Amrapali and other commercial cultivars of Northern India. It ripens by 3rd week of July. The fruit is medium to large in size with attractive apricot yellow peel colour and medium total soluble solids (18.5%). It is rich in vitamin 'C' (42.6 mg/100g pulp) and β-carotene content. It has good shelf life (8 to 10 days) at room temperature after ripening.	Uttar Pradesh, Bihar, Jharkhand, Andhra Pradesh, Tamil Nadu, Odisha, West Bengal, Punjab, Uttarakhand
Pusa Lalima	The plants are semi vigorous. It has attractive fruit shape, bright red peel and orange pulplet has good sugar, acid blend and uniformity in size. The fruit weight (209 g) and maturity (125 days) after flowering. Shelf life at room temeperature (5-6 days). The average yield under normal condition 55.62 kg per plant.	Uttar Pradesh, Delhi, Punjab, Haryana
Pusa Shreshth	Regular in bearing, attractive elongated shape, red peel and orange pulp. It has (7-8 days) shelf life at room temperature after ripening. Semi vigorous in stature. Moderate sugar, acid blend, uniformity in size.	Uttar Pradesh, Bihar, Jharkhand, Andhra Pradesh

Name of Variety	Salient Features	Recommended Areas
Pusa Pratibha	The plants are semi vigorous and suitable for closer planting. It is regular bearer. The fruits are very attractive, bright red peel and orange pulp. The red peel colour on golden yellow background makes it very appealing. Fruits are medium in size with higher pulp content (71.1%). It has pleasant flavour with improved shelf life (7-8 days) at room temerature after ripening.	All over India
Pusa Peetamber	The plants are semi vigorous. Fruits are yellow in colour at ripening. It has (5 to 6 days) shelf life at room temperature after ripening. It has good sugar/acid blend and uniformity in fruits size.	Uttar Pradesh, Delhi, Punjab, Haryana, Rajasthan
BSKKV, Dapoli, Maharashtra		
Ratna	It is a cross between Neelum and Alphonso. Trees are moderately vigorous and precocious. Fruits are medium in size, attractive in colour and free from spongy tissue.	Maharashtra, Karnataka
Sindhu	The hybrid is a cross between Ratna and Alphonso. It is a regular bearer hybrid. Its fruits are medium in size, free from spongy tissue with high pulp to stone ratio and very thin and small stone.	Maharashtra, Gujarat
IIHR, Bangalore		
Arka Aruna (Banganapalli x Alphonso)	Regular bearing, flesh free from fibre and spongy tissue, pale yellow in colour, moderately firm, good for mango bars. Fruits are big in size. Plants are dwarf.	Andhra Pradesh, Karnataka, Tamil Nadu, Andaman & Nicobar Islands (Port Blair)
Arka Anmol (Alphonso x Janardhan Pasand)	Regular bearing, attractive skin colour, free from spongy tissue, good keeping quality, good sugar/acid blend.	Andhra Pradesh, Karnataka, Tamil Nadu, Andaman & Nicobar Islands (Port Blair)
Arka Neelkiran (Alphonso x Neelum)	Regular bearing, fruits are medium in size, free from spongy tissue, good pulp colour, excellent skin colour and semi vigorous tree.	Andhra Pradesh, Karnataka

OLIVE

Name of Variety	Salient Features	Recommended Areas
Arbequina	Trees are hardy, low vigour, spreading with medium to dense canopy. It comes into early fruiting and constant in production. The fruit ripens unevenly and matures early to mid season. The fruits are small in size. Resistant to cold and tolerant to salinity. Oil content is very high.	Rajasthan
Barnea	Trees are vigorous with an erect growth habit and sparse canopy, yield moderate to high, fruits are medium in size. It is elongated with a nipple and many large lenticels. It is high yielding variety. Fruit ripens early and very productive. Susceptible to olive fly. It is suitable for pickling.	Rajasthan
Picnal	Trees are moderately vigorous and spreading with dense canopy. Trees are very hardy and highly productive. The fruit shape is oval and curved with a nipple on the end. Oil content and fruit yields are high. Fruit ripens mid to late season. Resistant to drought and sensitive to wilt and peacock spot/eye.	Rajasthan
Koronoiki	It is the main oil variety. It comes into production early and its productivity is high and constant. Trees are upright, moderately vigorous, inflorescence racemose, but short and compact. Fruits are oval and small, bright black in colour. Oil content 20-21%. Resistant to cold, drought and frost but susceptible to Cycloconium knot and olive fly.	Rajasthan
Coratina	Trees are moderately vigorous, inflorescence short and compact, early bearing, fruits are large in size, oval wth no nipple and many small lenticels. Late ripening, heavy yielder with 23-25% oil content. Resistant to drought and cold but susceptible to sooty mould and peacock spot/eye. It is suitable for pickling.	Rajasthan, Himachal Pradesh, Jammu & Kashmir
Frontoio	Trees are moderately vigorous, inflorescence large and sparse, fruits are medium in size, purple black in colour and oval elongated in shape. Ripen late, oil content 23-25%, high yield and consistent. Susceptible to cold, Cycloconium knot and olive fly.	Rajasthan, Himachal Pradesh, Jammu & Kashmir

Name of Variety	Salient Features	Recommended Areas
Leccino	Trees are vigorous, inflorescence short and sparse, fruits are medium in size and purple black in colour, spheroidal with rounded apex, yield medium and consistent. Resistant to low temperature but susceptible to sooty mould and Cycloconium knot.	Rajasthan, Jammu & Kashmir
Picholine	Trees are moderately vigorous, inflorescence large and compact, fruits are medium in size, oval in shape with no nipple. Trees are tolerant to cold and resistant to peacock spot.	Rajasthan

PAPAYA

Name of Variety	Salient Features	Recommended Areas
Pusa Delicious	It is a gynodioecious variety with 100% productive plants with good fruit yield and quality having excellent taste and good flavour.	Uttar Pradesh, Bihar, Jharkhand, Uttarakhand, Rajasthan, Himachal Pradesh
Pusa Dwarf	It is a dwarf statured dioecious variety with good yield. Fruits are medium in size with oval shape and are preferred by consumers.	Uttar Pradesh, Bihar, Jharkhand, Uttarakhand, Himachal Pradesh
Pusa Nanha	An extremely dwarf variety, it is suitable for kitchen gardens, pot and roof top cultivation. This is ideal for high density orcharding.	Tripura, Bihar, Jharkhand
Co-1	A dwarf and dioecious variety. Fruits are medium in size with spherical shape.	Bihar, Jharkhand, Odisha Uttarakhand, Tamil Nadu, Karanataka, Andhra Pradesh
Co-2	It is medium to tall in size, dioecious variety, having good fruit quality with high papain content. It is predominantly cultivated for papain production.	Tamil Nadu, Himachal Pradesh, Chhattisgarh, Madhya Pradesh, Bihar, Jharkhand, Andhra Pradesh, Rajasthan, Odisha
Co-3	It is gynodioecious a variety with tall, vigorous trees. The fruits are medium in size with high sugar content and red colour flesh. This is preferred for dessert purpose.	Tamil Nadu, Karanataka, Maharashtra, Andhra Pradesh, Andhra Pradesh
Co-4	It is a dioecious variety with medium to tall trees. There are purple tinges on the stem, petiole and leaf. It is suitable for home gardening.	Tamil Nadu, Karanataka, Maharashtra, Andhra Pradesh, Andhra Pradesh
Co-5	It is a selection from Washington variety, cultivated mainly for papain production. It yields 1,500-1,600 kg/ha of dried papain.	Tamil Nadu, Andhra Pradesh, Andhra Pradesh
Co-6	A selection from Pusa Majesty, it is dioecious having dwarf stature. It produces large size fruits. It is recommended both for papain and dessert purposes.	Tamil Nadu, Bihar, Jharkhand, Andhra Pradesh, Andhra Pradesh
Coorg Honey Dew	A selection from Honey Dew, it is a gynodioecious variety having excellent fruit quality under south Indian conditions.	All over India
Pink Flesh Sweet	It is a selection with excellent quality fruits. Fruits are medium in size with pink flesh. It is a good dessert variety.	All over India

Name of Variety	Salient Features	Recommended Areas
Pant-1	Its plants are dioecious providing medium in size. It is recommended for tarai area in Uttar Pradesh.	Uttar Pradesh, Uttarakhand
Sunrise Solo	This is a gynodioecious variety having pink flesh and good taste.	All over India
Taiwan	This is also gynodioecious variety with blood red colour flesh and good taste.	All over India
IIHR, Bangalore (*Hybrid*)		
Arka Surya (Sunrise Solo x Pink Flesh Sweet)	Fruits are medium in size, weighing on an average about 600 to 800 g. The pulp is red in colour with a thickness of about 3.0 to 3.5 cm. Fruits are sweet to taste with a TSS of 13.5 to 15° Brix.	Andhra Pradesh, Karnataka, Tamil Nadu, Kerala
Arka Prabhath (Surya x Local Dwarf)	Gynodioecious, pulp deep pink in colour, pulp thickness about 3.0 to 3.5 cm. Fruits are sweet to taste with 13.5° to 15°Brix.	Andhra Pradesh, Tamil Nadu, Karnataka, Kerala

PASSION FRUIT

Name of Variety	Salient Features	Recommended Areas
Kaveri	A hybrid between 'Purple' and 'Yellow' passion fruit. Fruits are purple in colour at maturity. High yielding and highly tolerant to leaf spot disease.	Karnataka, Mizoram, Manipur, Meghalaya
Purple	Purple passion fruit is more productive, it is grown at higher elevations. More prolific and heavy bearer with larger fruits.	Karnataka Manipur, Mizoram, Nagaland, Meghalaya
Yellow	It is tolerant to wilt, brown leaf spot, thrips and nematodes.	Karnataka, Nagaland, Manipur, Mizoram, Meghalaya

PEACH

Name of Variety	Salient Features	Recommended Areas
July Elberta	Trees are medium in vigour, hardy and productive, fruits are medium to large in size and round in shape, skin dull red blushed over yellow base, free stone and early to mid season maturity.	Jammu & Kashmir, Himchal Pradesh, Uttarakhand, Arunachal Pradesh, Manipur, Nagaland, Jharkhand, Meghalaya
Red June	Trees are medium in vigour, fruits are large in size, roundish with rounded beak in shape, distinct suture, yellow with red blush on the shoulder, free stone and early season maturity.	Jammu & Kashmir, Himchal Pradesh, Uttarakhand, Arunachal Pradesh, Mizoram, Nagaland, Manipur, Meghalaya
Sun Heaven	Trees are medium in vigour, fruits are medium to large size, yellow fruit skin, semi free stone and early season maturity.	Himchal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh, Mizoram, Nagaland
Paradelux	Trees are medium in vigour, fruits are large in size and oblong flat with prominent beak in shape, yellow skin and flesh and late season maturity.	Himchal Pradesh, Jammu & Kashmir, Uttarakhand, Arunachal Pradesh
Crest Heaven	Produces top notch freestone fruit with golden yellow skin and flesh. Mid to late season variety, blooms late, fruit lasts well on the tree. Excellent for freezing and canning.	Himchal Pradesh, Jammu & Kashmir, Uttarakhand, Arunachal Pradesh
Glo Heaven	A large peach with yellow freestone flesh has mostly red skin with no fuzz, milder flavour, excellent for canning and fresh eating and free-stone.	Himchal Pradesh, Jammu & Kashmir, Uttarakhand, Arunachal Pradesh
Snow Queen	Trees are spreading, vigourous, fruits are small to medium in size, bright red colour on cream white background having smooth surface, flesh white, cling stone, maturity during mid June,	Himchal Pradesh, Jammu & Kashmir, Uttarakhand, Arunachal Pradesh
Red Heaven	Trees are medium in vigour, fruits are medium in size with prominent suture, distinct apex, golden yellow skin with red blush, free stone and early in maturity.	Himchal Pradesh, Jammu & Kashmir, Uttarakhand, Arunachal Pradesh
J.H.Hale	Trees are medium in vigour, fruits are medium to large in size, roundish ovate in shape, red purple yellow skin colour, free stone, mid to late season maturity.	Himchal Pradesh, Jammu & Kashmir, Uttarakhand, Arunachal Pradesh
Sun Red	Trees are low in vigour, fruits are small to medium in size with bright red skin, semi free stone and early season maturity.	Himchal Pradesh, Jammu & Kashmir, Uttarakhand, Arunachal Pradesh, Meghalaya, Mizoram, Manipur

Name of Variety	Salient Features	Recommended Areas
Fantasia	Vigorous tree, fruits are large ovate in shape, bright yellow with red blush over the major part of fruit skin and early to mid season maturity.	Himchal Pradesh, Uttarakhand, Arunachal Pradesh
Partap	It matures in the third week of April. The fruits are yellow with red blush. Flesh colour is also yellow with red colouration. It has better firmness and keeping quality than Parbhat and Flordasun, the average yield being 70 kg/plant.	Punjab
Shan-e-Punjab	It matures in the first week of May. Fruits are very large, yellow with red blush, juicy, sweet, excellent in taste and free stone. Since fruits are firm in texture, they can withstand transportation. These are suitable for canning, the average yield being 70 kg/plant.	Punjab, Haryana, Mizoram
Florda Prince	Its fruits ripen in the last week of April. Fruits are medium to large, round with little or no tip, red blush with yellow ground colour, flesh melting, yellow with some red colour, semi cling. On an average it yields 100 kg/plant.	Punjab, Madhya Pradesh
Early Grande	It ripen in the first week of May. Fruits are large with red blush surface. Flesh yellow, firm with some red colour next to pit, semi free when fully ripe. The average yield is 95 kg/tree. The fruits posses excellent shipping qualities.	Punjab
Prabhat	It is earliest maturing peach (mid April) and fetches good income to the growers. Fruits are medium in size, roundish with an attractive red blush. It is white fleshed when fully ripe, the average yield being 50 kg/tree.	Jammu & Kashmir, Uttarakhand, Jharkhand, Haryana, Madhya Pradesh
Florda Sun	It matures in the last week of April. Fruits are medium to large in size, roundish and yellow with red blush. Flesh is yellow, juicy and sweet. With free stone, on an average it yields 75 kg/plant.	Uttarakhand, Himachal Pradesh, Jharkhand, Madhya Pradesh, Tamil Nadu
Flora Red	An excellent, mid season table peach, it matures in the beginning of June. Fruits are large in size, almost red at maturity, juicy with white flesh and free stone. Its average yield is 100 kg/tree.	Uttarakhand, Himachal Pradesh, Jammu & Kashmir, Arunachal Pradesh, Tamil Nadu
Sharbati	Fruits are large in size, greenish yellow with rosy patches, very juicy with excellent taste and flavour. Fruits ripen during June end to first week of July, the average yield being 100-120 kg/tree.	Uttarakhand, Haryana, Jharkhand, Madhya Pradesh, Mizoram

PEAR

Name of Variety	Salient Features	Recommended Areas
Bartlett	Trees are vigourous upright, fruits are large in size with light green colour which turns to golden yellow, oblong to obtuse pyriform with a prominent neck making the fruit bell shape and mid season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh, Meghalaya
Red Bartlett	Trees are medium in vigour, fruits are large in size, dark red maroon in colour over light green yellow ground and mid season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh, Manipur, Meghalaya
Max Red Bartlett	Trees are medium in vigour, fruits are large in size, typical pyriform obovate in shape, red blushed skin and mid season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh
Conference	Trees are medium to moderately vigourous, fruits are medium in size, pyriform with long neck, brown rusted colour over light green ground and late season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh
Flemish Beauty	Trees are vigourous, fruits are large in size, obovate to obtuse pyriform in shape, creamy yellow colour skin with slightly red blushed, mid season maturity and acts as a good pollinizer.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh
Starkrimson	Trees are medium in vigour, fruits are medium in size, obtuse pyriform in shape, dark red to crimson in colour and early to mid season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh
Laxton's Superb	Trees are medium in vigour, fruits are medium in size, yellowish green with slight red blush and maturity in mid season.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh
Fertility	Trees are vigourous and upright, fruits are small to medium in size, pyriform in shape, brown russeted in colour and mid season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh, Meghalaya
Keiffer	Trees are vigourous, fruits are large in size, pyriform in shape, golden yellow in colour and early season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh, Tamil Nadu, Punjab

Name of Variety	Salient Features	Recommended Areas
Kashmirinakh	Trees are medium in vigour, fruits are small to medium in size, obovate to slightly conical in shape, skin light to dark green which turns to light yellow and mid season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh, Chhattisgarh, Madhya Pradesh, Mizoram
Jargonellae	Trees are upright with spreading branches, fruits are obtuse pyriform to oblong pyriform in shape, lemon yellow over green base with faded red blush on skin and mid season maturity.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh, Tamil Nadu
Pathernakh	Also called sand pear. It is heavy bearing and good keeping quality. Fruits are round in shape and green with prominent dots. The flesh is crisp and juicy. This fruits are tough and firm and can stand transportation very well for long distance without any spoilage.	Haryana, Punjab, Himachal Pradesh, Uttarakhand, Jharkhand, Manipur, Madhya Pradesh, Mizoram
Baggugosha	Trees are upright and vigorous and irregular bearing habit. It has a small green, yellow fruit with tapering stem-end. The fruits are sweet and somewhat gritty. It ripens an August and has average yield of 100 kg/tree.	Haryana, Punjab, Himachal Pradesh, Uttarakhand, Jharkhand, Manipur, Madhya Pradesh, Mizoram

PECANNUT

Name of Variety	Salient Features	Recommended Areas
Burkett	Trees are upright with medium vigour, nuts are 0more or less round in shape, base flattened to pointed, apex pointed, shoulder is even and greyish in colour with black strips around the apex, kernels are dark brown to chrome yellow, moderate in ease of removal of kernel.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir
Nellies	Trees are upright and medium in vigour, nuts are oblong in shape, cylindrical and tapering towards the end, light brown in colour with dark strips at base, kernels are amber in colour, moderately filled and easily removable from shell.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir
Mahan	Trees are upright and vigourous, nuts are extra large, oblong cylindrical, base flattened with moderately pointed apex, shoulder uneven and brown in colour with dark strips at the apex, kernels are amber brown in colour and easily removable from the grooves.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir
Schley	Trees are medium and compact in vigour, self pollinated, nuts are medium in size, oblong cylindrical in shape with evenly pointed apex and base, shoulder even and dark brown with prominent black strips around the apex, kernels are light brown, moderate removal from grooves and good kernel quality.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir
Cheyenne	Trees are medium and compact in vigour, protoandrous, nuts are medium in size, oblong with slight pointed at apex, brown in colour, kernels are light brown, loosely filled easy to remove from grooves.	Himachal Pradesh, Uttarakhand, Jammu & Kashmir

PERSIMMON

Name of Variety	Salient Features	Recommended Areas
Fuyu	Trees are vigourous and spreading, non astringent and pollination constant cultivar. Fruits are medium to large in size, tomato shape, flesh is firm, pale to light yellow orange, sweet and can be eaten when hard, late in maturity and very good keeping quality.	Himachal Pradesh
Jiro	Trees are slightly upright and vigourous, non astringent and pollination constant cultivar, fruits are large in size, oblate truncate in shape, orange red in colour, firm flesh, good keeping quality and mid season maturity.	Himachal Pradesh
Hyakume	Trees are vigourous and spreading, non astringent and pollination constant cultivar, fruits are large in size, roundish oblong to oblate and buff yellow to light orange marked with rings, firm flesh, juicy, mid season maturity.	Himachal Pradesh
Hachiya	Trees are vigourous and upright spreading, astringent and pollination constant cultivar, fruits are large in size, oblong conical glossy skin with deep orange colour, firm flesh, good for drying and mid to late in maturity.	Himachal Pradesh

PINEAPPLE

Name of Variety	Salient Features	Recommended Areas
Kew	It is a leading commercial variety particularly for canning. Fruits are big in size, oblong and tapering slightly towards the crown. The fruit with broad and shallow eyes becomes yellow when fully ripe. The flesh is light yellow, almost fibreless and very juicy. The leaves often have a short sector of small margin of spines just behind the tip, and irregularly on the base near its attachment to the stem.	Tamil Nadu, Karnataka, Assam, Meghalaya, Nagaland, Manipur, Tripura, Mizoram, Sikkim, Arunachal Pradesh, Andaman & Nicobar Islands (Port Blair), Goa, Odisha, Bihar, Jharkhand
Giant Kew	Cultivated in certain regions of West Bengal, it is synonymous to Kew except the size of plant and fruit which are larger than Kew as the name signifies.	West Bengal, Goa, Meghalaya
Queen	Its fruits are rich yellow in colour, weighing 0.9-1.3 kg each. The flesh is deep golden yellow, less juicy than Kew, crisp textured with a pleasant aroma and flavour. Eyes are small and deep, requiring a thicker cut when removing the skin. The leaves are brownish-red, shorter and very spiny.	Tripura, Assam, Meghalaya, Karnataka, Tripura, Bihar, Jharkhand, Nagaland, Manipur, Tamil Nadu, Andaman & Nicobar Islands (Port Blair), Arunachal Pradesh, Odisha, Bihar
Mauritious	A mid season variety of the Queen group. Fruits are medium in size, fruits are deep yellow and red in colour. Fruits are oblong in shape, fibrous and medium sweet compared with red ones. This is ideal for table purpose.	Kerala, Odisha, Mizoram, Manipur, Tamil Nadu, West Bengal, Goa

PISTACHIO

Name of Variety	Salient Features	Recommended Areas
Kerman	Trees are moderately vigourous and upright, spreading habit, blooming in mid to late season, female cultivar, precocious and alternate in bearing, nuts are large and round in shape, white in colour and late season nut maturity.	Jammu & Kashmir
Peter	Trees are moderate in vigour and upright, male plant and very good pollinizer for Kerman, good producer of durable pollen with longer bloom period (3 weeks).	Jammu & Kashmir
Chiko	Trees are moderate in vigour and upright, male plant, very good pollinizer for early cultivars like Bronte and Red Allepo.	Jammu & Kashmir
Red Allepo	Trees are medium in vigour and spreading, hanging branches, alternate bearer, blooming early to mid and female cultivar, nut smaller, kernels are crisp, early to mid season maturity.	Jammu & Kashmir
Joley	Trees are medium in vigour and upright, precocious and alternate bearer, blooming early to mid season, female cultivar, nuts are small to medium in size, kernels are crisp.	Jammu & Kashmir

PLUM

Name of Variety	Salient Features	Recommended Areas
Santa Rosa	Trees are large, vigourous and upright growth, fruits are large in size, round to oblong conic shape with a slight beak like tapering at the base, purplish crimson skin colour, acts as pollinizer and early to mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Manipur, Meghalaya, Nagaland, Mizoram, Jharkhand
Au-Rosa	High yielding (10.08 t/ha), TSS 19.3° Brix, recommended for cultivation in temperate regions.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Meghalaya, Nagaland, Mizoram
Frontier	Trees are upright and vigourous, fruits are large in size, rounded to slightly heart shape at base, red purple skin and yellowish flesh colour, free stone and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Meghalaya, Nagaland, Mizoram
Red Beauty	Trees are medium to vigourous, fruits are medium in size with globose in shape, bright red skin colour and yellow flesh and very early season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Meghalaya, Nagaland, Mizoram, Jharkhand
Methley	Trees are medium to vigourous, fruits are small to medium in size with roundish heart shape, reddish purple maroon skin with dark red flesh, good pollinizer and very early season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Meghalaya, Nagaland, Mizoram
Burbank	Trees are low in vigour and somewhat drooping, fruits are medium in size, bright red mottled skin colour and deep yellow flesh, and early to mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Nagaland, Mizoram
Satsuma	Trees are upright, medium to vigorous, fruits are medium to large in size with roundish cordate in shape, dark reddish skin, semi free stone and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Meghalaya, Nagaland, Mizoram, Tamil Nadu
Mariposa	Trees are upright vigourous, large heart in shape, skin mottled maroon over green base, almost free stone and mid to late season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Meghalaya, Nagaland, Mizoram

Name of Variety	Salient Features	Recommended Areas
Beauty	Trees are upright and medium in vigour, fruits are small to medium in size with round shape, skin translucent red over yellow base and early season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Nagaland, Mizoram
Kanto-5	High yielding (6.44 t/ha), TSS 8.3° Brix, recommended for cultivation in temperate regions.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Nagaland, Mizoram
Kubio	High yielding (6.5 t/ha), TSS 8.3° Brix, recommended for cultivation in temperate regions.	Jammu & Kashmir, Uttarakhand, Arunachal Pradesh, Nagaland, Mizoram, Tamil Nadu
Satluj Purple	Its fruits are quite large in size, bright crimson with thick flesh, possessing excellent shipping quality. They ripen in the second week of May, their average yield is 30 kg/tree. Since this variety is self incompatible, it should be planted with variety Kala Amritsari.	Punjab
Kala Amritsari	It is most popular cultivar grown in Punjab, its fruits are medium in size, round in shape and dark brown at maturity. Flesh is yellow, moderately juicy and excellent for jam making. The fruits ripen during mid May, the average yield is 40-50 kg/tree.	Punjab

POMEGRANATE

Name of Variety	Salient Features	Recommended Areas
Ganesh	Also known as GBG-1. This is a selection from open pollinated seedlings of Alandi. Fruits are pinkish yellow to reddish yellow rind. Arils are light pink, turn whitish during warmer months. It is soft seeded variety.	Maharashtra, Andhra Pradesh, Gujarat, Tamil Nadu, Uttar Pradesh, Himachal Pradesh
Bhagwa	Also known as Shendria or Sinduri, Astagandha and Kesar. This is a selection from F_2 population of the cross Ganesh x Gulesha Red. Fruits are attractive glossy red rind. Arils are blood red in colour. It is soft seeded variety.	Maharashtra, Karnataka, Gujarat, Andhra Pradesh, Himachal Pradesh, Uttar Pradesh, Uttarakhand, Gujarat, Rajasthan, Madhya Pradesh
Dholka	Also known as GKVK-1. This is a selection from Gujarat state. Rind is greenish white to red and arils are whitish to pinkish white in colour. Arils are whitish to pinkish white. It is soft seeded variety.	Gujarat
G-137	This is a clonal selection from Ganesh. Trees are spreading habit, fruit surface smooth, yellow with red tinge. Fruits are large in size with deep pink and bold aril, sweet in taste, soft seeds and prolific bearer. This is a distinct improvement over Ganesh in colour and size of aril and TSS.	Maharashtra, Andhra Pradesh, Karnataka
Mridula	This is a cross between Ganesh and Gulshah Rose Pink. Arils are blood red in colour and rind is red. It is soft seeded variety.	Maharashtra, Tamil Nadu, Rajasthan
Jyoti	Also known as GKVK-1. This is a selection from Bassein Seedless. Rind is red and arils are blood red in colour and it is soft seeded variety.	Karnataka, Tamil Nadu, Madhya Pradesh
Jalore Seedless	It is a selection of local variety. Rind is reddish yellow to pinkish yellow. Arils are light pink in colour. It is soft seeded variety.	Rajasthan
Co-1	It is a high yielding selection. Its fruits are medium in size with attractive rind, soft seeds, higher pulp content and sweet in taste.	Tamil Nadu
(*Hybrid*)		
Ruby	This is a complex hybrid between Ganesh, Kabul, Yercaud and Gulshah Rose Pink. The rind is pinkish yellow to reddish yellow. Fruit contains red and bold aril. It is soft seeded variety.	Karnataka, Maharashtra

SAPOTA

Name of Variety	Salient Features	Recommended Areas
Kalipatti	It has dark green, broad and thick leaves. Fruits are oval in shape, less seeded, sweet, mellow flesh of excellent quality. Frangrance is mild, main harvest in winter.	Maharashtra, Gujarat, Karnataka, Odisha, West Bengal, Madhya Pradesh, Chhattisgarh, Tamil Nadu
Dhola Diwani	It has light green leaves and whitish oval fruits which are harvested in summer. Fruits are superior in quality.	Maharashtra, Gujarat
Cricket Ball	It is also known as Calcutta Large. Leaves are light green. This bears the largest sized fruits which are round in shape. The pulp is gritty, granular and not very sweet.	Tamil Nadu, Maharashtra, West Bengal, Andhra Pradesh, Karnataka, Haryana, Gujarat, Odisha, West Bengal, Madhya Pradesh, Chhattisgarh
Calcutta Round	The foliage is light green in colour. Fruits are large but the flesh is gritty and of moderate quality.	West Bengal, Odisha
Baramasi	The fruits are medium in size and roundish in shape. However, it is not a round the year bearing variety, as it may be mislead by the name.	West Bengal
Pala	The fruits are small to medium in size and oval as egg in shape with the apex broadly pointed. Fuits are very sweet.	Andhra Pradesh, Tamil Nadu
Kirthabharti	The fuits are small to medium in size and oval as egg in shape. Fruit skin is rough and medium to thick. Pulp is very sweet. Good for transporation to distant places.	Andhra Pradesh, Tamil Nadu

STRAWBERRY

Name of Variety	Salient Features	Recommended Areas
Chandler	Fruits are exceptionally high dessert quality with outstanding colour and flavour. It is very resistant to physical damages caused by rain. Plants are tolerant to viruses. Fruits are large in size, flesh and skin firm and excellent flavour. It is suitable for fresh market and processing.	Himachal Pradesh, Uttarakhand, Maharashra, Haryana, Jammu & Kashmir, Rajasthan, West Bengal
Tioga	An early maturity cultivar, it is tolerant to viruses. Fruits are very large, flesh and skin firm, dessert and processing quality good.	Himachal Pradesh, Maharashtra, Jammu & Kashmir
Torrey	Tolerant to viruses, it produces numerous runners. Fruits are large, flesh and skin medium firm, dessert quality excellent, processing quality good.	Himachal Pradesh, Maharashtra
Selva	A day neutral cultivar, capacity to produce off season fruits. It is different from day neutral or ever bearing types. Fruits are large in size, flesh and skin firm, conic to blocky in shape, dessert quality good. It can be handled and shipped fairly well. Skin bright red, attractive, flesh red, internally somewhat hollow, light in colour at core.	Maharashtra, Jammu & Kashmir
Pajaro	It is very successful under summer. Plant tolerant to virus. Fruits have good dessert and processing quality. Fruits are quite susceptible to physical damage caused by rain. Fruits are large, flesh very firm, skin firm, red in colour.	Maharashtra, Haryana
Camarosa	Plant growth is similar to 'Chandler'. Compared to Chandler, leaf colour is distinctly lighter on the underside. Individual leaflets are larger, somewhat longer and narrower than Chandler. Leaves (including petioles) are similar in length to Chandler, but are much broader. It produces fruit early and has good storage properties.	Maharashtra, Meghalaya, Haryana, Jammu & Kashmir
Winter Down	Highly productive. Fruits are medium to large in size and moderately resistant to Botrytis and anthracnose.	Maharashtra, Meghalaya, Jammu & Kashmir

Name of Variety	Salient Features	Recommended Areas
Festival	It is a short day strawberry variety. Average height and width of mature plants is 23 and 30 cm, respectively. Average petiole length and diameter is 120 mm and 3.5 mm, respectively- Petioles have medium pubescence. Average length and breadth of terminal leaflets is 78 and 73 mm, respectively. Leaflet margins are crenate and average 21 serrations per terminal leaflet, and 26 serrations per secondary leaflet. The upper leaf surface is dark grey green colour, and the lower leaf surface is a light grey green in colour. Petiole colour is medium yellow green.	Maharashtra, Meghalaya, Himachal Pradesh, Uttarakhand, Haryana, Jammu & Kashmir, Rajasthan, West Bengal
Sweet Charlie	Plants of Sweet Charlie are smaller and more compact when compared to Camarosa. Leaves are generally slightly cupped, medium to dark green and semi glossy.	Maharashtra, Meghalaya, Himachal Pradesh, Uttarakhand, Haryana, Jammu & Kashmir, West Bengal, Rajasthan

SWEET ORANGE

Name of Variety	Salient Features	Recommended Areas
Mosambi	Amongst the different selections of Mosambi, Selection No. 4 (Phule Mosambi) recorded significantly higher values than control for various characters viz., canopy volume (27.03 m^3), number of fruits (302.82/plant), weight of fruit (240.96 g), yield (72.95 kg/plant i.e. 20.12 t/ha), juice (47.37%), TSS (9.66° Brix), reducing sugar (4.06%), total sugar (6.98%) and ascorbic acid (62.31 mg/100 ml juice). Nevertheless, the significantly least pest and disease incidence (e.g. leaf miner, black fly, aphids, tristeza and greening) was observed in selection No. 4.	Maharashtra, Uttar Pradesh, Odisha, Punjab, Rajasthan, Madhya Pradesh, Kerala, Himachal Pradesh, Nagaland, Arunachal Pradesh, Assam, Meghalaya, Manipur, Tripura, Sikkim, Mizoram, Jammu & Kashmir, Haryana, Karnataka, Chhattisgarh
Satgudi	It is the important cultivar of sweet orange and it is commercially grown in Andhra Pradesh (South India). The Satgudi having hermaphrodite type of flower and it contain more than four stamens per petal in each flower. The fruiting season is from July to end of September.	Andhra Pradesh, Odisha, Tamil Nadu, Rajasthan, West Bengal
Blood Red Malta	It is known as the most colourful citrus fruit. Its fruits have deep red flesh and a bright red blushed rind. The fruits have a stronger, distinct and sweet flavour with a hint of raspberry.	Uttarakhand, Uttar Pradesh, Odisha, Punjab, Rajasthan, Madhya Pradesh, Maharashtra, Tamil Nadu, Chhattisgarh, Jharkhand
Valencia	It is a late season fruit and therefore a popular variety when the navel oranges are out of season. Fruits are more juicy, few seeds and thin skin. Its excellent taste and internal colour make it desirable for the fresh markets.	Andhra Pradesh, Odisha, Punjab, Madhya Pradesh, Maharashtra, Mizoram, Assam, Arunachal Pradesh, Tripura, Sikkim, Nagaland, Manipur, Meghalaya, Mizoram, Karnataka, Chhattisgarh, Uttarakhand

WALNUT

Name of Variety	Salient Features	Recommended Areas
Hamdan	Trees are vigourous and spreading, mid to late blooming, protoandrous, terminal bearing, nuts are medium to large in size, oblong to ovate in shape, kernels are medium creamy light brown, soft shelled and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Sulaiman	Trees are spreading and vigourous, mid blooming and protoandrous, terminal bearing, nuts are medium to large in size, roundish oblong in shape, kernels are medium creamy light brown, soft shelled and mid season maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 1	Suitable for export as well as domestic market, having light kernel colour, nuts are bold, kernels are large in size, good kernel recovery (47%), light shell colour, long trapezoidal in shape, easy to remove kernel halves.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 2	Nuts are large in size, ovate in shape, medium shell texture, medium shell colour, strong shell seal, intermediate shell strength, complete shell integrity, satisfactory kernel flavour, well filled kernel, plumy, easy to remove kernel halves and light kernel colour.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 3	Nuts are large in size, round in shape, medium shell texture, medium shell colour, strong shell seal, strong shell strength, complete shell integrity, satisfactory kernel flavour, well filled kernel, plumy, difficult to remove kernel halves and light kernel colour.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 4	Nuts are large, ovate, rough shell texture, light shell colour, strong shell seal, intermediate shell strength, complete shell integrity, thin, satisfactory kernel flavour, well filled kernel, moderately plumy, very easy to remove kernel halves and light kernel colour.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 5	High yielder, having extra light kernel colour, suitable for export market, bigger nut (19 g) and kernel (9.5 g) size, good kernel recovery (48.9%), light shell colour, ovate in shape, moderate to remove the full kernel halves.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh

Name of Variety	Salient Features	Recommended Areas
CITH Walnut - 6	Nuts are large in size, ovate in shape, shell colour medium, intermediate shell seal, Intermediate shell strength, satisfactory kernel flavour, well filled kernel, moderate plumy and easy to remove kernel halves.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 7	Matures in 155-160 days after full bloom, nuts are medium in size, ovate in shape, medium shell texture, medium coloured shell, intermediate shell seal, intermediate shell strength, satisfactory kernel flavour, well filled kernel, plumy, moderate removal of kernel halves.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 8	Nuts are having light kernel colour, nut weight (20.4 g), and kernel weight (11.01 g), good kernel recovery (54%), light shell colour, long trapezoidal in shape, very easy to remove kernel halves, rough shell texture, strong shell seal and strong shell strength.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 9	Nuts are medium in size, round in shape, light in colour, strong shell seal, intermediate shell strength, well filled kernel, plumy, moderate to remove the kernel halves.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
CITH Walnut - 10	Heavy bearing, nuts are small in size, round in shape, smooth shell texture, medium colour shell, intermediate shell seal, intermediate shell strength, satisfactory flavour, well filled kernel, plumy and easy to remove kernel halves.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Partap	Trees are large in vigour and heavy bearer, nuts are large, oblong, smooth, light amber in colour, kernels are light in colour and very easy to remove, semi soft shelled.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Kotkhai Selection - 1	Trees are vigourous and good yielder, nuts are medium in size, smooth light weight, kernels are light in colour, well filled, thin shelled and early maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh
Chakrata Selection	Trees are vigorous and spreading, mid bloomer and protoandrous, nuts are small to medium in size, round ovate or short trapezoid, thin shelled and early maturity.	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh

STATE WISE RECOMMENDED VARIETIES OF FRUITS

ANDAMAN & NICOBAR ISLANDS

Crop	Varieties
Banana	Poovan, Red Banana
Mango	Arka Aruna, Arka Anmol
Pineapple	Giant Kew, Queen

ANDHRA PRADESH

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-10
Banana	Dwarf Cavendish, Robusta, Rasthali, Poovan (Karpoorachakrakeli), Grand Naine, Red Banana, Karpurvalli, Udhayam, Virupakshi
Ber	Gola, Umran
Grape	Thompson Seedless, 2A clone of Thompson Seedless, Anab-e-Shahi and its clone Dil Kush, Arka Kanchan, Arkavati, Arka Shyam, Arka Hans, Arka Neelamani, Shweta Seedless, Arka Majestic, Arka Chitra, Arka Krishna, Arka Soma, Arka Trishna, Pusa Navrang, Pusa Urvashi
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta, Arka Mridula, Arka Amulya, Arka Kiran,
Lime	Balaji Selection (Tenali), Kagzi Lime, Pramalini, Vikram, Jai Devi, Sai Sharbati, Phule Sharbati, Seedless Lime
Mango	Banganapalli, Neelum, Totapuri, Imam Pasand, Suvernarekha, Ambika, Mallika, Pusa Arunima, Pusa Surya, Pusa Shreshth, Pusa Pratibha, Arka Aruna, Arka Anmol, Arka Neelkiran
Papaya	Arka Surya, Arka Prabhath, Co-1, Co-2, Co-3, Co-4, Co-5, Co-6, Coorg Honey Dew, Sunrise Solo, Taiwan, Pink Flesh Sweet
Pomegranate	Ganesh, Bhagwa, G-137
Sapota	Pala, Kirthabharti, Cricket Ball
Sweet orange	Satgudi, Valencia

ARUNACHAL PRADESH

Crop	Varieties
Apple	**(Early Season)** Michal, Mollies Delicious, Shlomit, Maayan, Tydeman's Early Worcester **(Mid Season)** Royal Delicious, Rich-e-Red, Red Delicious, Starkrimson, Red Chief, Well Spur, Oregan Spur, Red Spur, Gala, Grammy Smith, Gala Must, Bright-N-Early, Cooper-4, Vance Delicious, Skyline Supreme, Silver Spur, Golden Spur, CITH Lodh Apple-1 **(Late Season)** Firdous, Lal Ambri, Top Red, Sunhari, Golden Delicious, Red Gold, Ambri, Fuji
Banana	Grand Naine
Cherry	Black Heart, Guigne Noir Gross, Bigarreau Napolian (Double), Bigarreau Noir Grossa (Mishri), Guigne Noir Hative (Makhmali), Lambert, Bing, Stella, CITH Cherry-01, CITH Cherry-02
Chestnut	Nankings, Meiling, Orrin, Crane, Jersey Gem, Kashmir Seedling Selection
Guava	Allahabad Safeda, Sardar (L-49), Lalit
Kiwi	Abbot, Allison, Bruno, Hayward, Monty, Tomuri
Lemon	Assam Lemon
Mandarin	Khasi Mandarin
Peach	July Alberta, Red June, Sun Heaven, Paradelux, Crest Heaven, Glo Heaven, Snow Queen, Red Heaven, J.H.Hale, Sun Red, Fantasia, Flora Red
Pear	Bartlett, Red Bartlett, Max Red Barlett, Conference, Flemish Beauty, Starkrimson, Laxton's Superb, Fertility, Keiffer, Kashmirinakh, Jargonellae
Pineapple	Kew, Queen
Plum	Santa Rosa, Au-Rosa, Frontier, Red Beauty, Methley, Burbank, Satsuma, Mariposa, Beauty, Kanto-5, Kubio
Sweet orange	Mosambi, Valencia
Walnut	Hamdan, Sulaiman, CITH Walnut-1, CITH Walnut-2, CITH Walnut-3, CITH Walnut-4, CITH Walnut-5, CITH Walnut-6, CITH Walnut-7, CITH Walnut-8, CITH Walnut-9, CITH Walnut-10, Partap, Kotkhai Selection-1, Chakrata Selection

ASSAM

Crop	Varieties
Aonla	Krishna (NA-5), NA-6
Banana	Dwarf Cavendish, Grand Naine, Rasthali (Malbhog, Amritpani), Poovan (Chini Champa), Karpurvalli
Guava	Allahabad Safeda, Lalit, Sardar (L-49), Shweta
Jackfruit	Local Genotype
Lemon	Assam Lemon
Litchi	Bombai, China, Shahi
Mandarin	Khasi Mandarin
Mango	Amrapali, Bombay Green (Malda), Pusa Pratibha
Papaya	Croog Honey Dew
Pineapple	Kew, Queen
Sweet orange	Mosambi, Valencia

BIHAR

Crop	Varieties
Anola	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-7, NA-10, NA-20
Bael	Narendra Bael-5, Narendra Bael-9, CISH B-1, CISH-2
Banana	Dwarf Cavendish, Robusta (Harichhal), Grand Naine, Rasthali (Malbhog), Poovan (Alpan, Chini Champa), Monthan (Kanchkel, Batheesa)
Guava	Allahabad Safeda, Sardar (L-49), Chittidar, Lalit, Shweta
Lemon	Eureka, Kagzi Kalan, Assam Lemon
Lime	Kagzi Lime, Pramalini, Vikram, Jai Devi, Sai Sharbati, Phule Sharbati, Seedless Lime
Litchi	Shahi, Bedana, Rose Scented, China, Late Seedless (Late Bedana), Late Large Red (Muzaffarpur), Purbi
Mango	Bombay Green (Malda), Dashehari, Chausa, Gulabkhas, Fazli, Zardalu, Chausa, Himsagar, Kishen Bhog, Langra, Mallika, Amrapali, Pusa Arunima, Pusa Surya, Pusa Shreshth, Pusa Pratibha
Papaya	Pusa Delicious, Pusa Dwarf, Pusa Nanha, Co-1, Co-2, Co-6, Pink Flesh Sweet, Taiwan, Coorg Honey Dew, Sunrise Solo
Pineapple	Kew, Queen

CHHATTISGARH

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-7, NA-10
Banana	Grand Naine, Dwarf Cavendish, Red Banana
Ber	Seb, Uman, Banarsi Kadaka
Custard apple	Balanagar, Arka Sahan
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta, Chittidar, Dhareedhar
Jackfruit	Local Genotypes (Khaza, Singapore, Silon)
Lemon	Eureka, Kagzi Kalan, Assam Lemon
Lime	Kagzi Lime, Pramalini, Vikram, Balaji (Tenali Selection)
Litchi	Late Large Red (Muzzaffarpur), Shahi
Mandarin	Nagpur Mandarin, Kinnow
Mango	Dashehari, Langra, Amrapali, Mallika, Bombay Green, Fazli, Pusa Pratibha
Papaya	Coorg Honey Dew, Taiwan, Co-2
Pear	Kashmirinakh
Sapota	Kalipatti, Cricket Ball
Sweet orange	Blood Red Malta, Valencia

DELHI

Crop	Varieties
Ber	Gola
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta
Lemon	Eureka, Kagzi Kalan
Mango	Chausa, Dashehari, Langra, Mallika, Amrapali, Pusa Lalima, Pusa Peetamber, Pusa Pratibha
Mandarin	Kinnow

GOA

Crop	Varieties
Banana	Saidathi, Raspali, Moira (Local), Grand Naine,
Mango	Malcorada, Ratnagiri Alphanso, Moncerate
Pineapple	Mauritious, Kew, Giant Kew

GUJARAT

Crop	Varieties
Aonla	Kanchan (NA-4), Krishana (NA-5), NA-6, NA-10
Banana	Grand Naine, Dwarf Cavendish, Red Banana
Ber	Thar Savika, Thar Bhubhraj, Gola, Seb
Custard apple	Balanagar
Date palm	Halawy, Khadarawy, Shamran (Sayer), Medjool, Barhee, Zahidi, Khalas
Fig	Poona
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta
Lemon	Eureka, Assam Lemon
Lime	Kagzi Lime, Pramilini, Vikram, Jai Devi, Sai Sharbati, Phule Sharbati, Seedless Lime
Mandarin	Nagpur Mandarin
Mango	Kesar, Alphanso, Dashehari, Neelum, Langra, Totapuri, Vanraj, Ambika, Pusa Pratibha, Sindhu
Papaya	Coorg Honey Dew, Taiwan, Pink Flesh Sweet, Sunrise Solo
Pomegranate	Ganesh, Bhagwa, Dholka
Sapota	Kalipatti, Dhola Diwani, Cricket Ball

HARYANA

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-10
Ber	Thar Savika, Thar Bhubhraj, Gola, Seb, Umran, Banarsi Kadaka, Mundia
Grape	Flame Seedless, Perlette
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta, Hisar Surkha, Hisar Safeda
Mandarin	Kinnow
Mango	Dashehari, Chausa, Langra, Amrapali, Mallika, Pusa Lalima, Pusa Pratibha, Pusa Peetamber
Peach	Prabhat, Shan-e-Punjab, Sharbati
Pear	Pathar Nakh, Baggugosha
Plum	Tidrom
Sapota	Cricket Ball
Strawberry	Camarosa, Pijaro, Chandler, Festival, Sweet Charlie

HIMACHAL PRADESH

Crop	Varieties
Almond	Non-Pareil, IXL, Drake, Ne-Plus Ultra, California Paper Shell
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-7, NA-10
Apple	**(Early Season)** Anna, Tydeman's Early Worcester **(Mid Season)** Royal Delicious, Rich-e-Red, Red Delicious, Starkrimson, Red Chief, Well Spur, Oregan Spur, Red Spur, Gala, Grammy Smith, Bright-N-Early, Vance Delicious, Skyline Supreme, Silver Spur, Golden Spur **(Late Season)** Top Red, Golden Delicious, Red Gold, Fuji
Apricot	Kaisha, New Castle, Halman, CITH Apricot-1, CITH Apricot-2, CITH Apricot-3, Safaida, Nari, Shakar Para, Charmagz
Banana	Virupakshi (Hill Banana), Grand Naine
Ber	Gola, Umran
Cherry	Black Heart, Guigne Noir Gross, Bigarreau Napolian (Double), Guigne Noir Hative (Makhmali), Lambert, Bing, Stella, CITH Cherry-01
Chestnut	Meiling, Orrin, Crane, Jersey Gem
Fig	Poona
Grape	Perlette, Pusa Seedless, Thompson Seedless
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta
Hazelnut	Tonda Giffani, Tonda Romaana, Gentille Delle Langhe
Jackfruit	Local Genotypes, (Gulabi, Champa, Hazari)
Kiwi	Allison, Bruno, Monty, Abbot, Hayward, Tomuri
Lemon	Eureka, Kagzi Kalan, Assam Lemon
Lime	Kagzi Lime
Litchi	Dehradun, Calcuttia, Rose Scented
Loquat	Golden Yellow, Improved Golden Yellow, Large Round, Pale Yellow, California Advance, Fire Ball, Improved Pale Yellow, Large Agra, Mammoth, Matchless, Safeda, Tanaka
Mandarin	Kinnow, Nagpur Manadrin
Mango	Alphonso, Dashehari, Langra, Chausa, Amarpali, Pusa Pratibha
Olive	Coratina, Frontoio
Papaya	Coorg Honey Dew, Co-2, Pink Flesh Sweet, Sunrise Solo, Taiwan, Pusa Delicious, Pusa Dwarf
Peach	July Alberta, Red Heaven, Sun Heaven, Paradelux, Glo Heaven, Snow Queen, Red Heaven, J.H.Hale, Sun Red, Fantasia, Florda Sun, Flora Red
Pecannut	Mahan, Nellies, Burkett, Schley, Cheyenne
Pear	Bartlett, Red Bartlett, Max Red Bartlett, Conference, Flemish Beauty, Starkrimson, Laxton's Superb, Fertility, Keiffer, Kashmirinakh, Jargonellae, Pathar Nakh, Baggugosha
Persimmon	Fuyu, Hachiya, Hyakume, Jiro
Plum	Santa Rosa , Red Beauty, Mariposa, Frontier, Au-Rosa, Methley, Burbank, Satsuma, Beauty, Kanto-5
Pomegranate	Ganesh, Bhagwa
Strawberry	Chandler,Torry, Tioga, Sweet Charlie, Festival
Sweet orange	Mosambi
Walnut	Hamdan, Sulaiman, CITH Walnut-1, CITH Walnut-2, CITH Walnut-3, CITH Walnut-4, CITH Walnut-5, CITH Walnut-6, CITH Walnut-7, CITH Walnut-8, CITH Walnut-9, CITH Walnut-10, Partap, Kotkhai Selection-1, Chakrata Selection

JAMMU AND KASHMIR

Crop	Varieties
Almond	Shalimar, Mukhdoom, Waris, Non- Pareil, Drake, Ne-Plus Ultra, Merced, Pranyaj, Primorskij, California Paper Shell, IXL
Aonla	Kanchan (NA-4), Krinshna (NA-5), NA-6, NA-10
Apple	**(Early Season)** Michal, Mollies Delicious, Shlomit, Maayan, Anna, Chabattia Anupam, Tydeman's Early Worcester **(Mid Season)** Royal Delicious, Rich-e-Red, Red Delicious, Star Krimson, Red Chief, Well Spur, Oregan Spur, Red Spur, Gala, Grammy Smith, Gala Must, Bright-N-Early, Cooper-4, Vance Delicious, Skyline Supreme, Silver Spur, Golden Spur, CITH Lodh Apple-1 **(Late Season)** Firdous, Lal Ambri, Top Red, Sunhari, Golden Delicious, Red Gold, Ambri, Fuji
Apricot	Kaisha, New Castle, Harcot, Turkey, Halman, CITH Apricot-2, CITH Apricot-3, Rokchey Karpo, Tokpopa, Rogan, Safaida, Nari, Australian, Shakar Para, Charmagz
Ber	Gola, Seb, Umran
Cherry	Black Heart, Guigne Noir Gross, Bigarreau Napolian (Double), Bigarreau Noir Grossa (Mishri), Guigne Noir Hative (Makhmali), Lambert, Bing, Stella, CITH Cherry-01, CITH Cherry-02
Chestnut	Nankings, Meiling, Orrin, Crane, Jersey Gem, Kashmir Seedlling Selection
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta
Hazelnut	Tonda Giffani, Tonda Romaana, Gentille Delle Langhe, Kashmir Selection
Lemon	Eureka, Assam Lemon (Nepali Oblong)
Lime	Kagzi Lime
Litchi	Rose Scented, Dehradun, Calcuttia
Loquat	Improved Golden Yellow, Tanaka
Mandarin	Nagpur Mandarin, Kinnow
Mango	Chausa, Dashehari, Langra, Mallika, Amrapali, Pusa Pratibha
Olive	Coratina, Frontoio, Leccino
Peach	July Elberta, Red June, Sun Heaven, Paradelux, Crest Heaven, Glo Heaven, Snow Queen, Red Heaven, J.H.Hale, Sun Red, Prabhat, Flora Red
Pear	Bartlett, Red Barlett, Max Red Barlett, Conference, Flemish Beauty, Starkrimson, Laxton's Superb, Fertility, Keiffer, Kashmirinakh, Jagonellae
Plum	Santa Rosa, Au-Rosa, Frontier, Red Beauty, Methley, Burbank, Satsuma, Mariposa, Beauty, Kanto-5, Kubio
Pecannut	Burkett, Nellies, Mahan, Schley, Cheyenne
Pistachio	Kerman, Peter, Chiko, Red Allepo, Joley
Strawberry	Chandler, Tioga, Selva, Camarosa, Winter Down, Festival, Sweet Charlie
Sweet orange	Mosambi
Walnut	Hamdan, Sulaiman, CITH Walnut-1, CITH Walnut-2, CITH Walnut-3, CITH Walnut-4, CITH Walnut-5, CITH Walnut-6, CITH Walnut-7, CITH Walnut-8, CITH Walnut-9, CITH Walnut-10, Partap, Kotkhai Selection-1, Chakrata Selection

JHARKHAND

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-10
Bael	Narendra Bael-5, Narendra Bael-9, CISH B-1, CISH-2
Banana	Dwarf Cavendish, Robusta, Grand Naine, Poovan, Monthan
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta, Chittidar
Jackfruit	Local Genotype
Lemon	Eureka, Kagzi Kalan, Assam Lemon
Lime	Kagzi Lime, Pramalini, Vikram, Jai Devi, Sai Sharbati, Phule Sharbati, Seedless Lime
Litchi	Shahi, China, Rose Scented, Bedana, Dehradun, Late Seedless, Late Large Red, Purbi
Mandarin	Nagpur Mandarin
Mango	Bombay Green, Chausa, Dashehari, Fazli, Gulab Khas, Himsagar, Kishen Bhog, Langra, Mallika, Amrapali, Pusa Arunima, Pusa Surya, Pusa Shreshth, Pusa Pratibha
Papaya	Pusa Delicious, Pusa Dwarf, Pusa Nanha, Co-1, Co-2, Co-6, Pink Flesh Sweet, Coorg Honey Dew, Sunrise Solo, Taiwan
Peach	July Elberta, Prabhat, Florda Sun, Sharbati
Pear	Pathernakh, Baggugosha
Plum	Santa Rosa, Red Beauty
Pineapple	Queen, Kew
Sweet orange	Blood Red Malta

KARNATAKA

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-10
Banana	Dwarf Cavendish, Robusta, Grand Naine, Rasthali, Poovan, Red Banana, Ney Poovan, Udhayam, Virupakshi
Ber	Umran, Gola, Seb
Fig	Poona
Grape	Thompson Seedless and its clones (Sonaka, Manik Chaman), 2A Clone of Thompson Seedless, Red Globe, Fantasy Seedless, Pusa Seedless, Pusa Navrang, Pusa Urvashi, Bangalore Blue, Abab-e-Shahi, Mutant of Anab-e-Shahi (Dil Kush), Manjri Naveen, Arka Kanchan, Arkavati, Arka Shyam, Arka Hans, Arka Neelamani, Shweta Seedless, Arka Majestic, Arka Chitra, Arka Krishna, Arka Soma, Arka Trishana
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta, Arka Mridula, Arka Amulya, Arka Kiran
Jackfruit	Palur-1 Jack, PP-1, Jack PLR (J)-2, Swarna
Lime	Kagzi Lime, Pramalini, Vikram, Jai Devi, Sai Sharbati, Phule Sharbati, Rasraj, Seedless Lime
Mandarin	Coorg Mandarin, Nagpur Mandarin, Kinnow
Mango	Alphanso, Banganapalli, Neelum, Pairi, Mallika, Totapuri, Mulgoa, Ambika, Amrapali, Ratna, Arka Aruna, Arka Anmol, Arka Neelkiran
Papaya	Co-1, Co-3, Co-4, Coorg Honey Dew, Pink Flesh Sweet, Sunrise Solo, Taiwan, Arka Surya, Arka Prabhath
Passion Fruit	Kaveri, Purple, Yellow
Pineapple	Kew, Queen
Pomegranate	Bhagwa, G-137, Jyoti, Ruby
Sapota	Cricket Ball, Kalipatti
Sweet orange	Valencia, Mosambi

KERALA

Crop	Varieties
Banana	Rubusta, Grand Naine, Poovan, Nendran, Red Banana, Monthan, Ney Poovan, Udhayam, Virupakshi
Jackfruit	Local genotypes (Idukki, Wayanand, Kannur, Thiruvananthapuram)
Mango	Banganapalli, Pairi, Neelum, Alphonso, Mallika, Mulgoa, Imam Pasand, Pusa Pratibha
Papaya	Coorg Honey Dew, Pink Flesh Sweet, Sunrise Solo, Taiwan, Arka Surya, Arka Prabhath
Pineapple	Mauritious
Sweet orange	Mosambi

MADHYA PRADESH

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-7, NA-10
Banana	Dwarf Cavendish, Grand Naine, Red Banana
Ber	Thar Sevika, Thar Bhubhraj, Seb, Banarsi Kadaka, Umran
Custard apple	Arka Sahan, Balanagar
Guava	Sardar (L-49), Allahabad Safeda, Chittidar, Lalit; Shweta, Dhareedhar
Jackfruit	Local genotypes (Khaza, Singapore, Silon)
Lemon	Kagzi Kalan, Eureka
Lime	Kagzi Lime, Pramalini, Vikram, Balaji (Tenali Selection)
Litchi	Shahi, Late Large Red (Muzaffarpur)
Mandarin	Kinnow, Nagpur Mandarin
Mango	Bombay Green, Dashehari, Langra, Fazli, Mallika, Amrapali, Pusa Pratibha Bombay Green, Langra, Mallika, Amrapali, Pusa Pratibha,
Papaya	Co-2, Coorg Honey Dew, Taiwan, Pink Flesh Sweet, Sunrise Solo
Peach	Florda Prince, Prabhat, Florda Sun, Sharbati
Pear	Kashmirinakh, Pathernakh, Baggughosa
Pomegranate	Bhagwa, Jyoti
Sapota	Kalipatti, Cricket Ball
Sweet orange	Mosambi, Valencia, Blood Red Malta

MAHARASHTRA

Crop	Varieties
Anola	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-7, NA-10
Banana	Dwarf Cavandish, Robusta, Grand Naine, Red Banana
Ber	Gola, Umran, Seb
Custard apple	Balanagar, Arka Sahan
Fig	Poona Fig
Grapes	**Table Grapes:** Thompson Seedless and its clones (Sonaka, Manik Chaman), 2 A Clone (Improved clones of Thompson Seedless), Tas-e-Ganesh, Sharad Seedless, Flame Seedless, Red Globe, Fantasy Seedless, Manjri Naveen
	Wine Grapes: **1. Red Wine Grapes:** Shiraz, Carbernet Sauvignon **2. White Wine Grapes:** Chenin Blance, Sauvignon Blance, Chardonnay
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta, Arka Mridula, Arka Amulya, Arka Kiran
Jackfruit	Konkan Prolific
Lime	Kagzi Lime, Pramalini, Vikram, Jai Devi, Sai Sharbati, Phule Sharbati, Seedless Lime
Mandarin	Nagpur Mandarin, Kinnow
Mango	Alphanso, Kesar, Pairi, Ratna, Sindhu, Pusa Pratibha
Papaya	Co-3, Co-4, Coorg Honey Dew, Pink Flesh Sweet, Sunrise Solo, Taiwan
Pomegranate	Bhagwa , Mridula, Ganesh, G-137, Ruby
Sapota	Kalipatti, Cricket Ball, Dhola Diwani
Strawberry	Chandler, Tioga, Torrey, Selva, Pajaro, Camarosa, Winter Down, Festival, Sweet Charlie
Sweet orange	Mosambi, Satgudi, Blood Red Malta, Valencia

MANIPUR

Crop	Varieties
Banana	Grand Naine, Poovan
Grapes	Thompson Seedless
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta
Lime	Kagzi Lime
Litchi	Late Large Red (Muzaffarpur)
Mandarin	Khashi Mandarin
Papaya	Taiwan
Passion fruit	Kaveri, Yellow, Purple
Peach	July Elberta, Red June, Sun Red
Pear	Red Bartlett, Baggugosha
Pineapple	Kew, Queen, Mauritious
Plum	Santa Rosa
Sweet orange	Valencia, Mosambi

MEGHALAYA

Crop	Varieties
Banana	Grand Naine, Poovan, Dwarf Canendish, Rasthali
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta
Jackfruit	Local genotype
Kiwi	Hayward
Lemon	Assam Lemon, Eureka
Lime	Kagzi Lime
Litchi	Late Large Red (Muzaffarpur)
Mandarin	Khasi Mandarin
Papaya	Coorg Honey Dew, Pink Flesh Sweet, Sunrise Solo, Taiwan
Passion fruit	Kaveri, Purple, Yellow
Peach	Red June, Sun Red, July Elberta
Pear	Bertlett, Red Bertlett, Fertility
Pineapple	Kew, Queen, Giant Kew
Plum	Santa Rosa, Au-Rosa, Frontier, Red Beauty, Methley, Satsuma, Mariposa,
Strawberry	Festival, Sweet Charlie, Camarosa, Winter Down
Sweet orange	Mosambi, Valencia

MIZORAM

Crop	Varieties
Apple	Michal, Mollies Delicious, Shlomit, Maayan, Anna, Chaubattia Anupam, Tyderman's Early Worcester
Banana	Grand Naine, Poovan (Chini Champa), Rasthali (Malbhog)
Grape	Bangalore Blue, Pusa Navrang
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta
Kiwi	Abbot, Allison, Bruno, Hayward, Monty, Tomuri
Lemon	Assam Lemon
Lime	Kagzi Lime
Mandarin	Khasi Mandarin
Mango	Himsagar
Papaya	Coorg Honey Dew
Passion fruit	Kaveri, Purple, Yellow
Peach	Shan-e-Punjab, Red June, Sun Heaven, Sun Red, Sharbati
Pear	Kashmirinakh, Pathernakh, Baggugosha
Plum	Santa Rosa, Au-Rosa, Frontier, Red Beauty, Methley, Burbank, Satsuma, Mariposa, Beauty, Kanto-5, Kurbio
Pineapple	Kew, Mauritious
Sweet orange	Valencia, Mosambi

NAGALAND

Crop	Varieties
Apple	Michal, Mollies Delicious, Shlomit, Maayan, Anna, Chaubattia Anupam, Tyderman's Early Worcester
Banana	Grand Naine, Dwarf Cavendish, Poovan
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta
Kiwi	Allison, Hayward
Lemon	Assam Lemon, Eureka
Lime	Kagzi Lime
Litchi	Late Large Red (Muzaffarpur), China
Mandarin	Khasi Mandarin
Mango	Amrapali
Papaya	Coorg Honey Dew, Pink Flesh Sweet, Sunrise Solo, Taiwan
Passion fruit	Purple, Yellow
Peach	Red June, Sun Red
Pear	Kashmirinakh, Pathernakh, Baggugosha
Pineapple	Kew, Queen
Plum	Santa Rosa, Au-Rosa, Frontier, Red Beauty, Mathley, Burbank, Satsuma, Mariposa, Beauty, Kanto-5, Kubio
Sweet orange	Mosambi, Valencia

ODISHA

Crop	Varieties
Banana	Poovan (Chini Champa), Dwarf Cavendish, Grand Naine
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta
Jackfruit	Local genotypes (Khajra, Kadua)
Lime	Kagzi Lime
Litchi	Late Large Red (Muzaffarpur)
Mandarin	Nagpur Mandarin
Mango	Amrapali, Mallika, Himsagar, Totapuri, Langra, Dashehari, Bombay Green, Banganpalli, Pusa Arunima, Pusa Surya, Pusa Pratibha
Papaya	Co-1, Co-2, Coorg Honey Dew, Taiwan, Sunrise Solo
Pineapple	Queen, Kew, Mauritious
Sapota	Kalipatti, Calcutta Round
Sweet orange	Mosambi, Satgudi, Blood Red Malta, Valencia

PUNJAB

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-10
Banana	Grand Naine
Ber	Gola, Umran
Date palm	Halawy, Khadarawy, Shamran, Medjool, Barhee, Zahidi, Khalas
Grapefruit	Star Ruby, Redblush, Marsh Seedless, Duncan, Foster
Grapes	Perlette, Flame Seedless, Anab-e-Shahi, Pusa Seedless, Pusa Navrang, Pusa Urvashi
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta, Hisar Surkha, Hisar Safeda, Arka Amulya
Lemon	Eureka, Kagzi Kalan
Lime	Kagzi Lime
Litchi	Dehradun, Calcuttia, Rose Scented, Late Seedless
Loquat	Golden Yellow, Improved Golden Yellow, Large Round, Pale Yellow, California Advance, Fire Ball, Improved Pale Yellow, Large Agra, Mammoth, Matchless, Safeda, Tanaka
Mandarin	Kinnow
Mango	Dashehari, Langra, Amrapali, Mallika, Chausa, Pusa Arunima, Pusa Surya, Pusa Lalima, Pusa Peetamber
Peach	Shan-e-Punjab, Partap, Florda Prince
Pear	Pathernakh, Baggugosha
Plum	Satluj Purple, Kala Amritsari
Sweet orange	Blood Red Malta, Valencia, Mosambi

RAJASTHAN

Crop	Varieties
Aonla	NA-7, Kanchan (NA-4), Krishna (NA-5), NA-6, NA-10, Goma Aishwariya
Bael	Narender Bael-5, Narender Bael-9, CISHB-1, CHIS-B2, Goma Yashi
Ber	Thar Sevika, Thar Bhubhraj, Umran, Gola, Seb, Mundia
Custard apple	Arka Sahan, Balanagar
Date palm	Halawy, Khadarawy, Shamran, Medjool, Barhee, Zahidi, Khalas
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta
Lemon	Kagzi Kalan
Lime	Kagzi Lime
Mandarin	Nagpur Mandarin, Kinnow
Mango	Dashehari, Chausa, Kishen Bhog, Langra, Amrapali, Mallika, Pusa Peetamber
Olive	Arbequina, Barnea, Picnal, Koronoiki, Coratina, Frontoio, Leccino, Picholine
Papaya	Pusa Delicious, Co-2, Taiwan
Pomegranate	Mridula, Bhagwa, Jalore Seedless
Strawberry	Chandler, Sweet Charlie, Festival
Sweet orange	Mosambi, Blood Red Malta, Satgudi

SIKKIM

Crop	Varieties
Apple	Michal, Tyderman's Early Worcester, Maayan
Banana	Grand Naine, Poovan
Guava	Allahabad Safeda, Lalit, Shweta, Sardar (L-49)
Kiwi	Allison, Abott, Bruno, Hayward, Monty, Tomuri
Litchi	Shahi
Mandarin	Khasi Mandarin
Papaya	Coorg Honey Dew, Pink Flesh Sweet, Sunrise Solo
Pineapple	Kew
Sweet orange	Valencia, Mosambi

TAMIL NADU

Crop	Varieties
Aonla	Krishna (NA-4), Kanchan (NA-5), NA-6, NA-7, NA-10
Apple	Michal, Mollies Delicious, Shlomit, Maayamn, Anna, Tydeman's Early Worcester
Banana	Dwarf Cavendish, Robusta, Grand Naine, Rasthali, Poovan, Nendran, Red Banana, Monthan, Ney Poovan, Karpurvalli, Virupakshi, Udhayam, Pehchanadan
Fig	Poona
Grape	Anab-e-Shahi, Thompson Seedless, Manik Chaman, Sonaka, Flame Seedless, Red Globe, Sharad Seedless, Arka Hans, Arka Kanchan, Arka Shyam
Guava	Allahabad, Safeda, Sardar (L-49), Lalit, Shweta, Arka Amulya, Arka Mridula,
Jackfruit	Palur 1 Jack (PLR 1), PP-1 Jack, PLR (J)-2, Local genotypes (Valipala, Singapore, Panruti Selection, Thanjavur Jack, Burliar 1)
Lemon	Eureka, Assam Lemon
Lime	Kagzi Lime, Pramalini, Vikram, Jai Devi, Sai Sharbati, Phule Sharbati, Seedless Lime
Litchi	Late Large Red (Muzaffarpur), Dehradun, Calcuttia, Late Seedless, Rose Scented
Mandarin	Coorg Mandarin, Kinnow, Nagpur Mandarin
Mango	Neelum, Alphonso, Totapuri, Banganapalli, Pusa Arunima, Pusa Surya, Mulgoa, Mallika, Amrapali, Arka Anmol, Arka Aruna
Papaya	Co-1, Co-2, Co-3, Co-4, Co-5, Co-6, Coorg Honew Dew, Pink Flesh Sweet, Taiwan, Sunrise Solo, Arka Surya, Arka Prabhath
Peach	Florda Sun, Flora Red
Pear	Kieffer, Jargonelle
Pineapple	Kew, Mauritious, Queen
Plum	Kubio, Satsuma
Pomegranate	Jyoti, Ganesh, Co - 1, Mridula
Sapota	Cricket Ball, Kalipatti, Kirthabharti, Pala
Sweet orange	Satgudi, Blood Red Malta

TRIPURA

Crop	Varieties
Banana	Poovan, Grand Naine
Guava	Allahabad Safeda, Sardar (L-49), Lalit, Shweta
Jackfruit	Local Genotype
Lemon	Assam Lemon
Lime	Kagzi Lime
Mandarin	Khasi Mandarin
Mango	Amrapali, Himsagar, Mallika
Papaya	Coorg Honey Dew, Pusa Nanha, Pink Flesh Sweet, Taiwan, Sunrise Solo
Pineapple	Queen, Kew
Sweet orange	Valencia, Mosambi

UTTAR PRADESH

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-10, NA-20
Bael	Narender Bael-4, Narender Bael -5, Narender Bael-7, Narender Bael-9, Narender Bael -16, Narender Bael-17, CISH B-1, CISH B-2, Pant Aparna, Pant Shivani, Pant Sujata, Pant Urvarashi
Banana	Grand Naine
Ber	Narender Ber-1, Narender Ber-2, Gola, Banarasi Kadaka
Custard apple	Balanagar
Fig	Poona
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta, Allahabad Surkha Chittidar, Apple Colour, Pant Prabhat
Lemon	Kagzi Kalan, Pant Lemon-I
Litchi	Calcuttia, Shahi, China, Rose Scented, Bedana, Dehradun, Late Seedless
Lime	Kagzi Lime
Loquat	Golden Yellow, Improved Golden Yellow, Large Round, Pale Yellow, Fire Ball, Improved Pale Yellow, Large Agra, Mammoth, Matchless, Safeda, California Advance, Tanaka
Mandarin	Kinnow, Nagpur Madarin
Mango	Bombay Green, Gulab Khas, Dashehari, Chausa, Fazli, Langra, Mallika, Amrapali, Pusa Arunima, Pusa Surya, Pusa Lalima, Pusa Shreshth, Pusa Pratibha, Pusa Peetamber
Papaya	Pusa Delicious, Pusa Dwarf, Pant-1, Pink Flesh Sweet, Taiwan, Sunrise Solo, Coorg Honey Dew
Pomegranate	Ganesh, Bhagwa
Sweet orange	Mosambi, Blood Red Malta

UTTARAKHAND

Crop	Varieties
Almond	Shalimar, Mukhdoo, Mukhdoom, Waris, Non- Pareil, Drake, Ne-Plus Ultra, Merced, Pranyaj, Primorskij, California Paper Shell, IXL
Aonla	Kanchan (NA-4), Krinshna (NA-5), NA-6, NA-7,NA-10, NA-20
Apple	**(Early Season)** Michal, Mollies Delicious, Shlomit, Maayan, Anna, Chabattia Anupam, Tydeman's Early Worcester **(Mid Season)** Royal Delicious, Rich-e-Red, Red Delicious, Starkrimson, Red Chief, Well Spur, Oregan Spur, Red Spur, Gala, Grammy Smith, Gala Must, Bright-N-Early, Cooper-4, Vance Delicious, Silver Spur, Golden Spur **(Late Season)** Firdous, Lal Ambri, Top Red, Sunhari, Golden Delicious, Red Gold, Ambri, Fuji
Apricot	Kaisha, New Castle, Harcot, Turkey, Halman, CITH Apricot-1, CITH Apricot-2, CITH Apricot-3
Bael	Narendra Bael-5, Narendra Bael-9, CISH B-1, CISH B-2, Pant Aparna, Pant Shivant, Pant Sujata, Pant Urvarashi
Banana	Grand Naine
Cherry	Black Heart, Guigne Noir Gross, Bigarreau Napolian (Double), Bigarreau Noir Grossa (Mishri), Guigne Noir Hative (Makhmali), Lambert, Bing, Stella, CITH Cherry-01, CITH Cherry-02
Chestnut	Nankings, Meiling, Orrin, Crane, Jersey Gem, Kashmir Seedlling Selection
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta, Pant Prabhat
Hazelnut	Tonda Giffani, Tonda Romaana, Gentille Delle Langhe, Kashmir Selection
Kiwi	Abbot, Allison, Bruno, Hayward, Monty
Lemon	Eureka, Kagzi Kalan, Pant Lemon-1
Lime	Kagzi Lime
Litchi	Shahi, China, Rose Scented, Bedana, Dehradun, Calcuttia
Loquat	Golden Yellow, Improved Golden Yellow, Large Round, Pale Yellow, Fire Ball, Improved Pale Yellow, Large Agra, Mammoth, Matchless, Safeda, California Advance, Tanaka
Mandarin	Nagpur Mandarin, Kinnow
Mango	Chausa, Dashehari, Fazli, Gulab Khas, Langra, Bombay Green, Mallika, Amrapali, Pusa Arunima, Pusa Surya, Pusa Pratibha
Papaya	Pusa Delicious, Pusa Dwarf, Co-1, Coorg Honey Dew, Pink Flesh Sweet, Sunrise Solo, Taiwan, Pant-1
Peach	July Elberta, Red June, Sun Heaven, Paradelux, Crest Heaven, Glo Heaven, Snow Queen, Red Heaven, J.H.Hale, Sun Red, Fantasia, Prabhat, Flora Red, Florda Sun, Sharbati

Crop	Varieties
Pear	Bartlett, Red Barlett, Max Red Barlett, Conference, Flemish Beauty, Starkrimson, Laxton's Superb, Fertility, Keiffer, Kashmirinakh, Jagonellae, Baggugosha, Pathernakh
Pecannut	Burkett, Nellies, Mahan, Schley, Cheyenne
Plum	Santa Rosa, Au-Rosa, Frontier, Red Beauty, Methley, Burbank, Satsuma, Mariposa, Beauty, Kanto-5, Kubio
Pomegranate	Bhagwa
Strawberry	Chandler, Festival, Sweet Charlie
Sweet orange	Blood Red Malta, Valencia
Walnut	Hamdan, Sulaiman, CITH Walnut-1, CITH Walnut-2, CITH Walnut-3, CITH Walnut-4, CITH Walnut-5, CITH Walnut-6, CITH Walnut-7, CITH Walnut-8, CITH Walnut-9, CITH Walnut-10, Partap, Kotkhai Selection-1, Chakrata Selection

WEST BENGAL

Crop	Varieties
Aonla	Kanchan (NA-4), Krishna (NA-5), NA-6, NA-10
Banana	Dwarf Cavendish, Grand Naine, Rasthali, Monthan
Guava	Sardar (L-49), Allahabad Safeda, Lalit, Shweta
Lime	Kagzi Lime
Litchi	Bedana, Bombai, Elaichi, China, Late Large Red, Purbi, Calcuttia
Mandarin	Nagpur Mandarin, Kinnow
Mango	Bombay Green (Malda), Fazli, Gulab Khas, Himsagar, Kishen Bhog, Langra, Amrapali, Pusa Arunima, Pusa Surya, Pusa Pratibha
Papaya	Coorg Honey Dew, Pink Flesh Sweet, Sunrise Solo, Taiwan
Pineapple	Giant Kew, Mauritious
Sapota	Kalipatti, Cricket Ball, Calcutta Round, Baramasi
Strawberry	Sweet Charlie, Festival, Chandler
Sweet orange	Satgudi

MAJOR FRUITS PRODUCING BELTS IN INDIA

1. Almond

- **Himachal Pradesh:** Shimla (Kotgarh, Kumarsain, Jubbal Kotkhai, Rohoo), Kullu (Anni, Nirmand), Kinnaur (Kalpa, Pooh, Chango, Rekong peo), Lahul Spiti (Kazza)
- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch, Leh, Kargil
- **Uttarakhand:** Rudra Prayag, Uttarkashi, Tehri

2. Aonla

- **Andhra Pradesh:** Anantapur, Prakasam, Nellore, Medak, West Godavari, Nalgonda, Guntur, Rangareddy, Adilabad, East Godavari, Chittoor
- **Assam:** Kamrup, Tinsukia, Nagaon, Jorhat, Lakhimpur, Goalpara
- **Bihar:** Aurangabad, Gaya, Jamui
- **Chhattisgarh:** Raipur, Baloda Bazar, Gariaband, Mahasamund, Dhamtari, Kabirdham (Kawardha), Baster (Jagdalpur), Kondagaon, Kanker, Korba, Raigarh, Koriya, Bilaspur, Janjgir-Champa, Rajnandgaon
- **Gujarat:** Sabarkantha, Banaskantha, Bharuch, Vadodara
- **Haryana:** Bhiwani, Gurgaon, Hisar, Sirsa, Mewat
- **Himachal Pradesh:** Shimla (Rampur, Kumarsain), Kullu (Anni, Nirmad), Mandi (Karsog, Gohar, Suder Nagar), Kangra (Dehra, Gopipur, Pragpur, Indora, Nurpur), Sirmour (Rajgarh, Nauradhar, Haripurdhar, Pacchad), Bilaspur (Ghumarwin, Jandutta), Una (Amb, Bangana, Gagret), Hamirpur (Nadaun, Bhoranj)
- **Jammu & Kashmir:** Kathua, Udhampur, Jammu, Samba, Reasi, Doda, Kishtwar, Rajouri
- **Jharkhand:** Palamu, Latehar, Dhanbad, Girdih, Bokaro, Gumla, Hazaribagh, Ranchi
- **Karnataka**: Bangaluru (Urban), Shimoga, Bidar, Koppal, Chamarajnagar, Mandya, Mysore
- **Madhya Pradesh:** Satna, Panna, Seoni, Umaria, Katni, Jabalpur, Narsinghpur, Hoshangabad, Harda, Bhopal, Sehore, Raisen, Guna, Vidisha, Sagar, Damoh, Bhind, Morena, Sheopur, Gwalior, Shivpuri, Chhatarpur, Datia, Tikamgarh, Jhabua

- **Maharashtra:** Solapur, Amravati, Akola, Washim, Satara, Osmanabad
- **Punjab:** Gurdaspur, Hoshiarpur, Ropar
- **Rajasthan:** Jaipur, Alwar, Ajmer, Baran, Kota, Jhalawar, Pali, Chittorgarh, Jodhpur, Nagaur, Sawai Madhopur, Tonk, Jalore, Karauli, Barmer, Banswara, Sriganganagar
- **Tamil Nadu:** Coimbatore, Dindigul, Madurai, Salem, Sivaganga, Theni, Thoothukudi, Tirupur, Tirunelveli, Virudhunagar
- **Uttar Pradesh:** Pratapgrah, Sultanpur, Allahabad, Mathura, Fatehpur, Faizabad, Jhansi, Lalitpur, Chitrakoot
- **Uttarakhand:** Haridwar, Dehradun, Udham Singh Nagar
- **West Bengal:** Purulia, Bankura, Birbhum, Pashchim (West) Midnapore

3. Apple

- **Arunachal Pradesh:** West Kameng, Tawang, Lower Subansiri, East Kameng, Upper Siang, Upper Dibang Valley
- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch, Leh, Kargil
- **Himachal Pradesh:** Shimla (Kotkhai, Jubbal, Rohroo, Rampur, Theog, Chopal, Kumarsain, Kotgarh Dodra Kewar, Kullu (Kullu, Anni, Manali, Nirmand, Sainj), Mandi (Karsog, Janjhaili, Banjar), Chamba (Pangi, Bharmour, Saluni), Kinnaur (Rekong Peo, Ropa Valley, Sangla Valley, Chango, Pooh), Lahul Spiti (Kaza, Lahul), Kangra (Multhan, Bara, Bhangal, Chota Bhangal), Sirmour (Rajgarh)
- **Mizoram:** Champhai
- **Nagaland:** Zunheboto, Phek, Kiphire
- **Sikkim:** North Sikkim (Lachung), West Sikkim (Ribdi, Okhrey)
- **Tamil Nadu:** Krishnagiri, Nilgiris, Dindigul
- **Uttarakhand:** Nainital, Dehradun, Chamoli, Tehri, Uttarkashi

4. Apricot

- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch, Leh, Kargil
- **Himachal Pradesh:** Shimla (Jubbal, Rohroo, Theog, Kumarsain, Rampur), Kullu (Naggar, Bajaura), Mandi (Karsog, Gohar), Chamba (Chamba, Bharmour), Kinnaur (Kalpa), Lahul (Spiti-Kaza), Sofan (Solan, Nauni, Kandaghat), Sirmour (Rajgarh, Pacchad)
- **Uttarakhand:** Rudra Prayag, Uttarkashi, Tehri

5. Bael

- **Bihar:** Jamui, Banka, Bhagalpur, Nawada, Munger, Rohtas, Kaimur, Gaya, Aurangabad
- **Jharkhand:** Deoghar

- **Rajasthan:** Bikaner, Sriganganagar, Jhunjhunu, Ajmer, Jodhpur, Jalore, Nagaur, Jaipur, Bhilwara, Sikar, Alwar
- **Uttar Pradesh:** Deoria, Gorakhpur, Basti, Lucknow, Khushinagar, Maharajganj, Ballia, Mirzapur, Rampur
- **Uttarakhand:** Haridwar, Dehradun, Udham Singh Nagar

6. Banana

- **Andaman & Nicobar Island:** South Andaman, North & Middle Andaman, Nicobar
- **Andhra Pradesh:** West Godavari, Guntur, Kadapa, Anantapur, Kurnool, Medak, Nizamabad, Khammam
- **Arunachal Pradesh:** Lower Subansiri, Pasighat, Papum Pare
- **Assam:** Sonitpur, Lakhimpur, Golaghat, Nagaon, Morigaon, Kamrup, Cachar, Goalpara
- **Bihar:** Vaishali, Bhagalpur, Khagaria, Katihar, Purnia, Samastipur
- **Chhattisgarh:** Raipur, Gariaband, Baloda Bazar, Mahasamund, Dhamtari, Durg, Rajnandgaon, Balod, Bemetara, Kabirdham (Kawardha), Mungeli, Bilaspur, Janjgir-Champa, Raigarh, Surguja, Korba, Balrampur, Surajpur, Koriya, Jashpur, Bastar (Jagdalpur), Kondagaon, Narayanpur, Dantewada, Sukma, Bijapur, Kanker
- **Goa:** Pernem (North Goa), Quepem (South Goa)
- **Gujarat:** Anand (Borsad, Ankalav), Vadodara (Sankheda, Chani), Bharuch (Zagadia), Narmada (Rajpipla), Surat (Kamrej)
- **Himachal Pradesh:** Sirmour (Nahan)
- **Jharkhand:** Sahibganj
- **Kerala:** Thiruvanantapuram (Pallichal, Kottukal, Nedumangad, Kattakada, Chenkal), Kollam (Punalur, Anchal, Sasthamkotta), Kottayam (Kanjirapally, Iratupeta), Thrissur (Ollukkara, Kodakara, Irinjalakuda), Palakkad (Mannarcaud, Pattambi, Agali, Sreekrishnapuram), Malappuram (Kondotty, Vazhayur, Vazhakkad), Kozhikode (Kunnummel, Thodannur, Mukkam), Wayanad (Mananthavadi, Sulthanbathery), Kannur (Thaliparamba, Irikkur, Peravoor), Kasargod (Kanhangad)
- **Karnataka:** Hassan, Shimoga, Bengaluru, Chickmagalore, Dakshina Kannada, Tumkur
- **Madhya Pradesh:** Balaghat, Kukshi, Dhar
- **Maharashtra:** Jalgaon, Nanded , Parbhani. Throughout Maharashtra **(Grand Naine)**
- **Manipur:** Thoubal, Ukhrul, Tamenglong, Chandal, Churachandpur, Imphal East, Imphal West, Bishnupur
- **Meghalaya:** Garo Hills, West Khasi Hills, Ri-bhoi, East Khasi Hill, Jaintia Hills
- **Mizoram:** North and West Part of Mizoram, Chhimheipui, Serchip
- **Nagaland:** Mokokchung, Wokha, Kohima, Zunheboto, Dimapur, Mon, Tuensang, Phek, Kiphire, Longleng, Peren
- **Odisha:** Puri, Cuttack, Balasore, Bhadrak, Angul, Dhenkanal, Bolangir, Kalahabdi, Koraput, Rayagada, All Districts **(Grand Naine)**
- **Punjab:** Ludhiana, Patiala, Sangrur, Fatehgarh Sahib

- **Sikkim:** North Sikkim (Phidang Samdon), East Sikkim (Khamdong, Pandam, Kamaray, L-Syari, Sirwani, Marchack, Nazitam, Amba Biring, Reshi Mulukay), South Sikkim (Samatar, Kamrang, Wok Pakzor, Mellidaa, Lingmo), West Sikkim (L/Rangit, Omchung, Kengsa, Chingthang, Barfok, Daramdin, Tharpu)
- **Tripura:** South Tripura (Karbook, Bagafa, Satchand), West Tripura (Bishalgarh, Knowai, Sonamura, Hezamara), North Tripura (Panisagar, Dasda, Pecharthal), Dhalai (Manu, Ambassa)
- **Tamil Nadu:** Coimbatore, Erode, Kanyakumari, Thoothukudi, Tiruchirapalli, Tirunelveli, Vellore, Karur, Krishnagiri, Salem, Nilgiris, Tiruvannamalai, Madurai
- **Uttar Pradesh:** Bahraich, Shravasti, Gonda, Balrampur, Basti, Sidharthnagar, Gorakhpur, Maharajganj, Kushinagar, Deoria, Faizabad, Barabanki, Allahabad, Kaushambi, Pilibhit, Lakhimpur Kheri, Sitapur
- **Uttarakhand:** Haridwar, Kotdwar
- **West Bengal:** Jalpaiguri, Cooch Behar, Nadia, 24 Parganas (North & South), Hooghly, Bardhaman, Midnapore (West & East), Murshidabad, Uttar Dinajpore, Dakshin Dinajpore, Malda, Birbhum, Bankura

7. Ber

- **Andhra Pradesh:** Medak, Mahbubnagar, Nizamabad, Adilabad, Nalgonda
- **Chhattisgarh:** Raipur, Gariaband, Baloda Bazar, Mahasamund, Dhamtari, Durg, Rajnandgaon, Balod, Bemetara, Kabirdham, Mungeli, Bilaspur, Janjgir-Champa, Raigarh, Korba, Jashpur, Bastar (Jagdalpur), Kondagaon, Narayanpur, Dantewada, Sukma, Bijapur, Kanker
- **Delhi:** Nangloi, Baprola, Najafgarh, Rewla Khanpur, Kharkhari Nahar, Alipur
- **Gujarat:** Ahmedabad
- **Himachal Pradesh:** Solan (Nalagarh), Una (Santokgarh)
- **Jammu & Kashmir:** Jammu, Samba, Kathua, Udhampur, Reasi, Doda, Kishtwar, Rajouri
- **Karnataka:** Tumkur, Kolar, Bellary, Raichur, Belgaum
- **Haryana:** Mewat, Sonipat, Jhajjar, Narnaul, Bhiwani, Hisar, Jind, Rewari, Rohtak
- **Madhya Pradesh:** Balaghat, Rewa, Satna, Panna, Seoni, Umaria, Katni, Jabalpur, Narsinghpur, Hoshangabad, Harda, Bhopal, Sehore, Raisen, Guna, Vidisha, Sagar, Damoh, Bhind, Morena, Sheopur, Gwalior, Shivpuri, Betul, Chhindwara, Shivpuri Ratlam, Ujjain, Jhabua, Dhar, Indore, Dewas, Khargone
- **Maharashtra:** Solapur, Jalgaon, Dhulia, Nandurbar
- **Punjab:** Bathinda, Sangrur, Patiala
- **Rajasthan:** Jaipur, Alwar, Ajmer, Sriganganagar, Nagaur, Pali, Jodhpur, Jalore, Barmer, Bhilwara, Sirohi, Jhunjhunu, Dungarpur, Sawai Madhopur
- **Uttar Pradesh:** Mathura, Agra, Mirzapur, Jhansi, Lalitpur, Chitrakoot, Allahabad, Varanasi

8. Cherry

- **Arunachal Pradesh:** West Kameng, Tawang, Upper Dibang Valley
- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara, Kathua, Udhampur, Doda, Kishtwar, Ramban, Leh, Kargil
- **Himachal Pradesh:** Shimla (Kotkhai, Kotgarh, Rampur, Theog, Matiana, Kumarsain), Kullu (Manali, Sunder Nagar), Kinnaur (Ropa valley)
- **Uttarakhand:** Pauri, Uttarkashi

9. Chestnut

- **Arunachal Pradesh:** West Kameng, Tawang, Upper Dibang Valley
- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla
- **Himachal Pradesh:** Kinnaur (Rekong peo)
- **Uttarakhand:** Nainital, Pauri, Chamoli, Rudra Prayag, Uttarkashi, Tehri

10. Custard apple

- **Chhattisgarh:** Mahasamund, Rajnandgaon, Kabirdham, Jagdalpur, Kondagaon, Kanker, Dantewada, Bilaspur, Mungeli, Korba, Raigarh, Jashpur, Koriya, Narayanpur
- **Gujarat:** Vadodara, Bhavnagar
- **Rajasthan:** Chittorgarh, Udaipur, Pratapgarh
- **Madhya Pradesh:** Sheopur, Gwalior, Shivpuri, Jhabua
- **Maharashtra:** Nanded Beed, Aurangabad, Ahmednagar, Pune, Solapur
- **Uttar Pradesh:** Jhansi, Lalitpur, Jalaun, Hamirpur, Mahoba, Agra

11. Date palm

- **Gujarat:** Kutch
- **Punjab:** Bathinda, Sri Muktsar Sahib, Fazilka (Abohar)
- **Rajasthan:** Jaisalmer, Barmer, Bikaner, Jodhpur, Nagaur

12. Fig

- **Gujarat:** Rajkot, Junagarh, Bhavnagar, Porbander, Amreli, Surendranagar, Jamnagar
- **Himachal Pradesh:** Una, Hamirpur, Kangra, Bilaspur
- **Karnataka:** Dharwad, Belgaum, Davangeri, Hubli, Bellary, Raichur
- **Maharashtra:** Aurangabad, Pune, Kolhapur, Solapur, Karad (Sangli)

- **Tamil Nadu:** Coimbatore, Dindigul, Virudhunagar (Hindupur)
- **Uttar Pradesh:** Lucknow, Saharanpur

13. Grape

- **Andhra Pradesh:** Hyderabad, Rangareddy, Anantapur
- **Himachal Pradesh:** Kullu (Bajaura), Mandi (Nagwain), Kinnaur (Ribba, Rekong peo), Solan (Gaura)
- **Haryana:** Hisar, Fatehabad, Sirsa
- **Karnataka:** Bijapur, Bengaluru (Rural), Kolar, Belgaum, Bengaluru (Urban), Gulbarga, Koppal, Bidar, Belgaum
- **Punjab:** Bathinda, Mansa, Sangrur, Faridkot
- **Maharashtra:** Sangli, Nasik, Solapur, Pune, Ahmednagar, Latur, Satara, Osmanabad, Buldhana (**Table Grapes**), Nasik, Sangli, Osmanabad, Buldhana (**Wine Grapes**)
- **Manipur:** Imphal West, Bishnupur, Imphal East, Thoubal, Churachandpur, Chandel
- **Mizoram:** Champhai
- **Tamil Nadu:** Coimbatore, Dindigul, Theni

14. Guava

- **Andhra Pradesh:** Anantapur, Khammam, East & West Godavari, Guntur, Krishna, Medak
- **Arunachal Pradesh:** Changlang, Upper Siang, West Siang,
- **Assam:** Cochar, Dhubri, Kokrajhar, Bongaigaon, Barpeta, Darrang, Nagaon, Marigaon, Chirang, Tinsukia
- **Bihar:** Bhojpur, Buxar, Vaishali, Bhagalpur, Gaya, Aurangabad, Rohtas, Samastipur, Begusarai, Katihar, East & West Champaran, Araia
- **Chhattisgarh:** Raipur, Gariaband, Baloda Bazar, Mahasamund, Dhamtari, Durg, Rajnandgaon, Balod, Bemetara, Kabirdham, Mungeli, Bilaspur, Janjgir-Champa, Raigarh, Surguja, Korba, Balrampur, Surajpur, Koriya, Jashpur, Bastar (Jagdalpur), Kondagaon, Narayanpur, Dantewada, Sukma, Bijapur, Kanker
- **Delhi:** Shakarpur, Najafgarh, Alipur
- **Gujarat:** Ahmedabad, Bhavnagar, Bharuch
- **Haryana:** Mewat, Hisar, Sirsa, Fatehabad, Jind, Jhajjar, Sonipat, Karnal, Yamuna Nagar, Ambala
- **Himachal Pradesh:** Kangra, Mandi, Una, Bilaspur, Sirmour, Solan
- **Jammu & Kashmir:** Jammu, Samba, Kathua, Udhampur, Reasi, Rajouri, Poonch
- **Jharkhand:** Ranchi, Lohardaga, Hazaribagh, Giridih, Gumla, Palamu
- **Karnataka:** Kolar, Bengaluru (Rural), Bengaluru (Urban), Dharwad, Shimoga
- **Madhya Pradesh:** Balaghat, Rewa, Satna, Panna, Seoni, Umaria, Katni, Sheopur, Gwalior, Shivpuri, Betul, Chhindwara, Guna, Ratlam, Ujjain, Jhabua, Dhar, Indore, Dewas, Khargone, Kukshi

- **Maharashtra:** Ahmednagar, Nasik, Satara, Beed, Pune, Aurangabad, Amravati, Jalgaon, Jalna, Akola, Wardha
- **Manipur:** Imphal West, Bishnupur, Imphal East, Thoubal, , Churachandpur, Chandel
- **Meghalaya:** Ri-bhoi, Gharo Hills
- **Mizoram:** South Mizoram
- **Nagaland:** Kohima, Wokha, Mokokchung, Tuensang, Zunheboto, Phek, Kiphire, Longleng, Mon, Dimapur, Peren
- **Odisha:** Cuttack, khordha, Nabarangpur
- **Punjab:** Patiala, Ludhiana, Sangrur, S.A.S. Nagar (Mohali), Jalandhar, Sri Muktsar Sahib, Ferozepur, Fazilka, Bathinda, Faridkot, Ropar, Hoshiarpur
- **Rajasthan:** Kota, Baran, Chittorgarh, Banswara, Jaipur, Bundi, Ajmer, Karauli, Sawai Madhopur, Bhilwara, Udaipur, Sirohi, Tonk
- **Sikkim:** North Sikkim (Timbong, Sanding, Lum), East Sikkim (Pandan, Packack, Ralep, Pakyong, Mulukey), South Sikkim (Turuk-Sumbuk, Lingzo, Mellidara Dong, Wok), West Sikkim (Gyalshing, Rundu, Lasso, Chingthang)
- **Tamil Nadu:** Cuddalore, Dindigul, Kanchipuram, Madurai, Theni, Tiruvallur, Thoothukudi, Tiruchirapalli, Tiruneveli, Vellore, Vilupuram, Virudhunagar
- **Uttar Pradesh:** Allahabad, Kausambi, Farrukhabad, Kanpur, Unnao, Aligarh, Badaun, Varanasi, Fatehpur, Faizabad, Lucknow Jhansi, Jalaun, Hamirpur, Mahoba, Chitrakoot, Banda, Lalitpur, Agra, Mathura, Sonbhadra, Mirzapur
- **Uttarakhand:** Pithoragarh, Udham Singh Nagar, Haridwar, Dehradun, Pauri, Tehri, Uttarkashi
- **West Bengal:** Nadia, 24 Parganas (North & South), Birbhum, Midnapore (West & East), Purulia, Bankura, Bardhaman

15. Hazelnut

- **Himachal Pradesh:** Kullu (Kullu, Sunder Nagar), Kinnaur (Nichar)
- **Jammu & Kashmir:** Bandipora, Kupwara
- **Uttarakhand:** Nainital, Uttarkashi

16. Jackfruit

- **Assam:** Cachar, Goalpara, Darrang, Nagaon, Kamrup, Karbi Anglong, Dima Hasoa
- **Chhattisgarh:** Raipur, Gariaband, Baloda Bazar, Mahasamund, Dhamtari, Durg, Rajnandgaon, Bemetara, Kabirdham (Kawardha), Mungeli, Bilaspur, Janjgir-Champa, Raigarh, Surguja, Korba, Balrampur, Surajpur, Koriya, Jashpur, Bastar (Jagdalpur), Kondagaon, Narayanpur, Dantewada, Sukma, Bijapur, Kanker
- **Himachal Pradesh:** Solan (Nalagarh, Kunnihar), Sirmour (Nahan, Dhaula kuan), Bilaspur (Ghumarwi)
- **Jharkhand:** Ranchi, Khunti, Chatra, Ghumla, Deoghar, Latehar, Sahibganj, Pakur, Dumka

- **Karnataka:** Mysore, Bangaluru (Rural), Uttara Kannada, Tumkur, Kolar, Chikkaballapur, Mandya
- **Kerala:** Idukki, Kannur, Thiruvananthapuram
- **Madhya Pradesh:** Balaghat, Shahdol, Sidhi and part of Mandla & Dindori
- **Maharashtra:** Thane, Raigad, Ratnagiri, Sindhudurg, Mumbai, Kolhapur, Karad (Sangli), Pune
- **Meghalaya:** Ri-bhoi, Garo Hills, East Khasi Hills
- **Odisha:** Kandhamal, koraput, Ganjam, Kalahandi
- **Tamil Nadu:** Ariyalur, Cuddalore, Dindigul, Kanyakumari, Namakkal, Perambalur, Pudukottai
- **Tripura:** All Districts

17. Kiwi

- **Arunachal Pradesh:** Ziro, West Kameng, Dirang and Lower Subansiri, Tawang, Upper Dibang Valley
- **Himachal Pradesh:** Kullu (Bhunter, Sunder Nagar, Banjar), Solan (Solan, Nauni), Sirmour (Rajgarh)
- **Meghalaya:** East Khasi Hills
- **Mizoram:** Champhai
- **Nagaland:** Kohima, Mokokchung, Phek, Zunheboto, Peren
- **Sikkim:** West District
- **Uttarakhand:** Dehradun, Nainital, Tehri, Uttarkashi

18. Lime

- **Andhra Pradesh:** Guntur, Nellore, Kadapa, Khammam, Nalgonda
- **Bihar:** Rohtas, Kaimur, Aurangabad, Gaya, Nawada, Seikhpura
- **Chhattishgarh:** Raipur, Gariaband, Baloda Bazar, Mahasamund, Dhamtari, Durg, Rajnandgaon, Balod, Bemetara, Kabirdham (Kawardha), Mungeli, Bilaspur, Janjgir-Champa, Raigarh, Surguja, Korba, Balrampur, Surajpur, Koriya, Jashpur, Bastar (Jagdalpur), Kondagaon, Narayanpur, Dantewada, Sukma, Bijapur, Kanker
- **Gujarat:** Mehsana, Kheda, Anand, Vadodara, Surendranagar
- **Himachal Pradesh:** Sirmour (Dhaula Kuan, Ponta), Kangra (Nur Pur, Indora), Solan (Kunihar), Una (Una, Amb), Hamirpur (Nadaun, Bhoranj
- **Jammu & Kashmir:** Baramulla, Kupwara, Jammu, Samba, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch
- **Jharkhand:** Palamu, East & West Singhbhum, Chatra
- **Karnataka:** Bijapur, Gulbarga, Raichur
- **Maharashtra:** Akola, Ahmednagar, West Solapur
- **Madhya Pradesh:** Balaghat, Rewa, Panna, Seoni, Umaria, Katni, Jabalpur, Narsinghpur, Hoshangabad, Harda, Bhopal, Sehore, Raisen, Vidisha, Sagar, Damoh, Sheopur, Gwalior, Chhatarpur, Datia, Tikamgarh, Betul, Chhindwara, Shivpuri, Guna, Ratlam, Ujjain, Jhabua, Dhar, Indore, Dewas, Khargone
- **Manipur:** Kangpokpi, Ukhrul, Chandel, Churachandpur

- **Meghalaya:** Dawki, Nongiri, Mawlong, Umsning, Burnihat, Umling, Sesatgiri, Chandigiri, Jowai, Cherrapunjee
- **Mizoram:** Kolasib, Tawitaw, Aizawl, Thingdawal
- **Nagaland:** Kohima, Wokha, Mokokchung, Dimapur, Peren
- **Odisha:** Mayurbhanj, Keonjhar (kendujhar), Koraput, Ganjam, Gajapati, Dhenkanal
- **Punjab:** Ferozepur, Hoshiarpur, Sri Muktsar Sahib, Bathinda
- **Rajasthan:** Jaipur, Baran, Sirohi, Ajmer, Alwar, Pali, Jodhpur, Banswara, Karauli, Sawai Madhopur, Bhilwara, Dungarpur, Bundi, Barmer, Udaipur, Jhunjhunu, Tonk, Chittorgarh, Jhalawar, Kota, Nagaur, Sriganganagar
- **Sikkim:** South Tripura (Amarpur, Matabari, Bagafa), West Tripura (Jirania, Teliamura, Khowai, Bishagar), Dhalai (Melaghar), North Tripura (Kamalpur, Ambassa, Kanchanpur, Panisagar, Kadamtala)
- **Tamil Nadu:** Dindigul, Perambalur, Theni, Thoothukudi, Tiruchirapalli, Tirunelveli, Virudhunagar
- **Tripura:** South and West Tripura, Dhalai
- **Uttar Pradesh:** Jhansi, Hamirpur, Lalitpur, Jalaun, Mahoba, Chitrakoot, Banda, Agra
- **Uttarakhand:** Dehradun, Pithoragarh, Bageshwar, Almora, Nainital, Pauri, Kotdwar, Chamoli, Tehri, Udham Singh Nagar
- **West Bengal:** 24 Parganas (North and South), Jalpaiguri, West and East Midnapore, Cooch Behar

19. Lemon

- **Assam:** Karbi Anglong, Golaghat, Cachar, Dibrugarh, Kamrup, Lakhimpur, Dima Hasao
- **Arunachal Pradesh:** Basar, Along, Yazali, Bagara, Ziro, East Siang, East Kameng, Papum Pare, Kurung Kumey, Upper Subansiri, West Siang, Upper Siang, Lower Dibang Valley, Lohit, Anjaw, Changlang, Tirap
- **Bihar:** Rohtas, Kaimur, Aurangabad, Gaya, Nawada, Sheikhpura
- **Chhattishgarh:** Raipur, Gariaband, Baloda Bazar, Mahasamund, Dhamtari, Durg, Rajnandgaon, Balod, Bemetara, Kabirdham (Kawardha), Mungeli, Bilaspur, Janjgir-Champa, Raigarh, Surguja, Korba, Balrampur, Surajpur, Koriya, Jashpur, Bastar (Jagdalpur), Kondagaon, Narayanpur, Dantewada, Sukma, Bijapur, Kanker
- **Delhi:** Alipur, Bawana, Jhangola, Bhatawarpur, Akbarpur
- **Gujarat:** Mehsana, Kheda, Anand, Vadodara, Surendranagar
- **Himachal Pradesh:** Sirmour (Dhaula Kuan, Ponta), Kangra (Nur Pur, Indora), Solan (Kunihar), Una (Una, Amb), Hamirpur (Nadaun, Bhoranj
- **Jammu & Kashmir:** Baramulla, Kupwara, Jammu, Samba, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch
- **Jharkhand:** Palamu, East & West Singhbhum, Chatra
- **Madhya Pradesh:** Balaghat, Rewa, Panna, Seoni, Umaria, Katni, Jabalpur, Narsinghpur, Hoshangabad, Harda, Bhopal, Sehore, Raisen, Guna, Vidisha, Sagar, Damoh, Sheopur, Gwalior, Shivpuri, Chhatarpur, Datia, Tikamgarh, Betul, Chhindwara, Ratlam, Ujjain, Dhar, Indore, Dewas, Khargone, Jhabua
- **Mizoram:** Kolasib, Tawitaw, Aizawl, Thingdawal
- **Meghalaya:** Dawki, Nongiri, Mawlong, Umsning, Burnihat, Umling, Sesatgiri, Chandigiri, Jowai, Cherrapunjee

- **Nagaland:** Kohima, Wokha, Mokokchung, Dimapur, Peren
- **Punjab:** Ferozepur, Hoshiarpur, Sri Muktsar Sahib, Bathinda
- **Rajasthan:** Jaipur, Baran, Sirohi, Ajmer, Alwar, Pali, Jodhpur, Banswara, Karauli, Sawai Madhopur, Bhilwara, Dungarpur, Bundi, Barmer, Udaipur, Jhunjhunu, Tonk, Chittorgarh, Jhalawar, Kota, Nagaur, Sriganganagar
- **Sikkim:** South Tripura (Amarpur, Matabari, Bagafa), West Tripura (Jirania, Teliamura, Khowai, Bishagar), Dhalai (Melaghar), North Tripura (Kamalpur, Ambassa, Kanchanpur, Panisagar, Kadamtala)
- **Tamil Nadu:** Dindigul, Perambalur, Theni, Thoothukudi, Tiruchirappalli, Tirunelveli, Virudhunagar
- **Tripura:** North District of Tripura
- **Uttar Pradesh:** Jhansi, Hamirpur, Jalaun, Lalitpur, Mahoba, Chitrakoot, Banda, Agra
- **Uttarakhand:** Dehradun, Pithoragarh, Bageshwar, Almora, Nainital, Pauri, Kotdwar, Chamoli, Tehri, Udham Singh Nagar

20. Litchi

- **Assam:** Dibrugarh, Goalpara, Sonitpur, Lakhimpur, Jorhat, Golaghat, Kamrup, Nalbari, Barpeta, Bongaigaon, Nagaon
- **Bihar:** Muzaffarpur, Vaishali, East Champaran, West Champaran, Sitamarhi, Sheohar, Samastipur, Bhagalpur
- **Chhattisgarh:** Korba, Raigarh, Surguja, Jashpur, Surajpur, Balrampur, Koriya, Narayanpur
- **Himachal Pradesh:** Kangra (Palampur, Panchrukhi, Dharmshala), Sirmour (Paonta Sahib, Dhaula kuan)
- **Jammu & Kashmir:** Jammu, Samba, Kathua, Udhampur, Reasi
- **Jharkhand:** Ramgarh, Ranchi, Hazaribagh, Gumla
- **Madhya Pradesh:** Shahdol, Sidhi, Madla, Dindori
- **Manipur:** Imphal West, Bishnupur, Imphal East, Thoubal, Churachandpur, Chandel
- **Meghalaya:** East Khasi Hills, Ri-bhoi, Garo Hills
- **Nagaland:** Kohima, Wokha, Mokokchung, Tuensang, Zunheboto, Phek, Kiphire, Longleng, Mon, Dimapur, Peren
- **Odisha:** Sambalpur, Debagarh (Deogarh), Sundergarh, Rayagada, Koraput
- **Punjab:** Gurdaspur, Hoshiarpur, Ropar
- **Sikkim:** North Sikkim (Phidang), East Sikkim (Majhitar, Bhasmey, Rorathang, Makha, Ralep, Mulukey), South Sikkim (Kitam, Pakzor, Chalamthamthang, Kichudumra), West Sikkim (Sagbari, Kamling)
- **Tamil Nadu:** Tiruvarur, Vellore, Vilupuram
- **Uttar Pradesh:** Saharanpur, Muzaffarnagar, Kushinagar
- **Uttarakhand:** Nainital, Udham Singh Nagar, Haridwar, Dehradun, Almora
- **West Bengal:** Malda, Murshidabad, 24 Parganas (North & South), Uttar Dinajpore, Cooch Behar

21. Loquat

- **Himachal Pradesh:** Kangra (Palampur, Baijnath), Mandi (Sunder Nagar), Solan (Nalagarh)
- **Punjab:** Amritsar, Hoshiarpur, Gurdaspur
- **Jammu & Kashmir:** Kathua
- **Uttar Pradesh:** Saharanpur, Muzaffarnagar, Meerut, Farrukhabad, Kanpur, Bareilly
- **Uttarakhand:** Dehradun

22. Mango

- **Andaman & Nicobar Island:** South Andaman, North & Middle Andaman, Nicobar
- **Andhra Pradesh:** Srikakulam, West Godavari, Guntur, Nellore, Prakasam, Chittoor, Kadapa, Anantapur, Kurnool, Mahabubnagar, Rangareddy, Medak, Nizamabad, Karimnagar, Warangal, Adilabad, Khammam, Nalgonda
- **Assam:** Cachar, Karimganj, Kamrup, Marigaon, Golaghat, Sivsagar, Dhemaji
- **Bihar:** Darbhanga, Bhagalpur, Muzaffarpur, East Champaran, West Champaran, Sitamarhi, Sheohar, Vaishali, Saharsa
- **Chhattisgarh:** Raipur, Gariaband, Baloda Bazar, Mahasamund, Dhamtari, Durg, Rajnandgaon, Balod, Bemetara, Kabirdham (Kawardha), Mungeli, Bilaspur, Janjgir-Champa, Raigarh, Surguja, Korba, Balrampur, Surajpur, Koriya, Jashpur, Bastar (Jagdalpur), Kondagaon, Narayanpur, Dantewada, Sukma, Bijapur, Kanker
- **Delhi:** Mehroli, Fatehpur, Bhatti, Andheria Mod
- **Goa:** All over Goa
- **Gujarat:** Junagadh, Bhavnagar, Amreli, Valsad, Navsari, Surat, The Dangs
- **Haryana:** Yamuna Nagar, Ambala, Karnal, Panchkula, Kurukshetra, Panipat
- **Himachal Pradesh:** Shimla (Rampur), Mandi (Sunder Nagar), Kangra (Dehra, Gopipur, Pragpur, Indora), Solan (Kunihar, Arki), Sirmour (Paonta Sahib, Nahan, Dhaulakuan), Bilaspur (Ghumarwin, Jandutta), Una (Amb, Bangana, Gagret), Hamirpur (Bhoranj, Nadaun)
- **Jammu & Kashmir:** Jammu, Samba, Kupwara, Kathua, Udhampur, Reasi, Rajouri
- **Jharkhand:** Ranchi, Gumla, Hazaribagh, Ramgarh, Pakaur, Dumka, Deogarh, Jamtara, Giridih, Sahebganj
- **Karnataka:** Kolar, Bengaluru, Tumkur, Mysore, Belgaum, Hassan, Dharwad
- **Kerala:** Palakkad (Muthalamada), Alappuzha (Cherthala, Chengannoor), Thiruvanantapuram (Varkala)
- **Madhya Pradesh:** Balaghat, Rewa, Satna, Part of Panna, Seoni, Umaria, Katni, Jabalpur, Narsinghpur, Harda, Hoshangabad, Shahdol, Sidhi, Bhopal, Sehore, Guna, Raisen, Vidisha, Sagar, Damoh, Kukshi, Dhar, Betul, Chhindwara, Chhatarpur, Datia, Tikamgarh
- **Maharashtra:** Ratnagiri, Sindhudurg, Thane, Raigad, Mumbai, Aurangabad, Beed, Hingoli, Jalna, Latur, Nanded, Osmanabad, Parbhani
- **Mizoram:** South Mizoram
- **Nagaland:** Kohima, Wokha, Mokokchug, Tuensang, Zunheboto, Phek, Kiphire, Longleng, Mon, Dimapur, Peren
- **Odisha:** All Districts **(Amrapali, Mallika)**, Koraput, Nabaranpur, Rayagade, Kendujhar (Keonjhar), Mayurbhanj, Kandhamal, Debagarh (Deogarh), Sundergarh, Sambalpur, Dhenkanal, Angul, Subarnapur (Sonepur), Cuttack, Puri, Gajapati

- **Punjab:** Gurdaspur, Hoshiarpur, Ropar
- **Rajasthan:** Chittorgarh, Banswara, Karauli, Dungarpur, Udaipur, Sawai Madhopur, Sirohi
- **Tamil Nadu:** Coimbatore, Dhamapuri, Dindigul, Krishnagiri, Madurai, Salem, Theni, Thiruvallur, Thirunelveli, Vellore
- **Tripura:** South Tripura (Rajnagar, Bagafa, Sabroom), West Tripura (Bishalgar, Dukli, Melaghar), North Tripura (Kumarghat, Gournagar), Dhalai (Kamalpur, Ambassa)
- **Tamil Nadu:** Coimbatore, Dharmapuri, Dindigul, Krishnagiri, Madurai, Salem, Theni, Tiruvallur, Tirunelveli, Vellore
- **Uttar Pradesh:** Lucknow (Mal. Malihabad, Kakori, Baxi-ka-Talab), Pratapgarh (Kunda, Kalakankar, Sardar, Mangraura), Allahabad (Chayal, Mooratganj), Bulandshahar (Suana, Unchagaon), Saharanpur (Behat), Faizabad (Masaudha, Sohawal), Varanasi (Chiraigoan), Moradabad (Amroha, Joya, Gajraula), Barabanki (Banki, Deva), Meerut (Khekra, Jhani, Pilana, Shahjahanpur), Unnao (Shafipur, Fatehpur-Chaurasi, Miyanganj, Auras, Hasanganj), Sitapur (Mohmodabad), Hardoi (Shahabad), Gorakhpur, Basti, J.P. Nagar, Mathura
- **Uttarakhand:** Nainital, Almora, Udham Singh Nagar, Haridwar, Dehradun, Kotdwar
- **West Bengal:** Malda, Murshidabad, 24 Parganas (North & South), Midnapore (West & East), Purulia, Bankura, Birbhum, Bardhaman, Hooghly, Howrah, Nadia, Uttar Dinajpore, Dakshin Dinajpore

23. Mandarin orange

- **Assam:** Kamrup, Goalpara, Kokrajhar, Chirang, Udalguri, Tinsukia, Karbi Anglong, Dima Hasao
- **Arunachal Pradesh:** Basar, Along, Yazali, Bagara, Ziro, East Siang, East Kameng, Papum Pare, Kurung Kumey, Upper Subansiri, West Siang, Upper Siang, Lower Dibang Valley, Lohit, Anjaw, Changlang, Tirap
- **Chhattisgarh:** Durg, Balod, Rajnandgaon
- **Delhi:** Najafgarh, Kapashera, Bijwasan, Kangan Heri
- **Gujarat:** Mehsana, Kheda, Anand, Vadodara, Surendranagar
- **Haryana:** Yamuna Nagar, Ambala, Karnal, Panchkula, Kurukshetra, Panipat
- **Himachal Pradesh:** Sirmour (Dhaula Kuan, Ponta), Kangra (Nur Pur, Indora), Solan (Kunihar), Una (Una, Amb), Hamirpur (Nadaun, Bhoranj
- **Jammu & Kashmir:** Baramulla, Jammu, Samba, Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch
- **Jharkhand:** Palamu, East & West Singhbhum, Chatra
- **Karnataka:** Chickmagalore, Hassan, Bijapur, Kodagu (Coorg), Raichur, Shimoga
- **Madhya Pradesh:** Jabalpur, Narsinghpur, Hoshangabad, Harda, Bhopal, Sehore, Raisen, Vidisha, Sagar, Damoh, Bhind, Morena, Sheopur, Gwalior, Chhatarpur, Datia, Tikamgarh, Panna, Betul, Chhindwara, Shivpuri, Guna, Ratlam, Ujjain, Jhabua, Dhar, Indore, Dewas, Khargone
- **Maharashtra:** Amravati, Nagpur, Wardha, Yavatmal, Buldhana, Washim

- **Manipur:** Tamenglong, Ukhrul, Churachandpur
- **Meghalaya:** Dawki, Nongiri, Mawlong, Umsning, Burnihat, Umling, Sesatgiri, Chandigiri, Jowai, Cherrapunjee
- **Mizoram:** Aizawl (Saitual), Lunglei (Vanlaiphai), Chhimtuipui (Saiha Tuipang), Champhai, North, South and West part of Mizoram, Chhimheipui, Kolasib, Tawitaw, Aizawl, Thingdawal
- **Nagaland:** Mokokchung, Wokha, Kohima, Zunheboto, Dimapur, Mon, Tuensang, Phek, Kiphire, Longleng, Peren
- **Odisha:** Sambalpur, Debagarh (Deogarh)
- **Punjab:** Ferozepur, Hoshiarpur, Sri Muktsar Sahib, Bathinda
- **Rajasthan:** Jhalawar, Kota, Baran, Chittorgarh, Bhilwara, Sriganganagar
- **Sikkim:** North Sikkim (Timbong, Samding, Lum), East Sikkim (Pandam, Packack, Mulukey, Khamdong, Sang, Sumin), South Sikkim (Sripatam, Ligmoo, Lingi, Turuk, Sumbuk Kewzing, Lingding, Tinglay), West Sikkim (Gyalshing, Kabirthang, Barthang, Martam Radhu, Hatheydunga, Chumbong, Zoom)
- **Tamil Nadu:** Dindigul, Perambalur, Theni, Thoothukudi, Tiruchirappalli, Tirunelveli, Virudhunagar
- **Tripura:** North & South Tripura (Kanchanpur, Killa, Amarpur), West Tripura & Dhalai (Tulashikhar, Longthorai Valley)
- **Uttar Pradesh:** Jhansi, Lalitpur, Agra
- **Uttarakhand:** Chamoli, Rudra Prayag, Pauri, Tehri, Champawat, Pithoragarh
- **West Bengal:** Darjeeling, Jalpaiguri

24. Olive

- **Himachal Pradesh:** Kullu (Bajaura), Mandi (Nagwain), Sirmour (Rajgarh, Haripurdhar)
- **Jammu & Kashmir:** Baramulla, Kupwara, Samba, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch
- **Rajasthan:** Sriganganagar, Hanumangarh, Bikaner, Nagaur

25. Papaya

- **Andhra Pradesh:** Kadapa, Anantapur, Kurnool, Mahabubnagar, Nizamabad, Khammam
- **Assam:** Kamrup, Barpeta, Sonitpur, Nagaon, Chirang, Karbi Anglong, Dima Hasao
- **Bihar:** Patna, Gopalganj, Nalanda, Samastipur, Nawada, Jamui
- **Chhattisgarh:** Raipur, Gariaband, Baloda Bazar, Mahasamund, Dhamtari, Durg, Rajnandgaon, Balod, Bemetara, Kabirdham (Kawardha), Mungeli, Bilaspur, Janjgir-Champa, Raigarh, Surguja, Korba, Balrampur, Surajpur, Koriya, Jashpur, Bastar (Jagdalpur), Kondagaon, Narayanpur, Dantewada, Sukma, Bijapur, Kanker
- **Gujarat:** Sabarkantha, Banaskantha, Bharuch, Vadodara
- **Himachal Pradesh:** Mandi (Sunder Nagar), Kangra (Pragpur, Dehra), Solan (Nalagarh), Sirmour (Nahan, Dhaulakuan), Bilaspur (Ghumarwin, Una, Banganga), Hamirpur (Bhota)
- **Jharkhand:** Ranchi, Ramgarh, Hazari Bagh, Ghumla, Lohardaga. Khutee

- **Karnataka:** Bengaluru (Rural)
- **Kerala:** Palakkad
- **Madhya Pradesh:** Balaghat, Jabalpur, Narsinghpur, Hoshangabad, Harda, Bhopal, Sehore, Raisen, Guna, Vidisha, Sagar, Damoh, Bhind, Morena, Kukshi, Dhar
- **Maharashtra:** Jalgaon, Amravati, Wardha, Nagpur, Yavatmal, Aurangabad, Akola, Buldana, Nasik, Ahmednagar, Pune
- **Manipur:** Imphal West, Imphal East, Thoubal, Bishnupur, Churachandpur, Chandel
- **Meghalaya:** All districts
- **Mizoram:** All districts
- **Nagaland:** All districts
- **Odisha:** Puri, Cuttak, Balangir, Koraput, Kandhamal
- **Rajasthan:** Jaipur, Ajmer, Alwar, Tonk, Banswara, Nagaur, Chittorgarh, Sawai Madhopur, Jhalawar, Kota, Sirohi
- **Sikkim:** North Sikkim (Phidang Samdong), East Sikkim (Samdong Ralep, Sirwani, Marchack, Nabin, Aho Bashilakha, Padamchey, Pandey), South Sikkim (Dong, Mellidara, Turuk, Turung), West Sikkim (Gyalshing, Kabirthang, Tharpu, Salley, Arigaon)
- **Tamil Nadu:** Coimbatore, Erode, Tirupur
- **Tripura:** South Tripura (Udaipur, Amarpur, Belonia, Sebroom), West Tripura (Boxanagar, Mohanpur, Bishalgar, Sonamura), North Tripura (Panisagar, Kadamtala, Kanchanpur, Kailashaher), Dhalai (Kamalpur, Manu, Gandachera)
- **Uttar Pradesh:** Lucknow, Raibareilly, Meerut, Sitapur, Varanasi
- **Uttarakhand:** Udham Singh Nagar, Haridwar, Kotdwar
- **West Bengal:** 24 Parganas (North & South), Jalpaiguri, Mushidabad, Nadia, Hooghly, Bankura, Purulia, Midnapore (West & East), Bardhaman

26. Passion fruit

- **Karnataka:** Kodagu (Coorg)
- **Manipur:** Senapati, Churachandpur, Chandel, Ukhrul
- **Meghalaya:** Ri Bhoi, East Khasi Hills, West Khasi Hills, Jaintia Hills, Garo Hills
- **Mizoram:** Aizawl (Saitual), Lunglei (Vanlaiphai), Chhimtuipui (Saiha Tuipang), Champhai
- **Nagaland:** Wokha, Mokokchung, Phek, Dimapur, Kohima, Mon, Tuenchang, Zunheboto, Kiphire, Peren

27. Peach

- **Arunachal Pradesh:** Tawang, West Kameng, Lower Subansiri
- **Himachal Pradesh:** Shimla (Rampur, Kumarsain), Kullu (Lag Valley), Mandi (Nagwain), Sirmour (Rajgarh, Shillal, Pacchad)
- **Haryana:** Yamuna Nagar, Kurukshetra, Panchkula, Ambala
- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch, Leh, Kargil

- **Jharkhand:** Palamu (Netarhat)
- **Madhya Pradesh:** Shahdol, Sindhi and part of Mandla & Dindori
- **Manipur:** Senapati, Ukhrul
- **Meghalaya:** East Khasi Hills, West Khasi Hills, Jaintia Hills,
- **Mizoram:** Aizawl (Saitual), Lunglei (Vanlaiphai), Chhimtuipui (Saiha Tuipang), Champhai
- **Nagaland:** Kohima, Zunheboto
- **Punjab:** Kapurthala, Shahid Bagat Singh Nagar, Jalandhar, Amritsar, Sangrur
- **Tamil Nadu:** Dindigul
- **Uttarakhand:** Nainital, Pithoragarh, Almora, Chamoli

28. Pear

- **Arunachal Pradesh:** Tawang, West Kameng, Lower Subandiri, Kurung Kumey, Tirap
- **Chhattisgarh:** Jashpur, Surguja, Surajpur, Balrampur
- **Himachal Pradesh:** Shimla (Kotkhai, Jubbal, Rohroo, Rampur, Theog, Chopal, Kuamarsain, Kotgarh, Dodra Kawar), Kullu (Kullu, Anni, Manali, Nirmand, Sainj), Mandi (Karsog, Janjhaili, Banjar), Chamba (Pangi, Bharmour, Saluni), Kinnaur (Rekong Peo, Ropa Valley, Sangla Valley, Chango, Pooh), Lahul Spiti (Kaza, Lahul), Kangra (Palampur, Baij Nath, Multhan, Bara Bhangal, Chota Bhangal), Solan (Kandaghat, Solan, Arki), Sirmour (Rajgarh, Pacchad)
- **Haryana:** Yamuna Nagar, Kurukshetra, Panchkula, Ambala
- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch, Leh, Kargil
- **Jharkhand:** Palamu (Netarhat)
- **Madhya Pradesh:** Shahdol, Sidhi and part of Mandla & Dindori
- **Meghalaya:** East Khasi Hills, West Khasi Hills, Jantia Hills
- **Manipur:** Senapati, Ukhrul
- **Mizoram:** Aizawl (Saitual), Lunglei (Vanlaiphai), Chhimtuipui (Saiha Tuipang), Champhai
- **Nagaland:** Kohima, Zunheboto
- **Punjab:** Amritsar, Tarn Taran, Jalandhar, Shahid Bagat Singh Nagar, Ludhiana, Patiala, Fatehgarh Sahib, S.A.S. Nagar (Mohali)
- **Tamil Nadu:** Dindigul, Salem
- **Uttarakhand:** Nainital, Pithoragarh, Almora, Chamoli, Uttarkashi

29. Plum

- **Arunachal Pradesh:** Tawang, West Kameng, Lower Subandiri, Kurung Kumey, Tirap
- **Himachal Pradesh:** Shimla (Rampur, Kumarsain), Kullu (Lag Valley), Solan (Solan, Saproon), Sirmour (Rajgarh, Pacchad)

- **Haryana:** Yamuna Nagar, Kurukshetra, Panchkula, Ambala
- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch, Leh
- **Jharkhand:** Palamu (Netarhat)
- **Manipur:** Senapati, Ukhrul
- **Meghalaya:** East Khasi Hills, West Khasi Hills, Jaintia Hills,
- **Mizoram:** Aizawl (Saitual), Lunglei (Vanlaiphai), Chhimtuipui (Saiha Tuipang), Champhai
- **Nagaland:** Kohima, Zunheboto
- **Punjab:** Amritsar, Tarn Taran, Jalandhar
- **Tamil Nadu:** Dindigul
- **Uttarakhand:** Tehri, Dehradun, Uttarkashi, Nainital, Almora, Pithoragarh

30. Pecannut

- **Himachal Pradesh:** Kullu (Nagwain), Solan (Nauni), Sirmuor (Pacchad), Bilaspur (Ghumarwih)
- **Jammu & Kashmir:** Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch
- **Uttarakhand:** Nainital, Uttarkashi

31. Persimmon

- **Himachal Pradesh:** Kullu (Sunder Nagar, Kullu), Solan (Kandaghat), Sirmour (Rajgarh)

32. Pineapple

- **Andaman & Nicobar Island:** South Andaman, North & Middle Andaman, Nicobar
- **Arunachal Pradesh:** Lohit, Tirap, East Kameng, Papum Pare, Upper Subansiri, West Subansiri, West Siang, Upper Siang, East Siang, Lower Dibang Valley, Changlang
- **Assam:** Kamrup, Karbi Anglobg, Cachar, Dima Hasao, Hailakandi
- **Bihar:** Kishnaganj
- **Goa:** Ponda, Satary (North Goa)
- **Jharkhand:** Ranchi, Pakur, Khutee, Ramgarh
- **Kerala:** Ernakulam (Moovatupuzha, Kothamangalam), Kottayam (Kanjirapally, Iratupeta, Kaduthururhi), Idukki (Thodupuzha, Elamdesam)
- **Karnataka:** Bijapur, Bellary, Koppal, Bagalkot, Belgaum
- **Madhya Pradesh:** Balaghat, Bhopal, Sehore, Raisen, Guna, Vidisha, Sagar, Damoh, Bhind, Morena, Shivpuri, Guna, Ratlam, Ujjain, Dhar, Indore, Dewas, Khargone, Kukshi, Jhabua
- **Manipur:** Kangpokpi, Thoubal, Churachandpur, Imphal East, Bishnupur, Chandel
- **Meghalaya:** Ri Bhoi, East Khasi, Garo Hills, West Khasi Hills, Jaintia Hills

- **Mizoram:** Aizawl (Saitual), Lunglei (Vanlaiphai), Chhimtuipui (Saiha Tuipang), Champhai, North, South and West part of Mizoram, Chhimheipui
- **Nagaland:** Mokokchung, Wokha, Kohima, Zunheboto, Dimapur, Mon, Tuenchang, Phek, Kiphire, Longleng, Peren
- **Odisha:** Gajapati, Rayagada, Kandhamal, Kalahandi
- **Sikkim:** North, West, East & South districts of Sikkim
- **Tamil Nadu:** Dindigul, Kanyakumari, Namakkal, Virudhunagar
- **Tripura:** South Tripura (Kakraban, Matabari, Ampi), West Tripura (Teliamura, Sonamura, Mohanpur), North Tripura (Nalkatata, Kanchanpur, Pecharthal), Dhalai (Chowmanu, Ambassa)
- **Uttarakhand:** Dehradun, Uttarkashi, Bageshwar
- **West Bangal:** Darjeeling, Jalpaiguri, Cooch Behar Uttar Dinajpore, 24 Parganas (North & South), Midnapore (West & East)

33. Pistachio

- **Jammu & Kashmir:** Srinagar, Doda

34. Pomegranate

- **Andhra Pradesh:** Nellore, Anantapur, Karnool, Mahabubnagar, Medak, Nalgonda
- **Chhattisgarh:** Raipur, Baloda Bazar, Durg, Balod, Jajngir-Champa, Bemetara, Bastar (Jagdalpur)
- **Gujarat:** Banaskantha, Patan, Kutch
- **Himachal Pradesh:** Shimla (Rampur, Kumarsain), Kullu (Bajaura, Sunder Nagar), Sirmour (Rajgarh), Solan (Nauni, Kandaghat)
- **Karnataka:** Bijapur, Bellary, Koppal, Bagalkot, Belgaum
- **Madhya Pradesh:** Balaghat, Bhopal, Sehore, Raisen, Guna, Vidisha, Sagar, Damoh, Bhind, Morena, Shivpuri, Ratlam, Ujjain, Dhar, Indore, Dewas, Khargone, Kukshi, Jhabua
- **Maharashtra:** Nasik, Sangli, Solapur, Satara, Ahmednagar, Buldhana, Beed, Aurangabad, Washim
- **Rajasthan:** Jaipur, Ajmer, Alwar, Tonk, Sriganganagar, Kota, Jodhpur, Pali, Jalore, Banswara, Sawai Madhopur, Bhilwara, Jhunjhunu, Sirohi
- **Tamil Nadu:** Coimbatore, Dindigul, Namakkal, Tirunelveli
- **Uttarakhand:** Dehradun, Uttarkashi, Bageshwar
- **Uttar Pradesh:** Lucknow, Jhansi, Varanasi

35. Sapota

- **Andhra Pradesh:** Kadapa, Anantapur, Kurnool
- **Chhattisgarh:** Raipur, Durg, Bastar (Jagdalpur), Kondagaon, Baloda Bazar

- **Gujarat:** Valsad, Navsari
- **Haryana:** Yamuna Nagar, Ambala, Panchkula, Kurukshetra, Karnal
- **Karnataka:** Kolar, Bengaluru, Belgaum, Gulbarga, Chickmagalore, Bellary
- **Madhya Pradesh:** Balaghat, Chhatarpur, Datia, Tikamgarh, Panna, Shivpuri, Guna, Ratlam, Ujjain, Jhabua, Dhar, Indore, Dewas, Khargone, Kukshi
- **Maharashtra:** Thane, Pune, Ahmednagar
- **Odisha:** Balasore, Bhadrak
- **Tamil Nadu:** Coimbatore, Dharmapuri, Dindigul, Krishnagiri, Madurai, Namakkal, Salem, Theni, Tirupur, Tirunelveli, Vellore, Virudhunagar
- **West Bengal:** 24 Parganas (South), Midnapore (East)

36. Strawberry

- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara
- **Himachal Pradesh:** Kullu (Bajaura), Sirmour (Paonta Sahib)
- **Haryana:** Hisar, Rohtak, Bhiwani, Karnal, Sonipat
- **Maharashtra:** Mahabaleshwar, Pune
- **Meghalaya:** Ri Bhoi, East Khasi Hills, West Khasi Hills, Jaintia Hills, Garo Hills
- **Rajasthan:** Chittorgarh, Udaipur
- **Uttarakhand:** Dehradun, Nainital
- **West Bengal:** Nadia, Bakura

37. Sweet orange

- **Assam:** Kamrup, Goalpara, Tinsukia, Karbi Anglong, Dima Hasao
- **Andhra Pradesh:** Guntur, Prakasam, Nellore, Kadapa, Anantapur, Kurnool, Mahabubnagar, Rangareddy, Nizamabad, Karimnagar, Nalgonda
- **Arunachal Pradesh:** West Siang, East Siang, Lowe Dibang Valley, Upper Subansiri
- **Chhattisgarh:** Baloda Bazar, Gariaband, Raipur, Durg, Balod, Bemetara, Rajnandgaon, Bilaspur, Korba, Narayanpur, Bastar (Jagdalpur), Kondagaon, Janjgir-Champa
- **Haryana:** Hisar, Sirsa, Fatehabad, Bhiwani
- **Himachal Pradesh:** Chamba (Banikhet), Kangra (Banikhet, Indora, Dehra), Sirmour (Dhaula Kuan)
- **Jammu & Kashmir:** Baramulla, Kupwara, Jammu, Samba, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch
- **Jharkhand:** Palamu, East & West Singhbhum, Chatra
- **Karnataka:** Bengaluru (Rural), Bijapur, Shimoga

- **Kerala:** Idukki
- **Madhya Pradesh:** Sheopur, Gwalior, Shivpuri, Chhatarpur, Datia, Tikamgarh, Panna, Betul, Chhindwara, Guna, Ratlam, Ujjain, Dhar, Indore, Dewas, Khargone, Jhabua
- **Maharashtra:** Jalna, Aurangabad, Parbhani, Nanded, Beed
- **Manipur:** Tamenglong, Ukhrul, Churachandpur
- **Meghalaya:** Ri-bhoi, Garo Hills, Khasi Hills
- **Mizoram:** Kolasib, Tawitaw, Aizawl, Thingdawal
- **Nagaland:** Mukokchung, Kiphire, Kohima, Wokha, Tuensang, Peren, Mon, Zunheboto
- **Odisha:** Gajapati, Rayagada
- **Punjab:** Fazilka (Abohar), Ferozepur, Faridkot, Hoshiarpur
- **Rajasthan:** Alwar, Baran, Jhalawar, Sriganganagar, Udaipur
- **Sikkim:** North, East, South & West Districts
- **Tamil Nadu:** Dindigul, Namakkal, Salem, Perambalur, Theni, Thoothukudi, Tirupur, Tiruchirappalli, Tirunelveli, Virudhunagar
- **Tripura:** North & South Tripura (Kanchanpur, Killa, Amarpur), West Tripura & Dhalai (Tulashikhar, Longthorai Valley)
- **Uttar Pradesh:** Jhansi, Lalitpur, Jalaun, Hamirpur, Mahoba, Agra, Saharanpur, Mirzapur, Sonbhandra
- **Uttarakhand:** Chamoli, Rudra Prayag, Pauri, Tehri, Champawat, Pithoragarh
- **West Bengal:** Darjeeling, 24 Parganas (North), Midnapore (West & East), Jalpaiguri

38. Walnut

- **Arunachal Pradesh:** Tawang, West Kameng, Lower Subansiri, Upper Dibang Valley
- **Himachal Pradesh:** Shimla (Rohroo, Theog), Kullu (Banjar Nagar), Mandi (Karsog, Gohar), Chamba (Saloonoi, Chamba), Kinnaur (Kalpa), Kangra (Bajnath, Bara Bhangal), Solan (Solan, Nauni), Sirmour (Naura Dhar, Shillai, Rajgarh)
- **Jammu & Kashmir:** Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Bandipora, Kupwara, Kathua, Udhampur, Reasi, Doda, Kishtwar, Ramban, Rajouri, Poonch, Leh, Kargil
- **Uttarakhand:** Nainital, Almora, Bageshwar, Pithoragarh, Champawat, Dehradun, Pauri, Kotdwar, Chamoli, Rudra Prayag, Tehri

UNDERUTILIZED AND LESSER KNOWN FRUITS

There are large number of other edible fruits in the tropics, some of them have been domesticated while many are yet to be recognized and exploited for their potential importance. Currently, few of these are being raised on a limited scale in home gardens, small farms or as backyard trees, and several fruits also come up naturally in forest, from where the local people gather them for consumption. But cultivation of these fruits on a commercial scale is not yet attempted. Nevertheless, a good market for many of these lesser known fruits, in the fresh or processed form, exists and some of them even find place in international market if grown systematically with stringent quality control.

UNDERUTILIZED FRUITS

JAMUN

It is generally grown as avenue or as wind break. It is widely grown from Indo- Gangetic plains in north to Tamil Nadu in south. It is also found in the lower range of the Himalayas and Kumaon hills. Fruits are good source of iron, used as an effective medicine against diabetes, heart and liver trouble. The seed powder of Jamun reduces the quantity of sugar in the urine very quickly. Fruits ripen during June-July or onset of rains. It takes about 3-5 months to ripen after full bloom. Fruits are processed into excellent quality fermented beverages such as vinegar and cider and non- fermented ready-to-serve beverages and squashes. A good quality jelly is prepared from its fruits. Trees are grown on a wide range of soils - calcareous, saline sodic soils and marshy areas. There is no improved variety for commercial cultivation.

CARAMBOLA

It is commonly known as star fruit. It prefers warm moist climate and can be grown on the hills. It is a small tree with drooping branches and bears attractive, golden yellow, 3-5 ribbed, oval elliptic fruits measuring 12-15 cm in length. The fruits are acidic in nature due to oxalic acid content. It can be used as fresh as the making fruit juice, pickles or a substitute for tamarind. There is no improved variety for commercial cultivation.

CHIRONJI

It is subtropical fruit mostly found in drier regions. Trees are a small and mostly grown by tribal communities. Dark coloured ripe fruits are eaten, seeds also edible and used as dry fruit, gum obtained from the tree is used in textile industry. There is no improved variety for commercial cultivation.

MULBERRY

Cultivated throughout India. It is very hardy. It can be grown in marginal soil even in rocky soil. Basically, mulberry is a temperate climate, but it grows well is tropical & subtropical climate. The fruits are consumed as fresh or processed into jam, beverages and wines. The importance of Mulberry leaves in sericulture industry.

BREADFRUIT

It is grown throughout the tropics. It is used more as a vegetable than as a fruit. It is usually cooked after peeling and slicing and makes a good delicacy in combination with ingredients like coconut cream. Chips and biscuits are made from it. The leaves can be fed to livestock.

EGG FRUIT

In India, it is only known and eaten in a few localities and is seldom utilized commercially. The fruits, which are about the size of an apple, are yellowish or orange in colour with somewhat mealy pulp similar in appearance and texture to a cooked egg yolk enclosing often a single large seed. The egg fruit comes up well in tropical and subtropical climates. Standard varieties are lacking in egg fruit.

MANGOSTEEN

It is a fruit of humid tropics and comes well in south India. The mature trees reaches a height anywhere between 10 to 25 m with a dense pyramidal crown and glossy bright leaves. Mangosteen fruit resembles small sized orange with a smooth reddish purple cortex (rind). The cortex is used in treating chronic diarrhea. Usually a single crop is produced annually, but 2 crops, viz. August-October and April-June, have been obtained from the tress at the Nilgiris hills. The August-October is the main crop. Elite varieties are unknown.

DURIAN

In India, there are no large orchards or commercially planting of durian, but some trees are found around Nilgiris (Tamil Nadu) and West coast. The fruits are highly prized both as fresh fruit or processed fruit. It has also some pharmacological properties. The fruiting is clearly seasonal, available 2 times in a year. Immature fruits are picked only for use as vegetable.

RAMBUTAN

Rambutan, a medium sized evergreen tree with an open structure growing 12-15 m hight. It produces ellipsoidal fruits in clusters of 15-20 fruits. Fruits weight 40-50 g each and resemble litchi

but because of long, thick hairs or spines on the surface these are known a rambutan. The fruits are a good source of sugar and vitamin 'C' and are eaten as a fresh dessert fruit. The pulp can be preserved in syrup or used in several conserves.

RASPBERRY

The species is native to Burma and India, particularly the lower Himalayas, from Punjab to Assam, the Deccan peninsula, and the Western Ghats and is common in the evergreen forests of Mahabaleshwar. The plants are large scrambling shrub with cylindrical, flexible stems downy when young, later purple, coated with a white bloom. It is thoroughly set with sharp, hooked thorns. The fruits are round, conical, flat at the base, made up of individual drupelets, red when unripe, purple black when ripe, with a very fine bloom. Fruits are juicy and sweet with rich flavour.

GALGAL

It is found in semi wild state in the North West Indian hill states of Jammu and Kashmir, Himachal Pradesh and Uttarakhand. It is indigenous to India. Galgal is also cultivated on a limited extent. Trees are medium in size with an irregular and loose crown. Fruits are ovate oblong in shape, yellow in colour, 10-11.5 cm in diameter, weight 400 - 500g, The main use of fruits in making pickle. Galgal pickle is very popular in North India and there exists a sizeable trade in it. Villagers concentrate galgal juice by heating. This juice, which is called "*chukh*" in local dialect, is then stored in glass bottles and is then used later in the season. Juice of galgal is also used as a souring agent in many food preparations.

HATKORA

The botanical name of Hatkora is citrus *macroptera.* It is grown in southern slopes of Khasi & Jaintia hills, Mizoram, Manipur and Jampui hills of Tripura. Its rind is eaten as vegetable by cutting into small pieces and cooked either green/ripe in beef, mutton and fish curries, etc. The pulp is squeezed and the juice is used as soft drink. The fruit is also used as Primary ingredient in Hatkora pickles. It is used as a medicine for indigestive problem.

KARONDA

Karonda is a hardy, evergreen, spiny and indigenous shrub. Widely grown in India, it is found wild in Bihar, Uttar Pradesh, West Bengal and South India. It is grown commonly as a hedge plant. Regular plantations of Karonda are very common in Varanasi district of Uttar Pradesh. Fruits are sour and astringent in taste, rich source of iron and good amount of vitamin 'C'. There are no well established varieties of Karonda. Raw or mature fruits are most suitable for making and excellent quality pickles, jelly and candy. Ripe fruits can be processed into Ready-to-Serve (RTS) squash and syrup.

MAHUA

Mahua, is an indigenous tree of high economic value. A characteristic tree of the dry region, it is found in north and central India. It is commonly grows in eastern Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Maharashtra, Odisha, Andhra Pradesh and Gujarat. The tree is very well known to rural folk since ages in India. There is no improved variety of mahua for an organized orcharding. A large variability occurs in its fruits.

The fruit pulp can be used as a source of sugar for alcoholic fermentation. Dry fruit husk may be used for preparation of obsolute alcohol. Seeds processed for oil are used to manufacture of vanaspati, soap, greases and cosmetics. Seeds are also used for preparation of defatted seed flour having a great potential in bakery products. Mahua cake obtained is used as manure and has insecticidal properties. Every part of mahua yields economic products of great potential value, hence mahua constitutes most important raw materials for various industries.

PHALSA

Phalsa, a subtropical fruit, is native to India. It is commercially grown in Punjab, Haryana, Gujarat, Maharashtra, Uttar Pradesh and Bihar Its cultivation is favoured around big cities where fruits find a ready and quick sale. It has a poor keeping quality. It is also grown as an intercrop with mango, aonla, bael and ber. Phalsa is bushy plant which can grow into a tree if left unpruned. It is very hardy and tolerant to drought. It bears many small berry-like fruits of deep reddish brown colour. The fruits are somewhat astringent and have a cooling effect. They help cure inflammation, heart and blood disorders, fever and constipation.

Phalsa being a hardy plant, can withstand drought and can be grown under adverse climatic conditions. There is no improved variety of phalsa. Fruits can be processed into quality beverages Ready-to-Serve (RTS), nectar, squash and syrup.

WOOD APPLE (ELEPHANT APPLE)

Wood apple is found almost throughout the country, prefers dry climate, cricket ball size fruits have sweet and aromatic pulp, eaten fresh or used for drinks, chutneys, jellies, etc. the tree yields good quality gum.

LESSER KNOWN FRUITS

BARBADOS CHERRY

Also called west India cherry. In India, it is mostly found in Tamil Nadu, Kerala, Andaman & Nicobar Islands. The fruits are small in size and contain high percentage of vitamin 'C' (4515 mg/100g). Trees are spreading shrub, about 4 m high, can withstand mild frost and drought, bark yields tannin. The fruits are edible and can be used for making juice & pulp particularly as a baby food and juice.

BILIMBI

It is a small tree and mostly grown in humid tropics. Fruits are gherkin-like, seeds are covered by a fatty layer which contains 6% oxalic acid. Fruits used for pickles, curries and preserves.

CAPE GOOSEBERRY

It is grown as a commercial crop as well as in kitchen garden in parts of UP, West Bengal, MP, Punjab, Chhattisgarh and Jammu & Kashmir. Cultivated throughout India for edible fruits;

herbaceous, erect growing, perennial, fruits are enclosed in a large persistent calyx, acidic pulp has a pleasant flavour, good source of vitamin 'C', fruits are eaten as fresh and also used for jam preparation.

HOG PLUM

Grows in humid tropics of south India, very large tree, pear-shaped yellow fruits and used in jelly-making, infusion of leaves and fruits is useful as expectorant.

INDIAN ALMOND

It is also called Singapore or tropical almomd; grown throughout hotter parts of India. Seeds (kernels) are edible, bark and fruits are used for tanning. It is mostly found in Jammu & Kashmir and Himachal Pradesh.

KOKAM BUTTER TREE

Evergreen tree found in Western Ghats, fruits have sweetish to acidic pulp and is used for preparing juice, dried pulp is used in curries for souring, seeds are used for making kokam butter and in soap making.

LANSON

Mainly grows in humid tropics, fruits are medium in size and occur in bunches, edible pulp is juicy and translucent, pulp can be preserved in syrup.

LAGON

It is mostly found in India. Sub-tropics or tropical low lands. It is an ornamental tree found in south and east India, fruits occur in clusters of 25-30, sweet aril is eaten fresh, dried and canned.

MANILA TAMARIND

Distributed throughout India; used as hedge plant; attractive tamarind like pods, pulp (aril) is crisp, sweet and edible, a delicious drink is also prepared.

PRICKLY PEAR

Found in arid tropics and sub-tropics with winter rains, grown as hedge plant, Identified as a cactus fruit. Fruits are oblong to pear shaped, pulp soft, whitish, translucent with many seeds, juicy and can be eaten fresh or dired, baked fruits are good for whooping cough.

ROSE APPLE (MARBAR PLUM)

Comes up in warm moist tropics mostly found in south India, large handsome tree (10 m height), flowers are showy with long stamens, spherical (5 cm diameter), pale yellow fruits, crips pulp with rose flavour has high pectin. Fresh Fruit is eaten.

STAR APPLE

Can be raised in humid tropics to frost-free sub-tropics, a graceful ornamental tree reaching a height of 15 m, star-shaped, 5-10 cm diameter fruits are edible, pulp is whitish, soft and sweet.

STAR GOOSEBERRY

Cultivated in south of India, Trees are small and star shaped. Fruits are acidic in nature and used for pickling and chutney, bark is used in tanning industry.

SURINAM CHERRY

Widely distributed in tropics and subtropics, an ornamental shrub, sub-globose (3 cm diameter), 8-ribbed fruits, soft, juicy, pulp is pleasantly eaten fresh and used for jelly making.

WATER ROSE APPLE

Distributed in Assam, Meghalaya and Sikkim, trees are small and branching near the base, purplish, ball shaped fruits have watery pulp, eaten raw and sometimes used to prepare syrup.

WHITE SAPOTA

Tropical high lands to sub tropics, found in south India; medium-sized tree, fruits are yellow with a sweet, pleasant flavoured pulp and large seeds, rind is bitter. It has potential for use in beverages.

SEA-BUCKTHORN

In India, sea-buckthorn fruit grows in the cold deserts of Ladakh region of J&K, Lahul Spiti areas of Himachal Pradesh and in some parts of Arunachal Pradesh. The fruit grows wild and as of now,

very little quantities have been processed. Common sea-buckthorn has branches that are dense and stiff, and very thorny. Sea-buckthorn fruit can be used to make pies, jams, lotions and liquors. The juice or pulp has other potential applications in foods or beverages. The seed and pulp oils have nutritional properties that vary under different processing methods. Sea-buckthorn oils are used as a source for ingredients in several commercially available cosmetic products and nutritional supplements. Bark and leaves may be used for treating diarrhea and dermatological disorders. India holds tremendous potential in respect of sea-buckthorn fruit production and diverse varieties which can be put to specific commercial use.

ECOLOGICAL REQUIREMENTS

Almond

The site for almond cultivation should have well aerated deep soil and free from hailstorm and frost in spring. Almond grows 750 to 3, 210 m above mean sealevel. The most tender stage in blossoming and development of young fruits is shortly after dropping of the husk. The blossoms become more and more tender on opening and can withstand temperature up to -2.2°C, but if low temperature persists for many hours, plants are damaged. The blossoms at petal fall stage are damaged at temperature below 0.5°C.

Aonla

Aonla is a hardy plant, which is successfully grown in variable soil conditions. The deep root system, reduced foliage, dormancy of fertilized fruitlets (April-June) makes aonla an ideal plant for arid and semi-arid regions with soils slightly acidic to saline/sodic (pH 6.5-9.5). Heavy soils or high water table areas are not suited for its cultivation. A mature aonla tree can tolerate freezing as well as high temperature of 46°C but not heavy frost in winter. Warm temperature is conducive for the initiation of floral buds and ample humidity is essential for initiation of fruit growth of dormant fruitlets during July-August.

Apple

Apple cultivation prefers loamy soils, rich in organic matter having a pH of 5.5-6.5 with gentle to moderate slope, proper drainage and good aeration. The soil should have proper drainage channels to restrict the incidence of collar rot, root rot and other soil borne diseases. Most of the apple varieties require 1,000-1,500 hours of chilling below 7°C during winter to break the rest period which is normally available at an elevation of 1,500-2,700m above mean sea level in the Himalayan ranges. The areas with frost free spring and adequate sunshine during summer without wide fluctuations in temperature (21°-24°C) are most suitable for apple cultivation. An ambient temperature (not below 2.2°C) with optimum wind velocity is must towards bee activity for proper pollination. The optimal temperature for pollen germination and fruit setting is 21°-26°C. Dry temperate areas suitable for apple cultivation in Himachal Pradesh and Jammu and Kashmir for production of high quality fruits having intense colour , high sugar content and longer shelf life.

Apricot

Apricots are successfully grown in most of the soils, but deep fertile and well drained loamy soils are more suitable with pH of 6.0-6.8 and at an altitude between 900 and 2,000m above mean sea level.

The long cool, frost free winter (300-900 chilling hours below 7°C) and warm spring are favourable for fruiting. Average summer temperature (16° - 32°C) is suitable for better growth and quality fruit production. The sites located in north eastern India at lower elevations and in south western at higher elevations are suitable for its cultivation. Spring frost causes extensive damage to the blossoms and high humid condition in summer causes brown rot. An annual rainfall of about 100cm, well distributed throughout the season, is good for its normal growth and fruiting.

Avocado

Cultivation of avocado is taken up on loamy or sandy loamy soils of alluvial origin having 5-7pH. This crop is sensitive to waterlogged condition, salinity and soil with low organic matter. Avocado grows well in tropical and subtropical climate with a mild winter at an elevation of 600-1,500m and an annual rainfall of 125-180cm. High humidity during flowering and fruit set is necessary to secure a good crop. This fruit has been grown successfully on a limited scale in India on the hill slopes of Nilgiris, western ghats of Karnataka, Kerala and Maharashtra.

Bael

Owing to hardy nature, bael tree has a wide adaptability to adverse soil and climatic conditions. It requires subtropical climate where summer is hot and dry, and winter is mild. Plants can be grown even up to an elevation of 1,200m. They are not damaged by low temperature even as low as-7°C. A well drained, sandy loam soil is ideal. It can thrive even on poor, clay, stony and sodic soils.

Banana

Banana is cultivated in all kinds of soils having good drainage. In sandy loam soil, plants grow faster compared to vertisol or clay loam soil. Though soil pH of 6.5-7.5 is optimum, banana can be grown in soil having a pH upto 8.5 with suitable amendments. Banana is well suited for cultivation from humid subtropical to semi arid subtropics up to 2,000m above mean sea level with rainfall of 5,00-2,000mm/year and mean temperature of 20°-30°C. At higher altitudes, banana cultivation is restricted to a few varieties like 'Hill banana' which can be grown successfully without any deterioration of quality and specific aroma. Bananas grown under mid subtropical conditions have better quality fruits, as they develop better aroma with crisp pulp. The bunch growth of banana is affected by low temperature and high temperature (above 36°-38°C). Similarly, water stagnation and high wind velocity affects fruit growth.

Ber

Ber is not particularly exacting in its soil requirement. It is grow on a wide variety of soils viz. sandy, clayey, saline and alkali soils. Ber grows under varying conditions of climate all over India even at elevations up to 1,000m above mean sea level. It can withstand extreme hot conditions but is susceptible to frost.

Cherry

Cherry grows in a well drained deep sandy loam soil with pH 6.5-7.0, which have high moisture capacity holding during summer, are most suitable. The cherry plant is very sensitive to waterlogging, so heavy soil should be avoided. Sweet cherry requires colder climate. It is grown successfully in areas between 2,000 and 2,700m above mean sea level, requiring 1,000-1,500 hr chilling period during winter. Climate of Jammu and Kashmir, high hills of Himachal Pradesh and Uttarakhand is ideal for its commercial cultivation. An annual rainfall of 100-120cm, well distributed throughout the year is desirable.

Custard apple

It thrives well in rocky terrain with shallow, gravelly, well drained soils. Heavy soils are not suitable, especially in waterlogged areas. An annual rainfall of 60-80cm is optimum. It cannot stand frost or a large cold period.

Fig

Fig is grown in medium to heavy, calcareous well drained, deep soil having pH of 7-8. Although, it does well even on light sandy & shallow soils, deep soils encourage better root establishment. The crop can tolerate drought, salts (chlorides and sulphates) but is sensitive to sodium carbonate and boron. The fruits produced on fertile, light soils are better suited for drying. . It favours areas having arid or semi arid climate, high summer temperature, plenty of sunshine and moderate winter. Climate has an important bearing on size, shape and colour of skin and pulp. A relatively cool climate stimulates production of larger and elongated fruits.

Grape

Grapes are grown on a variety of soils, alluvial in north, heavy black clay in Maharashtra and north Karnataka, red loam in southern Karnataka and Tamil Nadu and very light sandy locally called "Chalka" soils in Andhra Pradesh. Soil with good drainage and water holding capacity in a pH range of 6.5-7.5 is ideally suited for grapes. Areas with high humidity and high rainfall are not suitable. Cool nights and mild temperature during day time with low humidity favour fruiting of grapes. The rainfall during flowering and berry ripening is not favourable.

Guava

Guava is grown under a wide variety of climatic conditions. It is highly resistant to drought in comparison to other fruit crops. The optimum temperature during flowering and fruiting is reported to be between 23° and 28°C. In areas where winter temperature goes down to 7°C, growth ceases and leaves become purple. In subtropical regions with insufficient heat calories during winter months, commercial production sometimes becomes difficult and the time from anthesis to fruit harvest increases to 200 days. Guava is one of the few tropical and subtropical fruit crops, which have tolerance to salinity and can be grown on marginal lands with minimum care. Though, it thrives well in varieties of soils having pH ranging from 4.5 to 9.5, the best results are achieved in sandy loam with an optimum pH range between 5 to 7.

Jackfruit

Jackfruit can be grown on a wide variety of soils but grows well in a rich, deep, alluvial and well drained soils. It can also be grown on open textured or lateritic soil, provided sufficient nutrients are available. It grows well in a warm, humid climate up to an elevation of 1,500m. It cannot tolerate cold and frost.

Jamun

The jamun trees are grown on a wide range of soils calcareous, saline sodic soils and marshy areas. Deep loam and well drained soils are ideal. Jamun is a hardy furit crop, which can be grown under adverse soil and climatic conditions. It thrives well both under tropical and subtropical climates. Dry weather, at the time of flowering and fruit setting and early rains, is beneficial for better growth, development and ripening of fruit.

Karonda

Karonda is very hardy and drought tolerant, It is grown on a wide range of soils including saline and sodic soils. It thrives well throughout the tropical and subtropical climates.

Kiwi

Kiwi grows successfully in deep, rich, well drained sandy loam soils with a pH slightly less than 6.9 but higher pH up to 7.3 affects fruit growth adversely. Kiwi is a deciduous vine which can withstand wide climatic conditions. In India, kiwi can be successfully grown at 800-1,500m above mean sea level. A rainfall of about 150cm per year is sufficient. The plant does not withstand strong winds. For high yield and quality fruits, it requires 700-800 chilling hours below 7°C to break its rest period in the winter otherwise the bud break may be delayed.

Lime and Lemon

Acid lime is tropical in its climatic requirements and is cultivated in all parts of the country which are free from frost (drier region). It can be grown successfully where the rainfall does not exceed 750mm/annum. The areas, which are warm, moderately humid, free from strong winds and frost are ideally suited for its cultivation. In north India, where the temperature occasionally falls below freezing, commercial cultivation of acid lime is risky. Sweet lime is more hardy than acid lime and can be grown under a wide range of climate conditions right from dry areas to frosty area. Rangpur lime is raised throughout the country, particularly in drier regions. The optimum temperature requirement for Rangpur lime is 20°-30°C. In humid areas, it becomes more susceptible to scab. Lemons are hardier than limes to both heat and cold. They have wide adaptability both in humid and semi humid regions, plains and areas receiving high rainfall. Lemons can be grown in hilly regions also (1,200m above mean sea level).

Litchi

Litchi grows in a variety of soil types viz. fairly deep, well drained loam soil rich in organic matter and light sandy loam. Lime content in soil is also beneficial to trees. A sandy loam or clay loam with

frost free area having pH of 5.5-7.0 and sufficient soil depth is ideal for litchi cultivation. Generally, it flourishes best in a moist atmosphere and abundant rainfall. . Plants grow luxuriantly at 30°C. the maximum temperature during flowering and fruit development varies from 21°C in February to 38°C in June in Bihar. Wet spring, dry summer and light winter are desirable conditions for fruiting in litchi. The dry hot winds in summer cause fruit cracking and subsequently damage the pulp (aril).

Loquat

Loquat requires a well-drained, deep, sandy loam soil with inorganic matter. It needs about 90 cm well distributed rainfall throughout the year. The limiting factor for its successful cultivation is frost during flowering period and hot summer with scorching winds.

Mandarin orange

Mandarins are grown in a wide variety of soils right from medium or light loamy soils with slightly heavy sub soil upto typical black clay soil (Nagpur). It also grows successfully in deep, well drained black and red loamy soil (South India) and lateritic type of sandy loam with pH 4.5-6.0 (Assam). The mandarin flourishes well in deep, well drained, black and red loamy soil of Coorg area. In northern India, kinnow is grown on alluvial soils with pH 5.0-9.0 and even in acidic laterite soil (Himachal Pradesh). Mandarin grows successfully in all frostfree tropical and subtropical regions of the country. They are well adapted well to sub mountainaceous tracts 370-1,500 m above mean sea level and temperature 10°-35°C. In north-eastern India, climate favours the production of excellent colour and quality mandarins. Kinnow needs sharply contrasting warm cool temperature with a chilling temperature during winter for good cropping and high quality fruits. Kinnow has adpted well in Punjab, Haryana, parts of Rajasthan and foothills of Himachal Pradesh. Kinnow is not grown successfully in humid tropical regions. It performs very well in Nagpur and Akola regions of Maharashtra.

Mango

Mango is grown on alluvial to lateritic soils even in slightly acidic soil with good drainage but not in black cotton soil. Mango is a tropical fruit, but it can be grown up to 1,100m above mean sea level. The temperature between 24 and 27°C is ideal for its cultivation. There should not be high humidity, rain or frost during flowering and frequent showering may attract many pest and diseases. It can be grown best in regions with a rainfall between 25cm and 250cm. Higher temperature during fruit development and maturity gives better quality fruits.

Papaya

Papaya is grown in a wide variety and well drained and aerated soils, eg. sandy loam, rich alluvial soils on banks and deltas of big rivers and also in calcareous and stormy soil with high organic matter (pH 6.0-7.5). Papaya is a tropical fruit but it also grows well in the mild subtropical regions of the country up to 1,000m above mean sea level. Night temperature below 12°-14°C for several hours during winter season affects its growth and production severely. It is very much sensitive to frost, strong winds and water stagnation.

Passion Fruit

It prefers tropical to subtropical climate and grows well up to 2,000m with a rainfall of 1,000-2,500 mm annually. It can grow in light sandy loam to heavy loam soils with a pH of 6 to 7. Soils should be well drained.

Peach

Peach requires deep sandy loam soil rich in organic matter with good drainage The pH of the soil should be between 5.8 and 6.8. Acidic and saline soils are unfit for peach cultivation. The land with gentle slope is ideal for peach cultivation. Humid climate with cold winter and dry summer is best for cultivation. It is sensitive to lower temperature(-6.5°C) and early spring frost in respect of flowering. The blooming period can be delayed by the application of gibberellic acid (200ppm) before leaf fall or by application of ethephon, to avoid the risk of spring frost.

Pear

Pear grows best in deep, welldrained, fertile, mediumtextured and relatively more clay soil. It is more tolerant to wet soils but less tolerant to drought than apple. Pears even do well on poorly aerated heavy soil with high watertable which is heavy in texture for most of deciduous fruits. A neutral pH range of 6.0-7.5 is desirable for proper growth and fruit production. Low lands are not suitable for pear cultivation. Pear can be grown in a wide range of climatic conditions, as it can tolerate as low as -26°C temperature when dormant and as high as 45°C during growing period. A large number of pear cultivars require about 1,200 hr below 7°C during winter to complete their chilling requirement to flower and fruit satisfactorily.

Pineapple

The pineapple grows well in sandy loam soil with 45-60cm in depth without hard pan or stones . It prefers soil pH of 5.0-6.0. It is crop of humid tropics. The optimum temperature for successful cultivation is 22°-32°C. Leaves and roots grow best at 32°C and 29°C respectively. It can be grown up to 1,100 m above mean sea level, if the area is frost free. The optimum annual rainfall for its commercial cultivation is 100-150 cm but grows remarkably well under a wide range of rainfall.

Plum

Plum grows on a wide range of soils, deep fertile and well drained, loamy soil with a pH of 5.5-6.5. The soil should be free from hard pan, water logging and excessive salts. Plum requires varying types of climates right from subtropical plains to the temperate high hills and free adequate sunshine in summer. Plum requires 90-110 cm well distributed rainfall throughout the year. Prolonged drought during fruit growth and development and excessive rains during fruit maturity hamper fruit quality.

Pomegranate

Pomegranate prefers a well drained, sandy loam to deep loam or alluvial soils and also in light soils. Quality and colour development in light soils is good but poor in heavy soils. It tolerates salinity

up to 9.00 EC/mm and sodicity 6.78 ESP. Pomegranate grows well under semi arid conditions and thrives best under hot dry summer and cold winter upto altitude of 500m provided irrigation facilities are available. The tree requires hot and dry climate for a sufficiently long period during fruit development and ripening to produce sweet fruits. The pomegranate tree is deciduous in areas of low winter temperature and an evergreen or partially deciduous in tropical and subtropical conditions. It can tolerate frost to a considerable extent in dormant stage, but is injured at temperature below - 11°C

Sapota

Sapota, a crop of tropical region, needs warm (10°-38°C) and humid (70% relative humidity) climate where it flowers and fruits throughout the year. In subtropics, it gives only one crop from summer flowering in April and May and in humid regions, it gives two crops in a year.

Strawberry

Strawberry can be grown on any type of soil-poor sand to heavy clay-provided proper moisture, organic matter and drainage is present. Strawberry ripens somewhat earlier on sandy soil than on clay soil. Strawberry is not much sensitive to soil reaction. However, it prefers a slight acidic soil. At higher pH, there is less root growth. There should be no underlying lime layer up to 15-20 cm, otherwise it causes burning of leaves. In drier areas, alkali soils must be avoided. Thus, sandy loam to loamy soil with pH 5.7-6.5 is ideal for strawberry cultivation.

Sweet orange

The production of sweet orange is largely favoured by dry, semi arid to subtropical conditions. However, plants grow well under subtropical climate and can even withstand occasional light frosts. Several hours of exposure to a temperature of 3°C cause severe injury to plants. On the other hand, very high temperatures are also detrimental. The average temperature for growth is about 16°-20°C. Hence, it can tolerate well maximum temperature of 32° C-40°C and minimum of 17°-27°C as it exists in most of the sweet orange growing belts of the country.

Sweet orange is grown on a wide range of soils. These grow in almost any soil if it is sufficiently aerated and deep, allowing the roots to penetrate to desired depth. In India, sweet orange is being cultivated on a wide range of soils, e.g. alluvial, sandy loam to loam , red sand soils to black clayey soils. In Andhra Pradesh, it is grown on red soil with loamy sub soils, red sandy soils and black clayey soils. The sweet orange growing areas of Maharashtra have black soils. Thus, a well drained sandy loam to clay loam is preferred by sweet oranges.

Pecannut

Pecan is grown in varied types of soil with proper aeration. Sandy loam, fertile soil, rich in organic matter, deep, well aerated and well drained soils with a pH of 6.4 is ideal . Although it can be grown in soils having pH of 5-8, in alkaline soils Zn deficiency in severe. Pecan grows in warm temperate climate. The extremes of both temperate and subtropical climates are undesirable. It requires

240-280 days growing season with a mean temperature above 26.7°C, heat units (above 10°C) amounting to 5,000 degree days during 7 months of nut-growing season, mean temperature for 3 coldest months between 7.2°C and 12.8°C with at least 400hr of chilling temperature at or below 7.2°C, medium to low rainfall and high levels of solar radiation during the growing season.

Walnut

Walnut is sensitive to low temperature during spring and high temperature during summer. Walnut should be grown only under such climate conditions which are free from frosts during spring and extreme heat during summer. At bloom, temperature of even 2°-3°C below freezing results in killing of a large number of young flowers. Hot summers with low humidity result in blank nuts. They grow well in areas with well-spread rain of about 75cm or more. Temperature of 29°-32°C near harvesting results in well filled kernels. Areas where the trees do not receive adequate chilling cause them to leaf out and bloom late.

A well drained silt loam soil having abundant organic matter is ideal. The soils should be free from rock, impervious clay, coarse and sandy soil with hard pan, layers of gravel and fluctuating watertable. Alkaline soils should be avoided.

LEADING FRUITS PRODUCING STATES (% SHARE IN PRODUCTION)

Banana

Mango

Guava

Papaya

Citrus Group

Citrus

Mandarin

Sweet orange

Lime/Lemon

Other Citrus Species

Grape

Custard apple

Almond

Apple

Aonla

Ber

Jackfruit

Kiwi

Litchi

Pear

Peach

Pineapple

Pomegranate

Sapota

Walnut

PRODUCTION SHARE OF FRUIT CROPS IN DIFFERENT STATES OF INDIA

Uttar Pradesh

Andhra Pradesh

Maharashtra

Karnataka

Bihar

Tamil Nadu

Gujarat

Madhya Pradesh

Chhattisgarh

Arunachal Pradesh

Assam

Haryana

Himachal Pradesh

Jammu & Kashmir

Jharkhand

Kerala

Manipur

Tripura

Uttarakhand

West Bengal

Meghalaya

Mizoram

Nagaland

Sikkim

Odisha

Andaman & Nicobar Islands

Delhi

Goa

YEAR of HORTICULTURE 2012

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