THE MANGO IN CEYLON

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1. CEYLON TYPES OR VARIETIES

FEW fruits, if any, have in India the reputation and history of the Mango (*Mangifera indica*) considered by De Candolle to have been in cultivation for many centuries, and certainly as far back as any dependable records go.

A native of India and the eastern tropics, its cultivation reaches to all tropical regions of the world, but the true home of the mango with its numerous varieties and hybrids is undoubtedly India.

Sturtevant in his "Notes on Edible Plants" gives Tropical Eastern Asia as the home of *Mangifera indica* and regarding the distribution of this fruit he records that the mango was introduced to Jamaica in 1782. In 1880 several fruitful and superior varieties were growing in the Botanic Gardens in Trinidad, and at Cayenne it was introduced at the beginning of the present century. Its introduction into Brazil was more ancient as the seeds came thence from Barbadoes in the middle of the eighteenth century, and in Martinique, by grafting, a dozen distinct varieties of excellent quality have been established. In Mauritius a number of varieties are established, whilst the tree is now grown to a limited extent in Florida also.

Although the fruit is found in the markets, the bazaars, and in the villages of Ceylon in large numbers during its season, the quality is invariably extremely poor and the fruits are usually from seedling trees. The few really good fruits to be found occasionally in the markets are generally those imported from India from grafted or enarched trees, but these in most instances suffer from the fact that the fruit is picked in too unripe condition and this detracts from the true flavour of a first-class mango.

There are in Ceylon about five types of the common mango. These are (i) the "Jaffna" mango which is of good quality when well grown, large, oval in shape, and not unlike the "Alphonso" of India; (ii) the "Rupee" mango, or Pol-amba a large globular-shaped fruit of good flavour, in great demand but never available in any large quantity owing to its shy fruiting habit; (iii) the "Parrot" mango or Gira-amba, a medium-sized fruit with broad marked beak and of a slightly acid but pleasant

taste; (iv) the "Bombay" mango or Baita-amba, a round and compressed fruit, juicy, yellow when ripe, of average quality and probably the commonest variety to be found in the Ceylon markets, and (v) the "Honey" mango, or Mi-amba, a somewhat small round fruit, of acid and poor flavour resembling turpentine rather than honey.

There are also wild varieties. The Etamba bearing a small oval fruit with scanty juicy pulp of a tart flavour, and though occasionally eaten, it is very unpalatable. The Puhuamba is another variety with very small fruit, acid but sweet flavour, and seedless.

The Ceylon mangoes generally leave much to be desired, yet many parts of the Island are suited to the proper cultivation of really good varieties and much more could be made of the mango than has been the case up to the present. The semi-dry regions of Ceylon and the dry regions also where irrigation is available are the areas most suited to this fruit though in certain districts of the wet zone varieties of the "Jaffna" mango have been observed to give quite useful crops. A pronounced dry season is, however, a very necessary climatic requirement and the reasons for this will be indicated later. Established fruit orchards worked on any up-to-date lines do not, as such, exist in Ceylon, except in rare instances. Individual enthusiasts have, however, of late years realised the necessity of an improvement and increase in fruit cultivation and production, and the opening up of small areas here and there is on the increase.

Of the mangoes common to Ceylon the "Rupee" and certain varieties of the "Jaffna" only are worth persevering with. The "Rupee" is a very fine fruit both for size and flavour, and careful experiments are necessary to ascertain if its shyness in fruiting cannot be improved by a selection of the best and the highest yielders. Its transfer by budding or enarching to a suitable stock, as European horticulturalists have similarly improved the temperate region fruits, wants to be tried.

2. INDIAN TYPES OR VARIETIES

The Indian mangoes are generally considered to belong to one species, *Mangifera indica*, though other species have doubtless entered largely into the composition of most of the cultivated forms. The number of types, sub-types, varieties, and sub-varieties are legion and present the problem of a cross-word puzzle. Indian nurserymen have undoubtedly a penchant for creating a bewildering number of new varieties from any tree that yields a fruit of superior quality, and this has led to synonymy and confusion.

The numerous requests for information on fruit growing received at Peradeniya are invariably preceded by the query as to what are the best imported varieties or types of particular fruit trees to grow. At the outset the first question to decide is whether a sufficiently good type of tree is available locally from which to propagate, or whether to import the trees required.

There must at the present time be a considerable number of imported grafted trees of good type in the Island. Many were imported in past years through the assistance of the Ceylon Agricultural Society, and of later years through the Central Seed Store, Peradeniya.

The varieties available from India on import are numerous but unfortunately a large number are worthless. Indiscriminate importations are to be avoided and plants of known good variety only should be secured. The following may be recommended:

(a) "Alphonso."—This is the leading variety of a group that keeps well and is probably the most widely cultivated mango in the Bombay Presidency. It bears fruit of average size and excellent flavour, the skin is thin and the pulp is reddish in the middle to pale-yellow on the outside, and the average weight is 14 oz.

(b) "Bangaloora."—A long-fruited variety and above the average in size, slightly tinged with red at the extremeties, the flesh reddish, very sweet and of good flavour. At Heneratgoda Gardens a five-year-old tree of this variety produced a fruit weighing 28½ oz.

(c) "Batli" or "Batlee."—A variety common in Bombay where they come into the markets from middle of May till end of June. It is a heavy, luscious fruit, with deep orange flesh, and the fruits average 14 oz.

(d) "Dilpasand".—A Bombay variety of good size fruit often 20 to 22 oz. in weight. The flesh is canary yellow, fibreless, with thick pulp and a flavour slightly acid, but delicious. This should not be confused with the South Indian "Dilpasand," as the latter is not so delicately flavoured and resembles more the "Totipuri" than the round "Dilpasand" type.

(e) "Fernandin."—A highly-prized variety with thin skin and flesh of bright yellow and thick consistency. A very superior fruit averaging 16 oz. but often 20 oz. or more in weight.

(f) "Koothathath."—A variety very similar to "Bangaloora" but with greenish colouring, yellow when ripening. Fruits are large, averaging 18 oz. each, the flesh being light in colour, fibreless, and of good taste and flavour.

(g) "Mulgoa."—A very fine mango of the Madras type and grown in abundance in Bangalore. In America this variety, the first of the Indian grafted trees to fruit there, does not fruit freely, but in the eastern tropics little fault can be found as to its fruit-yielding capacity and both in appearance and taste the fruit is exceptionally good. The skin is thin, the pulp pale-yellow, and the average weight of the fruit about 16 oz.

(h) "Piari."—This variety is of the type considered by many to produce the finest mango in India, but it is of rather poor keeping quality. The skin is moderately thick, the flesh bright yellow to orange, of fine texture, firm and juicy and of excellent flavour. The average weight of the fruit is 14 oz.

(i) "Peter Pasand."—A fruit of average size and of excellent taste and flavour. The skin is thin and separates easily from the pulp. Though not so well known as the foregoing varieties, can be well recommended, the fruits averaging 14 oz.

There are of course numerous others but those described are the better known of the Indian varieties. The western tropics and other parts also have their particular varieties or types, the more prominent of these being "Julie," "Peters," and "Pere Louis" of the West Indies, not omitting the famous No. 11 of Jamaica, and the equally famous "Sundersha" of Florida, the "Caraboa" and "Pica" of the Philippines and the "Gundoo" and "Sabre" among others of South Africa.

3. SOILS

The mango as with most other fruits thrives best in a good loamy soil but it is adaptable to a wider range of soils than many fruit trees. An essential requirement is that the soil should be well drained. The laterite and cabooky soils of many parts of Ceylon are suitable, though a good loamy soil is best since this produces and supports good yields and excellence of fruit. The red laterite soil of parts of India is well known to be most suited to mangoes. A shallow soil of hard rock or pure sand is not a suitable one since the mango is a deep-rooted tree, but a sandy to sandy loam soil with some depth will give excellent results provided fertilisers are applied fairly liberally and such soils in Southern Florida have proved most satisfactory. A clayey soil, provided it is well drained, seems to be a good soil for mangoes also, but the main requirements are obviously depth of soil and good drainage. The fine avenue of mango trees at the Botanic Gardens of Rio de Janeiro are of large dimensions and of great age but according to Dr. Willis, (formerly Director of these gardens, and at one time Director of the gardens at Peradeniya) these never mature any fruits owing to the original error of planting the trees on low wet ground, though others planted on higher ground in the same gardens fruit freely and regularly. Good drainage cannot therefore be too strongly emphasized.

4. CLIMATE

Most tropical areas are suitable for the mango tree and in Ceylon it will thrive from sea level to 2,000 feet and will grow, but is scarcely fruitful, at elevations up to 4,000 feet. Though the tree grows well in humid localities subject to rain at all seasons, it cannot ordinarily be successfully fruited in such since a pronounced spell at time of flowering and setting of fruit is essential.

Localities with an annual precipitation of 50 inches, or more if it does not coincide with the flowering season, are conducive to satisfactory results, and where irrigation facilities are available it will succeed with less rainfall than this. The mango is in fact better suited to irrigated areas than otherwise since its moisture requirements are peculiar in that the effect of rain or even humid atmospheric conditions at time of flowering and setting of fruit are specially injurious by its interference with pollination. The commonest cause of crop failure at Peradeniya and in other moist regions is generally considered to be due to wet or damp weather at time of flowering. In irrigated areas the trees need to be irrigated till their fourth year, but after the fourth year watering is not necessary unless the tree actually shows signs of wilting.

5. PROPAGATION

The predominant method of propagation of this fruit at the present time in India is by enarching, but propagation by means of budding is also adopted, and in the western tropics by seed-sowing also. Propagation by cuttings has not been successful to any degree. With regard to the seed it should be noted that there are two types, firstly, the mono-embryonic type with seed containing only one embryo which is produced by a sexual process and is not therefore to be depended on to produce true progeny unless it came from a true bred parent stock which is usually not the case. The second type is poly-embryonic which contain several embryos arising as buds from the outer covering of the seed and are in consequence the equivalent of a bud or a graft of the parent and therefore represent that type.

The latter type of seed is more frequently found in the western than in the eastern tropics. In the eastern tropics the first type predominates.

The systems of enarching and budding are well known to insure uniformity of fruit, early bearing, and productiveness in the majority of fruit trees, and it applies to the mango also. For this reason these methods of vegetative reproduction are advocated for growers in Ceylon, and the question of a suitable stock or stocks have to be considered. At the present moment little or no definite information is available and propagation in

the east has been almost entirely restricted to enarching. The common mango (*Mangifera indica*) the Amba, and the Ceylon wild mango (*Mangifera zeylanica*) Etamba, would as far as present experiences go, meet the case. The former is cultivated in most parts of the Island and has a wide range of climate and elevation, being suited to both dry and wet zones and to an elevation of 4,000 ft. The latter is a very large tree of robust habit found in the low-country forests of both moist and dry regions.

Little can be said at the moment as to the probable influence of stock on scion, as very few reliable trials have been made either in India or elsewhere, but it is stated that the position of the scion on the stock influences the vigour of the vegetative growth of the scion and the age at which it flowers.

The Agricultural and Co-operative Gazette, Nagpur, Vol. IX, states that Bombay grafts were seriously affected by frost each year when growing at Pagara but when such were grafted on the wild Pachmari seedlings common to the Pachmari hills the resulting trees, without deterioration of quality, were quite frost resistant.

Both statements indicate a definite physiological influence of stock on scion and the qualities of the local and the wild mango as suitable stocks in respect to their root system and other probable advantages might be taken for granted at the present stage.

The enarching mode of propagation is the most common one employed for mangoes but unless grafting material is plentiful the method is an expensive one. Patch or shield budding on the other hand conserves material to a large degree and though more difficult, is successful if properly carried out, and it is preferable generally.

In the raising of stock plants, seeds should be selected from sound healthy and vigorous trees. The seeds germinate readily when fresh but lose their vitality if kept for long and should therefore be sown at once. The seeds should be planted at a depth of three to four inches and eight to ten inches apart if the seedlings are to be lifted into pots before budding, but sixteen to eighteen inches apart if budding is to be done in the nursery bed. A difficulty is invariably experienced in lifting the larger seedlings for potting purposes owing to the tap root system of the mango but this can be remedied to some extent by making the seed-beds on shallow soil or on a foundation of brick material.

Seedlings should be ready for budding when they attain the diameter of half an inch at a few inches above the ground, but larger seedlings if available are preferable. The best time for budding is usually towards the end of the monsoons but they can

be budded at other times also, according to the receptive condition of the stock, that is, when the bark lifts easily, usually during the periodical flushes of growth which last for several weeks, and patch budding, either by the square or rectangular patch is recommended.

The actual operation of patch budding might here be described and is as follows: Assuming the bark of both stock and scion lifts easily, a square or rectangular piece of bark bearing a bud from the scion should be taken out, of approximately 1 inch long by $\frac{3}{4}$ inch wide, and transferred into the stem of the stock from which a similarly shaped piece of bark has been removed. A small quantity of grafting wax is then smeared over the edges of contact and the bud with its shield firmly tied with budding tape or strands of bark. The stock should be budded at six inches from the ground, but this can be varied according to requirements and the size of the stock. All cuts should be clean ones and the operation carried out as quickly as possible so as to prevent the cambium surfaces of the stock and scion being damaged or dried by exposure. During the operation shady conditions are preferable and, if in the open, temporary shade should be afforded till such time as the buddings are well established.

A good grafting wax is made of a mixture of beeswax 2 parts, tallow 1 part, and resin 1 part. The two former should be melted, adding the resin in a well-powdered state and the whole stirred well. Ordinary white cotton cloth serves the purpose of a good budding tape and can be cut into various lengths and widths according to the size of the stock budded, and for average-sized stocks, strips 15 inches long and 1 inch wide are the best. Soak the budding tape in the grafting wax while it is hot and hang up to dry for an hour or so, afterwards winding the tape or cloth around a stick. The waxed tape will thus keep of suitable consistency for a long time.

After 14 to 18 days from budding the bandages should be removed and if the operation has been a successful one the bud sheath will show a healthy green appearance similar to that at the time of budding. The stock should then be notched at a point five or six inches above the point of the budding to arrest the flow of sap to the head of the stock and the bandages re-tied very lightly, but on this occasion, leaving the dormant bud exposed. The budding tapes should be finally removed when the bud begins to grow, a period that can vary from four to ten weeks from budding. At this time the head of the stock can be cut off at the point previously notched to allow all the vigour of the stock plant being forced into the newly-attached bud.

Budwood should naturally be selected from healthy vigorous trees and of the best fruiting qualities available. The bud selected should be from wood of the second or third flush below the growing point and the precaution should be taken, should the leaves not have fallen, of pinching off the leaf blades some two or three weeks beforehand from the shoots required for budding, this allows the leaf-stalks to drop and leaf-scars to heal over before the wood is required for budding.

6. CULTIVATION

Soil and climatic conditions have already been discussed and having selected a suitable site, good holes at least 3 feet in width and 3 feet in depth should be prepared. The holes should be 30 feet apart each way. A good dressing of well-decayed cattle manure should be incorporated with the soil when refilling the holes.

The mangoes must be considered the main crop of the plantation, though interplanting with catch crops for the first three or four years can be entertained.

The plants will require shading and watering for the first few weeks and permanent staking is required to prevent damage by wind. Attention during the first three or four years should be devoted to the encouragement of good healthy growth with a strong robust framework. A periodical dressing of well-decayed cattle manure on the approach of the monsoons, with a forking up of bed surface and a mulch of leaves, grass cuttings or other material just prior to the dry seasons will materially assist in this. From the fifth year onward the object is to induce fruiting and a change of manure is required, since cattle manure is not generally considered an entirely suitable manure at the flowering and fruiting stage. Heavy dressings of cattle manure upset the process of normal formation of flowers, and fruit production is postponed. Manuring therefore should be much lighter at this stage and the phosphoric acid contents of such manures as are given should be increased. A useful manure mixture for trees at the flowering and fruiting stage is recommended by the Acting Government Chemist, Peradeniya, as follows:

Sulphate of Ammonia	½ part	5-6 lb. per tree
Superphosphate	2 parts	
Steamed Bonemeal	2 ,,	
Sulphate of Potash	2 ,,	

in addition to small dressings of cattle manure or leafmould.

7. PRUNING AND THINNING

The fruit-bearing qualities of the mango vary greatly and much is doubtless involved in the principles of pruning or thinning adopted. These have not yet been worked out with any

accuracy. Unfavourable weather conditions in the direction of heavy rains, cold conditions, and even excessive heat if accompanied by hot dry winds at time of flowering are seriously adverse to the tree. Overbearing and exhaustion following a heavy crop are other difficulties to contend with, but these can be prevented or modified to some degree by the thinning of the crop in the early stages, and subsequent thinning out of the growing shoots. The mango is, like certain other fruit trees, subject to the peculiarity of alternating fruit years and prevention of overbearing from the early years can assist in overcoming this disadvantage.

According to investigations to date unfruitfulness in the mango is not due to defective mechanism of pollination. Popenoe, in a very thorough study of the subject of the pollination of the mango, concludes that mango sterility is due to climatic conditions which appear to favour vegetative growth and not reproductive growth. Root pruning can usefully be employed on unproductive trees, such operations tending to the formation of fruit buds which require to be encouraged by some check to the vigour of the tree.

Speaking generally, pruning, thinning, or root pruning, whichever is applied, means the checking or suppression of certain parts of the tree, either vegetative growth or root growth, in order that additional energy may be directed towards building up the tree structure, or when growing too freely, to flower or fruit well. The reduction of vigour by restriction of root supply, usually by means of root pruning, induces profusion of flowers and consequently the larger possibility of yield of fruit.

8. PESTS AND DISEASES

Of the insect pests common to the mango the Government Entomologist has afforded the following information in respect to the chief of its enemies:

Fruit pests.—The most important insect pests of mango fruits are the mango seed weevil (*Cryptorhynchus mangiferae*) and fruit flies (*Dacus* spp.).

1. The seed weevil is found in most parts of the world where mangoes are grown. The weevil lays its eggs in the fleshy portion of the young fruit and the grub on hatching bores into the seed and passes the remainder of its life inside the seed where it changes into the pupa and finally into the weevil. Portions of the pulp may become rotten, and infested fruits may drop prematurely. The presence of more than one grub in a young seed may result in its entire destruction, but usually the seed is not injured seriously enough to prevent germination. The weevils may remain in the seed until after the fruit has been

eaten and the seed has been discarded. Since this pest passes the whole of its early life inside the seed and there is often no external evidence of injury there is no practicable method of control except the collection and destruction of all fallen fruit.

2. Fruit flies are occasionally serious pests. The eggs are laid in the fruit and the maggots after destroying the fruit emerge to pupate in the soil. Poisoned baits can be used to attract and kill the flies before they lay their eggs. The usual bait recommended is a mixture of 6 lb. of cheap sugar and 6 oz. of arsenate of lead dissolved in 8 gallons of water. This bait can be sprinkled on to the leaves or exposed in tins or bottles hung from the branches; strips of cloth or lamp-wick can be hung outside the vessels with one end in the liquid. The collection and destruction of fallen fruits will also help to control these pests.

Leaf-eating pests.—The young leaves are attacked by various caterpillars and beetles which can be controlled by spraying with arsenate of lead used at the rate of 2 lb. in 50 gallons of water, or 1 oz. in 12 pints.

Plant-sucking bugs, including scale insects.—These can be controlled by spraying with concentrated lime and sulphur used at the rate of 3 oz. in every 1 gallon of water, or about a 2 per cent solution. This is a combination insecticide and fungicide and may also act as a deterrent to many leaf-eating insects.

Of mango diseases the Acting Government Mycologist gives the three main fungoid diseases common in Ceylon and the preventive measures, as follows:

Mildew.—The mango mildew (*Oidium* sp.) occurs at high elevations and attacks the new leaves produced after wintering. It is a white powdery mildew and can be checked either by dusting with sulphur or spraying with some sulphur compound. A convenient spray compound is a proprietary lime-sulphur spray known as "Sulfinette." This liquid is convenient to use and does not clog the nozzles of sprayers. The spray employed should consist of a 1-2 per cent solution in water. The trees should be sprayed or dusted during the wintering period and two applications should be made at intervals of one week before the new season's foliage emerges. It is hardly worth while to dust or spray later since any damage already done cannot be rectified.

Red Rust (*Cephaleuros parasiticus*).—This is an alga which forms orange-red to rusty brown patches generally on the upper surface of the leaves. *Red Rust* is essentially a disease of weak plants and the first consideration therefore is to improve the vigour of the trees by cultivation and manuring. On small trees the alga can be attacked directly by spraying with Bordeaux mixture. Spraying should be done before the orange fruiting

patches appear on the leaves because at this stage the spray will not wet the parasite. The following mixture if added to the Bordeaux will make it more adhesive in wet weather:

Washing soda	1 lb.
Resin (common resin or colophony)	2 lb.
Water	1 gallon.

Boil the water, then add the soda. When dissolved add the resin and boil for about one hour stirring continually. Add this, when cool, to the Bordeaux mixture at the rate of 1 gallon to every 24 gallons of Bordeaux.

Anthracnose.—This is a disease which affects the young leaves, twigs and fruits and is caused by the fungus *Gloeosporium Mangiferae.* The fungus attacks the young leaves and twigs forming small dark areas and causes the shoots to die back. On older fruits black spots of various forms occur which are usually sunken and may coalesce to form large diseased areas and cause rotting of the fruit. The fungus can be checked on the shoots by cutting off and burning the twigs and spraying with Bordeaux mixture, and on the fruits by spraying with Bordeaux mixture or "Sulfinette" 1-2 per cent solution in water about once a week after the fruits have set until they are mature.

Leaf Disease.—The fungus *Pestalozzia Mangiferae* forms minute angular grey specks sometimes coalescing to form irregular dark patches on the upper surface of the leaves. The fungus is a weak parasite and does very little harm.

The above deals with the main pests and diseases commonly met with in cultivation, but it is important to remember that prevention is better than cure, and good sanitation and cultivation with the maintenance of a vigorous healthy tree in the best possible condition is one of the best safeguards, and the results of judicious applications of fertiliser at the proper time are important means of controlling insect growth as well as fungoid diseases.

Other enemies are undoubtedly squirrels and birds, and the picking of the fruit in a very unripe condition is usually the unsatisfactory means adopted to forestall these attacks. The depredations of flying foxes on ripening fruits have to be contended with and frequent firing at them with a gun scares away such depredators for a time and appears to be the most practical remedy.

9. GENERAL

Enarched and budded mangoes should normally fruit at four to six years from planting but there is great variation of fruiting age among different varieties. The tree normally reaches maturity at ten to twelve years of age and full crops can be

expected from thence onward for a period of a further twenty-five years or so after which the tree would begin to decline in yield.

Though grown and used chiefly for dessert purposes the mango has a variety of other uses also and in recent years small canning factories have been started in India for the purpose of preserving this fruit. There are varieties for this purpose and also for culinary purposes in respect to chutneys and pickling. The fruit when green is used in curries both in the fresh and in the dried stage or can be made into a curry which has a sub-acid taste, or thin honey-like cakes are made by squeezing the juice on plates or pans and allowing this to dry.

In regard to canning a small trade in this is being developed in India. Preliminary experiments in canning undertaken in the Ganeshkhind Botanic Gardens with a steam pressure canning apparatus capable of developing a pressure of 30 lb. per square inch, have proved that this can be successfully accomplished and it is believed that a taste for the fruit so treated can be created. As many as 18,000 cans of mangoes so treated is stated to have recently been shipped to England in a single year and on receipt were reported on as being well preserved and that the fruit retained their flavour quite as well as do peaches canned in California.

In the cultivation of mangoes in Ceylon the initial steps desired are the production of good, high quality fruits for dessert purposes. The question of grading, packing, etc., for shipment, or facilities for canning can well be left to a later date when the fruit is produced in considerably greater quantities. A local market exists for all that can be produced for many years hence and there is little doubt that boats calling at Colombo would also create a certain demand if regular supplies are forthcoming throughout the mango season.

For these purposes however marketing conditions need to be studied to some degree, and the Fruit Report of the Imperial Economic Committee published in 1926 covers the ground admirably. The report emphasises a feature applicable at this juncture, *i.e.*, that all countries which have succeeded in establishing a fruit trade have done so by means of (a) the planting of sufficient areas of a single variety; and (b) by the process of grading all such fruit.

The selection of the variety suited to the locality is important and some assistance can be afforded in this respect if the imported plants already in the locality can be studied. There are many such in the Jaffna, Anuradhapura, and Negombo districts and such are of course very suitable localities for the mango. It is not suggested that one district or locality should restrict itself entirely to any one variety of the fruit, but where a variety is selected it should be one of the best for that locality and that if more than one variety is grown each should be in an area sufficiently large to supply a good market demand.

The question of grading for market purposes is an intricate one but if the grower limits his selection to one variety he reaps a considerable advantage over the grower of several varieties since in the latter case no two successive pickings would be uniform. Where the grower operates on a large scale it is possible for him to market his own fruit, but for the smaller grower a trade organisation is called for with agencies at various centres to purchase the fruit from the grower and, by recognised and uniform methods of grading and packing, create a regular market and stimulate demand for this luscious fruit. Considering that nearly Rs. 800,000 worth of fresh fruit is imported into the Island annually, it is evident that home production of high-class mangoes on a sufficiently large scale can materially assist in reducing these figures.