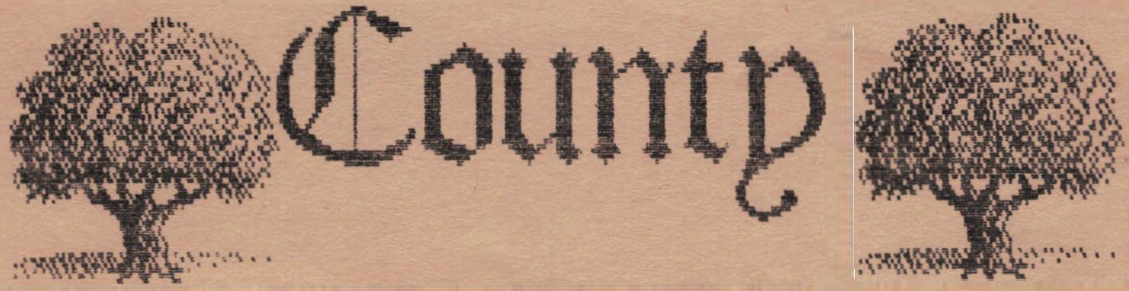
The Rare Fruit and Vegetable Council of Broward County



August, 1986

$1.25

TASTING TABLE
CHAIRPERSON
GERRI BUCHHOLZ
Phone-963-7364
***

DONOR	DONATED
Jane De Prado	6 Tommy Atkins Mangos
Jayne Morgenstern	2 Trays Tommy Atkins Mangos
Gerri Buchholz	2 Trays Tommy Atkins Mangos
W. Saltzman	Bag Strawberry Guavas
	4 Orimoco Bananas
Bob & Mary Heineman	15 Florigon Mangos
K.P. Bueker	15 lb. Lychee
	1 Carrie Mango
Alice Radomski	Mango Preserves
Hugo & Elvira Renda	Kent Mangos
Jackie & Roger Donjeon	Qt. Muntingias
Aileen & George Rhodeo	Wax Jambu

****

WORKERS

Josie Wian — Judy Cornell
Janice Tomarchio — Gerri Buchholz
Bill Buchholz

JAMS & JELLIES
CHAIRPERSON
JANICE TOMARCHIO
****

DONOR	DONATED
Harry Shay	20 Lbs. Sugar
Jo Clemens	Mango Puree

Sold at auction to somebody else, and it was just what you were looking for. Maybe it could have gone to you . . . if you had known it was coming up for auction.

(Sotto vo'ce . . . attend meetings)

PLANT AUCTION

AUCTION

***

BY: Henry Sachs
Assisted by;
Charles DeVoe

DONOR	PLANT
RFVC	Irvin Mango
Sold to Harry Klein	$15.00
RFVC	Keith Mango
Sold to Harry Klein	$17.00
RFVC	PALMER
Sold to Jack Brothers	$20.00
Hopkins Nursery	Jambu (Wax) "Stinarc"
Barbara Hopkins	Myrtaceae Rare
Sold to Henry Larrimore	$21.00
JoAnn Fronek	Imbi
Sold to Ruben De la Garza	$8.00
John Fronek	Brown Turkey Fig
Sold to Henry Larrimore	$9.00

Introducing the Staff of the

The Rare Fruit and Vegetable Council of Broward County Newsmagazine

EDITOR
ART — LYDIA E. TAI
LAYOUT DIRECTOR

*****

COMPUTER OPERATOR — LYDIA E. TAI

*****

CONTRIBUTORS — JAYNE MORGENSTERN
HAROLD MORGENSTERN

****

SPECIAL ACKNOWLEGEMENT:
Florida County Agricultural Agents:
Broward, Dade, IFAS, Gainesville.

A MESSAGE FROM THE PRESIDENT

EVANGELINE REED

My report is that it was a resounding success! Everyone knows I'm talking about the Mango Forum. The turnout-the channel 4 coverage, the reporter from the Sun-Sentinel were all in attendance.

The mango display ranged in shades from the golden hires to the peachy pinks that rolled into deep purple. It was glorious to behold and delicious and tempting to anticipate. It was a real foretaste of what was offered later at the tasting table.

The Mango judges were:

Lew Watson
Bob Reed
Hugh Meadors

They lined up the mango fruit entries, but believe me, it was a tough job. The plates were shuffled around, but finally the moment of truth arrived and all three agreed as the various colored ribbons were placed on each plate. There was silence in the room until Hugh started handing me the plates to make the announcements. From that step, it turned into pandemonium with the photographer & his trappings jockeying for position. The camera swept over the table of prized entries. We recognized Alice Radomski beaming her approval and then the camera zoomed into the kitchen area and hesitated long enough to get an opinion from Josie Wian & Gerry Buchholz and it all came out sounding "delicious". Our own Lew Watson was interviewed on all the specifics of the event. Last but not least, the purple ribbon & Grand Prize went to the Morgensterns. It was Jayne who acknowledged this on camera. As you can see, it takes many hands & faces to prepare a successful program. David Reasbeck won the first prize. Rose & Rene Irizarry won the 2nd prize. For the other mango winners, would you please contact me and next month, I'll submit the list for printing. Due to the excitement, the ID plates were not saved, thus the oversight.

This is slightly out of order, but our speaker of the evening was the charming Sandy Behnke the Home Economist on Staff at Broward County Extention. She injected whit and laughter into her presentation. The mirrored table had been rolled out to the center stage, so we didn't miss a thing as she dripped mango juice from the wrists . We said our thanks with a Certificate of Appreciation. She prepared multiple recipes on the side table for all to take and try themselves.

It's unfortunate, but some members did not get the Magazine until after the Forum. They were mailed out July 1st. This is a serious matter, but represents a problem on your route. Why not speak to your carrier and inquire if the 3rd class mail is now being shelved for an undue length of time. It now cost us approximate .75 cents for printing and postage, per copy, so may I remind you to renew your membership to help defray expenses. These nominal fees to join represent a wealth of knowledge and enjoyment that is derived from participation.

On another subject, PLEASE insert donated plants into plastic bags that are available in so many shapes and sizes. We had clean-up work to do on that side table and floor.

Continue your efforts in growing better and more fruit and you will derive joy in sharing.

The Prez

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^^^^^^^^^^^^
^   BOARD  ^
^ MEETING  ^
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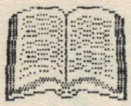
Monthly Meetings of the Board of directors held (unless otherwise noted) on the 4th Monday of each month. Next meeting will be Monday, August 28th, at 7:30 P.M. at the Broward Federal Savings. 3000 University Drive, Sunrise. (One block south of Oakland Park Blvd.)



BOOKWORM
By Jayne Morgenstern

ORTHO BOOKS latest contribution to the horticultural literature is ALL ABOUT CITRUS AND SUBTROPICAL FRUITS. As always with their book, there is no specific author but an editorial staff. it is an important addition to the fruit growers library no matter where located. For the South Florida reader, the in formation on all the fruits we raise, aside from the truly rare and exotic, from bananas to white sapotes is well documented and specified for different parts of the country, including how to grow them indoors. This latter information could easily be transferred to patio or porch growing.

There are recipes for the sub-tropical fruit included from our Cookbook which makes this volume a bit more personal than most publications. This excellent reference book is for sale at the Library table for $5.95.

PROGRAM HIGHLIGHTS
By: Jayne Morgenstern

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Comming Events

The speaker for August is a well known Mango authority who has 30 trees about which to talk. he is a past President of Rare Fruit Council International and member of the MANGO Forum. His summary of the mango situation this year will be interesting to all.

Past Events

The Fourth Annual Rare Fruit Seminar is now history. But as I am writing, it is still ten days away. however, I want to thank those faithful people who did so much to plan the program and make it possible. We began to meet in January and met again and again until the last detail was settled. They are Rose and Henry Sachs, Evangeline & Bob Reed, Bill and Lillian Taylor, Lucy and Jerry Wheeler, Kiki Moriconi, Harry Shay, Harold A. Morgenstern, Chris Howell, Catherine Byrne and several times, past President Henry Levy.

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Thanks to our coffee committee, Rose Sachs, Catherine Byrne, and Lillian Taylor. Also to our hostess and host Evangeline and Bob Reed, our Registrars Alice Radomski, Winnie Glover and Catherine Byrne. Our faithful Secretary Kiki Moriconi who also did the soliciting and packing of the Souvenir bags. And to the Treasurer who kept track of all the registrations and funds.

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Our name tags were beautifully written by Janice Tomarchio. There will be more people who will have contributed their time and skills when the Seminar takes place so this will be continued next month.

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From the July Meeting

The membership is most appreciative of the expertise of the MANGO FORUM judges Bob Reed, Hugh Meadors and Lewis Watson. Thanks also to Henry Sachs for pinch-hitting for Al Will who is out of the country at this time.

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HAPPY BIRTHDAY RFVC

Due to a crowded schedule at the June Meeting our birthday celebration was overlooked. So one of our conscientious members, Alice Radomski brought it to my attention. Our thanks to Harold A. Morgenstern for the traditional angel food cakes to mark the occasion. We are ELEVEN years old!

PRESTON B. BIRD AND MARY HEINLEIN
FRUIT & SPICE PARK
Chris Rollins, Director
24801 S.W. 187th Avenue
Homestead, Fl. 33031
Tel. (305) 247-5727

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August 9 Saturday — COOKING WITH TROPICAL FRUIT. 10:00 A.M.-1:00 P.M. Fee: $6.00. How to incorporate tropical fruit into your menu. Cooking demonstration taste samples, recipes and hints. Pat Porter and Sue Freundlich, Instructors.

August 30 Saturday — BANANA WORKSHOP. 9:30 A.M.-12:30 P.M. Fee $9.00. Cultivation of bananas, varieties, uses, insect and disease problems. Taste samples, question and answer period. Bill Lessard, Instructor.

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PLANT RAFFLE
CHAIRMAN
Charles DeVoe

***

DONOR	DONATED
Bob Reed	4 Cayman peppers
Wolf Saltzman	3 Orimoco Banana
	4 Cavendish
Bill & Gerri Buchholz	18 Mangos
Charles DeVoe	1 Apple Banana
RFVC	Assorted plants
Stan Del Riel	2 Monos Plums
	21 Papaya
Bill Petrowsky	32 Papaya
Guy Carmel	1 Egg Fruit
	1 Tropical Apricot
	1 Key Apple
Jo Clemens	4 Mulberry
	2 Malanga
	1 Tropical Almond
	1 Banana

The Meetingplace
Monday
August 4th,1986

Cooperative Extension
Auditorium
3205 College Ave.
Davie, Fl 33314

7:00 p.m. Receiving an viewing plants & seed
8:00 p.m. Meeting and

COMMAND PERFORMANCE!
Presenting

GUEST SPEAKER:
Mr. Frank Smathers

Mr Smathers is past president of Rare Fruit International, Miami, Florida. Mr. Smathers grows 30 varieties of mangos on his property and we could learn from his experience on mango growing. The evening should prove of interest to members and friends.

WILL SPEAK ON:

"VARIETIES ON MANGOS"

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WHEEL SERVICE

WHEN THE CROWD gathers for fun on your patio, give them free-wheeling service from wheel-barrow. Scrub it, line it with aluminum foil, then fill with ice. It's an ideal chilling cart for watermelon, keeps salad crisp, cools tropical fruits, (wrapped in foil), and for chilling tropical fruit drinks.

Continued on page 7.

MANGO

MANIGIFERA INDICA ANACARDIACEA
Native to Tropical Asia

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By Seek Brandon

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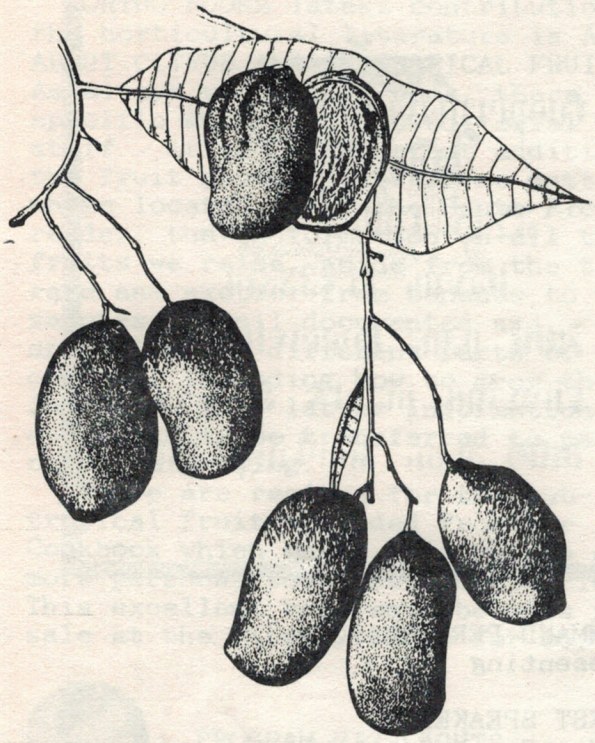

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Southeast Asian languages: manga (Tagalog); mangga (Malaysian); ma-muang (Thai).
Spanish;mango
West African languages: a-mangkoro, a-manko (Temne); ,mangoro (Yoruba, Hausa); mangolo (Ibo); mangro (Creole); mangwaro (Hausa); mangro (Mende); mano, manno(Twi)

WHERE IT GROWS

Some of the choicest varieties of the kingly mango, long guarded behind high garden walls of oriental potentates, can now be enjoyed by inhabitants of the simplest cottage in frost free regions. Though the mango is a native of Tropical Asia, from India to the Philippines, it has now spread to tropical and sub-tropical areas all over the world.

ORIGIN & HISTORY

This fruit has a proud heritage, with a written history dating back 6,000 years. Akbar, reigning emperor of North India in the 16th century, had an orchard of 100,000 mango trees planted, at a time when large fruit orchards were almost unknown. In the early 14th century poets sang praises of the mango. Buddha himself was given a mango grove, that he might seek repose under its shade.

Popenoe writes of the mango thus, "British authors have not hesitated to lavish praise on the oriental king of fruits, Fryer in 1673, wrote - The Apples of Hesperides are but Fables to them for Taste,, the Nectarine, Peach, and Apricot fall short. Hamilton in 1727, declared, - The Goa mango is reckoned-the wholesomeness and best tasted of any fruit in the World."

CULTIVATION

Cultivation and development of improved varieties has been going of for more than 4,000 years. This work is still under way, not so much to improve fruit quality or color of the most desirable sorts (some of which could hardly be surpassed but to develop varieties of more dependable fruiting habit. The long record of unpredictable crop production of the best varieties is the bane of commercial growers.

The mango is of greater importance to millions throughout the tropics than is the apple to temperate North America.

The tree is a quick grower, medium to large in size, usually with wide-spread limbs, but this varies somewhat with species. Seedlings on deep rich soil reach immense size and great age. One grown in Bahia, Brazil, had a trunk 25 feet in circumference, with a limb spread of 125 feet. Some of the trees in Akbar's orchard mentioned above, were found growing vigorously 300 years after planting. Budded or grafted trees do not grow as large as do seedlings and probably are shorter lived.

Tree form may be broadly round topped, erectly slender, or of somewhat open growth dependet upon variety and spacing. Most varieties assume a compact wind resistant form, unless crowed. If crowded, they will grow taller to seek the sunlight.

The lanceolate leaves, 10 to 12 inches or more in length, are borne on slender petioles 1 to 4 inches long, When young they are of a reddish copper color, hanging limply at first, becoming rigid and deep green as they mature. Flushes of new growth appear periodically and may occur only on one side of the tree at a time.

The small orangy pink flowers are borne in great profusion on large branched panicles: 4,000 or more may appear on a single panicle. Some will be perfect and some will be staminate. Trees of the Saigon race may have from 55 to 75 percent perfect flowers, while those of some other varieties may bear less than 5 percent. However, prolific production of bloom is no assurance of a good crop. Indeed, on some varieties, despite luxuriant bloom, there may be no fruit at all in some years. Causes of light or non-fruiting are not yet fully understood, even by experts. However, some progress has been made in the effort to correct this fault; especially in the control of anthracnose, a major cause of bloom and young fruit drop. Of fruit setting, Chandler has this to say "Light fruiting of some varieties, such as the Haden, seems to be due to embryo abortion rather than lack of pollination. Varieties and seedling trees, such as those in the Saigon race, that have such strong tendency to form nucellar embryos, some of which are rather sure to live and develop. are in part the cause of better setting in these varieties."

In South Florida, blossoming of many varieties occurs in January and February. However, some kinds may develop flower panicles over a period of weeks or months.

In 1915, an old Sandersha tree at the Plant Introduction Garden at Miami, Florida, bore some flowers every day from mid-January to late May. This is a good habit, since it increases the probability of fruit setting during dry periods when anthracnose causing fungi are not prevalent. Sometimes the entire tree comes into bloom, or flowering may be confined to one side or a small area of the tree.

Mango vary in size from a few ounces to 4 1/2 or 5 pounds. They develop rapidly after setting. In some hot climates the Saigon may reach full size 7 weeks from flower and ripen in 12 to 13 weeks.

The fruit is a single seeded drupe. The long flattish seed is enclosed in a tough woody husk. This husk is surrounded by the yellow to orange colored flesh, fibrous in inferior varieties, and without fiber or with very little in the choicest kinds. The whole is encased in a smooth moderately thick outer skin. Fruit size, color, form flesh texture, and flavor vary widely in the numerous varieties. In the best sorts the flesh is sweet and juicy, with a rich luscious taste of pleasing acidity and spiciness. The taste has been likened to a combination of pineapple and apricot. In the writer's opinion the mango resembles no other fruit in taste, but is certainly superior to most. However, as the wise natives of mango growing regions say, "there are mangoes and there are mangoes." Many of the turpentine flavored fibrous seedlings, found in all tropical areas, bear small resemblance to the rich delectable fruit of the choice grafted varieties, which have resulted from centuries of careful selection. However, production of the best sorts presents certain difficulties, chief of which is the tendency to irregular bearing.

During the mango season, many people break out with a skin rash, caused by the juice contained in the fruit stems and skins. Those so afflicted should take care when gathering or peeling th fruit to avoid getting the juice on the skin.

CULTURE

Propagation is by seed or vegetative means. Many common varieties, such as the Cambodiana, come almost true from seed and yield abundantly, but the best kinds are propagated vegetatively. Because of the erratic production of crops by most of the choicest varieties, it is perhaps wisest for the average home owner, wanting a dooryard fruit, to plant the Saigon or Cambodiana. While these are dependable bearers, they are not as colorful as the choicest kinds, but the taste is good and the larger production more than compensates for lack of vivid color and larger size.

Mangoes can be produced on many well drained soil types, from sandy rocky land to deep alluvial loam rich in humus; even well drained clay land is suitable. Good drainage is essential for fruit production. The trees themselves often thrive on wet low ground but will not ripen fruit. They may bloom and set some fruit in such locations, but it invariably drops off well before maturity. The best mango soils are those that dry thoroughly when no rain falls for a few weeks. Commercial planting as are best made on deep loose loam with good drainage and a high percentage of humus, though the comparatively shallow light sandy soil underlaid with oolitic limestone are entirely satisfactory when properly fertilized.

Popenoe quotes Faucett and Harrison on mango growing thus, "Although the mango grows freely every where it is not a fruitful tree in every district; in southern plains and the low, dry limestone hills its produces enormous crops year after year, and very often two crops a year, the main crop from May to August, and the second crop later in the year. In humid districts and along the northern coast the tree is no at all fruitful, except in very dry years, and in the wet districts like Castleton it rarely fruits."

Areas of warm summers, with frost free winters, are most suitable for mango culture. Mature trees of most varieties, if not in active growth, can withstand 28 to 29 degrees, if not of long duration. Old seedlings have withstood temperatures of 26.5 without losing more than the smallest branches. However, the physiological condition of the tree, local environments and other not too clearly understood factors may determine susceptibility of individual trees to cold. If the first or terminal bloom is lost by cold, but no injury is done to the bearing shoots, new flowering may occur later in the spring from lateral buds, but in some varieties these second panicales do not set much fruit. Young vigorous growing trees may be badly injured by a temperature of 32 degrees. Some protection against cold should be given young trees where winter temperatures fall below 33.

The ideal climate for mangoes is one where a dry season occurs several month before flowering, to induce dormancy, with continued dryness through blooming and fruit settling, to prevent attack by the dread disease anthracnose. Rains after fruit production encourage vegetative development, which is desirable. Precipitation can be 20 to 100 inches a year if a suitable by season occurs. Total amount of rainfall does not appear to be as important as the time it comes. Where dry season occurs during flowering and fruit setting, good crops usually ensue; but much wetness at blooming time generally results in poor fruiting, if any at all. Some of the seedling races will bear under such conditions, but choice varieties will not.

All authorities agree that a check of vegetative growth before the flowering season results in more abundant fruiting. In India, this done by ringing and hacking the trunk or by root pruning. Recent experiments indicate that liberal applications of potash are helpful. Withholding of nitrogenous fertilizers in the fall, a very dry season prior to bloom, or sometimes a frost, will accomplish the necessary check.

PROPAGATION

SEEDS

Seeds retain their viability only a short time and should be planted within two weeks of removing from the fruit. After that, the percentage of germination decreases. Seeds more than 4 weeks old seldom germinate. They should be washed, dried for a day or two, and the husks carefully removed with a sharp knife or heavy shears, being careful not to harm the enclosed seed.

They are planted, convex side up, leaving a small part above ground. Five or six inch pots, filled with a light potting soil may be used; or they may be sprouted in beds of sawdust or coconut fiber and the sturdiest then potted.

Germination will start in one or two weeks in warm weather. Seeds from fruit of Indian origin usually contain one embryo, while those of West Indian races are several. If more than one sprout appears from the same seed, all but the strongest one should be

destroyed.

Transfer to larger pots should be done as often as necessary to prevent root-binding.

The general practice is to use seeds of the commoner sorts; like turpentine and peach mango as root stock.

GRAFTING

Mango grafting follows the same techniques used in all other tropical horticulture. Inarching is the easiest method for beginners to use for vegetative propagation. Both the scion and the stock must contribute callus to a successful union. The mango is a poor producer of TRAUMATIN, a hormone that causes cells of the cambium a wound to reproduce rapidly and form a callus. Three factors contribute to the success of a mango graft and are as follows:

1. Vigorous, healthy rootstock.
2. Scions with a goodly store of carbohydrates.

Triming - most often the reason for failures. The graft must be made at the beginning of a strong growth cycle. If the scion has to wait, its precious viability wanes by the ticking of the clock and desiccation sets in and before it starts, it is finished.

The age of the seedling stock plant does not appear to be important: plants from 3 weeks to 3 years old have been used. Seeds sown in mid-summer make sturdy plants for in-arching by the following fall or winter. Such trees are then ready to set out by the next spring or summer.

While well grown nursery trees may be set at any time of the year, if the weather is warm and trees are not in active growth, the best time is from April to October. The labor of watering and furnishing protection from cold and wind, for trees set from November through March, is considerable.

Some authorities recommend that about 20 lbs. of fresh bones be placed in each planting hole, covered with a layer of soil and the plant set. However, the following method is usually practice. Planting holes are dug two to three feet wide and sufficient depth to accomodate the plant at the same level it was growing in the pot. An ounce or two of a well balanced commercial fertilizer and an ounce or two of steamed bone meal is then mixed with some topsoil and put in the bottom of the hole. This is covered with a thin layer of soil, to prevent roots from coming in contact with the fertilizer, and the plant set.

Top soil is filled in around the sides carefully firmed to prevent formation of air pockets about the roots, and the whole well soaked with water. A heavy mulch should then be spread about the tree, keeping it well away from the trunk. Frequent watering and light shade should be given until the tree is well established.

Fertilizer formulas vary with different soils and trees of various ages. On newly scarified limestone soil a 5-7-5-2 formula containing the secondary elements (copper, zinc, and manganese) with 30 percent of the nitrogen taken from organic sources, is suitable. Muck and peaty soil require low nitrogen formulas. Alkaline marl soils need 1 to 2 percent manganese added.

Fertilizers are applied under and slightly beyond the leaf spread, raked in and well watered. Young trees, set without root disturbance, may be given 4 to 8 ounces right after planting. For root pruned or older trees, it is best to wait several weeks to make the first application. Additional applications should be made every month thereafter, excepting the period from November 1 through January, when frosts are likely; increasing the amounts to one pound by the end of the first year. 2 pounds by the end of two years. 3 pounds by the end of the third year. Second and third year applications may be made 60 days apart, doubling the usual monthly amounts.

For the fourth and fifth years a formula of 5-5-5-3, with secondary elements, is recommended, with applications 90 days apart and in amounts not exceeding 1 pound per year of age of the tree per application.

Trees should not be allowed to bear until the trunks are about 2 1/2 inches in diameter. However, it is better not to remove the small fruit until April first or later, leaving the flower stem on the tree to dry up. If fruit or flowers are removed earlier, the tree may bloom again.

BEARING TREES

It is readily admitted by all authorities that no provable "best formula" has yet been worked out for bearing mangoes. They grow and produce in many different soils and under widely varied nutritional programs.

Apparently no definite fertilizing program is best for all conditions. In general it is recommended that heavy applications be made in years of heavy fruit production and light ones in years of sparse crops.

Younger trees with a high nitrogen supply have shown zinc deficiency in southern Florida, but older trees obtain zinc enough from soils that do not supply enough to citrus, avocado, guava, or peach trees.

There are special requirements for other elements or special response to deficiencies. Good growth on exceedingly shallow, impervious soils suggest that the trees may have greater ability than some others to obtain phosphorus and potassium from situations where these elements may be in slowly available combinations. In soils badly leeched and low in all elements, mango trees will most certainly respond to all major nutrients in fertilizers."

The following schedule for guidance in applying fertilizers to bearing trees, but suggests that growers get the latest information on the subject from their nearest agricultural station:

1. When bloom panicles begin to lengthen, apply to each tree at the rate of 1/2 pound for each year of age, a 10-0-10 formula (with quickly available nitrogen). At this rate a 5 year old tree would receive 2 1/2 pounds and a 15 year old tree 7 1/2 pounds. This ration has been worked out for trees spaced 30 feet apart each way or 36 pounds per acre. If trees are closer, do not exceed 36 pounds to the acre.

2. Thirty to sixty days after the above application, if there was a good set of fruit, apply at the rate of one pound per tree per age, a 5-7-5-3 formula, with 25 to 30 per cent organic nitrogen and containing the secondary elements (copper, zinc, and manganese). On muck soils nitrogen should be reduced up to one half. On alkaline soils one to two per cent of manganese should be added. Unless a good set of fruit occured this applications should not be made.

3. After harvest, from late May to late June, use the same formula and amount as for the second application.

4. If an exceptionally heavy crop was produced the previous season or if driving rains have leached out the early summer application, make a fall application of a 3-8-8-3 formula with minor elements, at the rate of one pound per year of age per tree but not exceeding 36 pounds per acre.

If no crop was produced and no heavy rains occured this application should not be made. If needed the trees will exhibit some hunger signs such as lack of a healthy dark green color in the foliage.

DISEASES

Successful control of fungus diseases requires that all susceptible parts of the plant be thoroughly coated with the fungicide before infection occurs. Sprays applied after infection (which occurs several days before the disease is evident) have no effect on ease development. Sprays must be re-applied as new tissues become exposed by growth and as spray residues are reduced by weathering. A successful program depends on (1) The right amount of a recommended fungicide, (2) timely applications before infection is most likely to occur and (3) thorough coverage of susceptible parts.

Anthracnose (Colletotrichum gloeospor-ioides). The most important disease of mango in Florida. Attacks flowers, young fruits, leaves and twigs. Appears as a black, slightly sunken lesions of irregular shape, which gradually enlarge and cause blossom blight, leaf spotting, fruit staining and fruit rot. Development is encouraged by rains or heavy dews. Prevention can be accomplished by maintaining a coating of a fungicide on susceptible parts.

Mango scab (Elsinoe mangiferae. Attacks leaves, flowers, fruits and twigs. In early stages, resembles anthracnose. Lesions of fruit usually become covered with corky brown tissue. Causes distortion of leaves and is particularly severe in

nurseries. Usually not important in commercial groves. Anthracnose spray program controls scab in commercial groves. Infection in nurseries can be prevented by frequent sprays of neutral copper on young leaves.

Powdery mildew (Oidium sp.). Attacks leaves, flowers and young fruits. Infected tissues are covered with whitish powdery growth of the fungus. Lesions develop along the midrib on under sides of leaves and become dark brown and greasy-looking as leaves mature. Severe infections cause failure of fruit set and defoliation of trees. If mildew occurs in the grove, applications of sulfur will prevent spread of infection to new growth.

PESTS

The most important pests in Florida are mites, scale insects and thrips. Although these pests seldom seriously limit fruit production, they occasionally build up populations large enough to require control measures. For more information and control measures, consult your county agricultural extension agent.

RIPENING AND STORAGE

The best temperatures for ripening are 70 to 75 F. Fruits ripened at higher temperatures often shrivel and develop off-flavors. Mature fruits ripen in three to eight days after harvest. Ripening can be delayed by cold storage to facilitate shipment of fruit to market. The lowest safe storage temperature is 55F.

PRODUCTION

The number of fruits which set and mature is very small in relation to the number of flowers produced by the tree. most commercial varieties in Florida produce on the average less than one fruit per panicle of flowers and therefore are considered to be shy bearers.

Grafted trees will begin to bear 3 to 4 years after planting. in Florida, average yields of 3 to 5 bushels can be expected from mature trees. Greater yields are possible with good management and favorable weather. Fruit of most varieties matures from May to September, with greatest production in June an July. The period of development from flowering to fruit maturity is 100 to 150 days. In warmer areas of the world, less time is required.

HARVEST

Although mangoes may be used in cookery while still green or half ripe, fruit intended for shipping, eating out of hand or for use as a fresh dessert fruit, should not be picked until some color is apparent. If picked too green they ripen with a wrinkled skin and inferior flavor. Fruits allowed to fully ripen on the tree have a full rich taste, lacking at immaturity.

Harvest of a moderately heavy crop of one variety may spread over a period of five weeks or more. Unless the fruits are to be used immediately, care should be taken not to bruise them in the picking. A long handled pole with a canvas bag and cutting knife on the end is the best tool. Two to four fruit may be cut, the bag lowered, and carefully emptied into a large container. Wire picker's are now available that do a fine job.

VARIETIES

There are two broad general classifications for mangoes. Those grown from seed and those propagated vegetatively by budding, grafting, mossing off, etc. Of this Popenoe writes "The seedling races of the tropics are, so far as has been observed, poly-embryonic in character. Three to ten plants commonly grow from a single seed. Since these develop vegetatively from the seed tissues, they are not the product of sexual reproduction, but may be compared to buds or cions from the parent tree. Most of the grafted Indian varieties have lost this characteristic. When their seeds are planted a single young tree develops, and this is found to differ from its parent...Usually the fruit is inferior, and the tree may be quite different in its bearing habit.

"When mono-embryonic seeds are planted, the fruit is likely to be inferior to that of the parent, if the latter was a choice variety; with polyembryonic seeds...the trees produce fruit closely resembling that of

the parent."

Obviously, the small grower wanting choice fruit is wiser to get trees yielding quality fruit and known good producing habit, than to experiment on his own with seedlings that do not produce trees resembling their parents. However, unless the grower plans to sell the fruit, trees of some seedling races (polyembryonic) are perhaps the best choice, because they are more dependent bearers of larger crops.

Growers are urged to taste fruit of many different varieties before chossing their trees.

MANGO CALENDAR

There are thousands of mango varieties now in existance. Enough are given here to enable the home owner to choose good quality fruit, producing at various time of the year. Ripening dates may vary as much as several weeks in different years because of climatic or other limiting factors, not too well understood at present.

MAY (Sometimes)to early JULY

Cambodian	Irwin(June to
Florigan	Early July)
Haden	Zill

JUNE - - JULY

Alice(Sometimes Aug.)	Irwin
Amini	Julie
Carrie	Lippens(Late
Edward	June-July)
Fascell (Late June-July)	Philipine
Glenn	Sunset(Late
	June-July)
	Tommy Atk-
	ins

JULY - - AUGUST

Ameeri	Jakarta
Anderson	Nam Doc Mai
Borsha	Paheri
Davis-Haden	Simmons
Golden Brooks	Smith
Grahm	Southern
	Blush
Hatcher	Springfels
Herman	Valencia
	Pride
	Wally

JULY - - AUGUST(Sometimes Sept.)

Kent	Palmer

AUGUST - - SEPTEMBER

Brooks(Sometimes Oct.)	Sandersha
Keitt	Sensation

The following are brief descripthins of the types mentioned in the above calendar:

Alice. A second generation Saigon seedling yielding fair sized crops of medium sized oblong well colored fruit with deep crimson blush; of good eating quality and containing practically no fiber.

Ameeri. An introduction from Bamboo, India about 1901. Fruit elongated oblong in form, with yellow to orange colored fiberless flesh; of good eating quality. Skin color ranges from greenish to crimson blush. Weight ranges from ten to fifteen ounces. Seed is monomaniacs.

Amini. Introduced from Bungler, India in 1901. A fairly reliable bearer of small oval fruit, fiberless and of an excellent spicy aromatic flavor. The skin is of a deep yellow color, shading to crimson at the base. The seed is quite large.

Anderson. Apparently a seedling of the Sandersha. A regular moderate bearer or long oval fruit, from nine to ten inches long and weighing from 2 1/2 to 3 1/2 pounds. The skin is yellowish green to orange yellow, with a light crimson blush at the stem end. The flesh is light to deep yellow in color, almost fiberless and of good eating quality.

Borsha. Introduced from India in 1902. The ovate orange fleshed fruit, weighing from ten to eighteen ounces, is fiberless and of very good flavor. It is greenish yellow in color, with a dark crimson blush, a slight lavendar bloom and many large yellow dots. Crops increase in size after ten to twelve years of age.

Brooks Late. A seedling of the Sandersha propagated commercially in Florida since 1924. The fruit weighs from one to two pounds, is oblong in form, and yellowish green in color, often with a scarlet blush and scattered white dots. The bright yellow flesh is moderately aromatic, of fair dessert quality, and fine for culinary purposes. The late season compensates somewhat for lack of color and richness.

Cambodiana. A seedling introduced from Saigon in 1902. A good producer of medium sized fruit weighing 5 to 10 ounces, of broadly oval form, greenish yellow to deep yellow outer surface and fiberless. The deep yellow flesh is of a pleasant aromatic flavor.

Carrie. A second generation seedling of the Julie. A fairly regular bearer of long medium sized fruit, orange yellow in color, fiberless, and of fine eating quality. A good dooryard tree, but because of its lack of crimson color will probably not become commercially important.

Davis-Haden. A Haden grafted onto an unknown seedling. A bearer of large oval fruit 1 1/2 to 2 pounds in weight, orangy yellow, with a purplish red blush and scattered large white dots. The orangy yellow flesh is almost fiberless and of rich aromatic flavor.

Edward. A cross between the Haden and Carabo. A producer of medium to large sized fruit weighing from 16 to 20 ounces; oval to oblong in form, with golden yellow almost fiberless flesh of excellent rich flavor. The densely crowned, rater low growing tree is most attractive for dooryard planting.

Fascell. A seedling of the Brooks Late. A regularly prolific bearer of medium sized ovately formed fruit weighing from 8 to 16 ounces. The pale yellow skin, blushed with deep carmine, has large scattered white dots. The flesh is fiberless and of rich aromatic flavor. A good shipper.

Florigon. A seedling of unknown parentage. Bears plump ovate fruit 8 to 16 ounces in weight, greenish to deep yellow in color, faintly blushed on upper sides, with light grayish bloom and many small yellow dots. The deep yellow fiberless flesh has a rich aromatic flavor. Seeds polyembryonic.

Golden Brooks. Seedling of the Brooks. Bears good crops in alternate years, of good sized fruit 1 to 1 1/2 pounds in weight, light greenish yellow, with white dots and light red blush on upper side. The orange yellow flesh, with some fibers, is sweet and of fair quality.

Haden. A chance seedling of the Mulgoba. Bears plump oval fruit 12 to 24 ounces in weight. Base color yellow, with attractive deep crimson blush. The almost fiberless flesh is firm and of excellent quality.

Herman. Seedling from a Saigon type. A prolific consistent producer of large fruit 1 1/2 to 2 pounds in weight, yellow base color, blushed with dark carmine. Almost fiberless orange yellow flesh, sweet and of good quality.

Irvin. Seedling of a Lippens, which was the seedling of a Haden. A consistent bearer of medium sized fruit, 3/4 to 1 pound in weight, orange yellow base color, with crimson blush on upper half and scattered white dots. The firm orangy yellow flesh is almost fiberless, with a rich aromatic flavor.

Julie. Introduced from Trinidad in 1902. A prolific bearer of small to medium sized fruit, with orange yellow base color, shading to a deep carmine blush. The rich spicy orange colored flesh is of good quality. Seed is mono-embryonic.

Keitt. A seedling of the Mulgoba. A producer of medium sized to large fruit, weighing from 1 to 1 1/2 pounds; oval in form; bright yellow ground color, pink blushed on upper side with scattered light yellow to russett dots and lavendar bloom. The firm deep yellow flesh is rich and sweet in flavor with few fibers. A good shipper. Said to be the best of the late mangoes.

Kent. A seedling of the Brooks, bearing plump ovately formed large sized fruit, weighing 1 1/4 to 1 3/4 pounds; greenish yellow ground color, with dark crimson blush and light grayish bloom, overspread with numerous small yellow dots. The firm, deep yellow to orange flesh is fiberless and of excellent quality. The seed is mono-embryonic.

Lippens. A seedling of the Haden, bearing plumb oblong fruit of medium size, from 3/4 to 1 pound in weight; deep yellow ground color; light crimson blush with slight lavendar bloom and numerous small yellow dots. The fiberless deep yellow flesh is of excellent quality, rich, sweet and moderately aromatic. The seed is monoembryonic.

Paheri. Introduced from Bombay, India in 1902. Bearer of small to medium sized fruit, oval in form, 6 to 12 ounces in weight, greenish yellow base color with garnet red blush (lacking in shaded fruit) and sprinkled with numerous white dots. The firm yellow orange flesh is fiberless and of excellent rich spicy flavor. Grown mostly as a yard tree.

Palmer. A seedling of unknown parentage, now propagated commercially. Bears well rounded oblong, medium sized fruit from 1 to 1 1/2 pounds in weight; orange yellow ground color, blushed with pink to crimson.

The firm yellow orange flesh is almost fiberless, sweet when ripe and of fair to good quality.

Sandersha. Introduced from Bangalore, India. A prolific consistent bearer of large sized fruit; oblong in form; weighing from 1 to 3 pounds; golden yellow in color, sometimes blushed with scarlet. The fiberless orange yellow flesh is tart in tast and more suitable for pie making and other culinary uses than as a dessert fruit. Seed is mono-embryonic.

Sensation. Ancestry not known. Bears medium small fruit weighing 10 to 12 ounces; oval in form; light to deep yellow ground color; blushed with plum red, and dotted with many small yellow spots. The mild slightly sweet flesh is almost fiberless and of good quality.

Simmonds. Seedling of a cross between the Haden and Carabo. Bears medium to large sized fruit, 3/4 to 1 1/4 pounds in weight, ovate to oblong in form, greenish yellow to yellow in color with lavendar bloomed crimson blush on upper side and sprinkled with small yellow dots. The juicy orange yellow flesh is almost fiberless, of good quality and pleasant spice flavor.

Smith. Seedling of the Haden. Bears large sized fruit, 1/2 to 2 pounds in weight; orange yellow ground color, with deep crimson blush and scattered large white dots. The firm orange yellow flesh, of good quality, is almost fiberless and of pleasant sweet flavor.

Springfels. Seedling of the Haden, thought to have been polinated by the sandersha. Bears large sized fruit from 1 1/2 to 2 pounds in weight, chunkily oblong in form, light to orange yellow ground color with deep maroon blush, shading to light crimson, with numerous large dots. The firm light to orange yellow flesh of sweet flavor (rich) contains a small quantity of fine fiber, but not enough to be objectionable.

Sunset. Ancestry not known. Bears small to medium sized fruit to 12 ounces in weight; oval to oblong in form; with yellow ground color, bright red blush, and scattered small yellow dots. The juicy, fiberless flesh is of good quality, with a pleasant tarty sweet taste.

Zill. Seedling of the Haden. Bears small to medium sized fruit 1/2 to 3/4 pound in weight, of ovate form, greenish yellow to dip yellow ground color, light to dark crimson blush, lavendar bloom and many small yellow dots. The firm fiberless orange yellow flesh is of very good quality with a sweet, rich, pleasantly aromatic flavor.

USES

In many tropical areas, the mango is the chief food fruit of summer. It is the tropical equivalent of the apple in the diet and can be used in all stages of development, from tiny green fruits to fully ripened ones.

In the Dutch East Indies, even the seed kernels are made into flour, mixed with sugar and coconut mulk and eaten as a porridge. Very small green fruits resembling olives are pickled in vinegar. Larger fruits, in all stages, from green to half ripe are used for pickles, chutneys, sauses, pies, puddings, cobblers, preserves, marmalades and for jelly making. Sliced mangoes may be canned like peaches. They also freeze readily.

Fruits - some of the common turpentine varieties and those of the Saigon race, such as the Cambodiana, are more dependable bearers and are entirely suitable for all manner of processed food products. They should not be overlooked in the constant search for a fruit of more glamorous appearance for the fancy fruit trade.

When fully ripe, the mango can hardly be excelled as a dessert fruit. They may be peeled and eaten out of hand or sliced and used in all sorts of fruit salad mixtures.

FOOD VALUE

The caloric value of mangoes is approximately 320 to 350 calories per pound of edible portion. They are an excellent source of vitamin A, a good to fair source of ascorbic acid and niacin, a fair source of riboflavin, and contain a small amount of thiamine. Green or half-ripe fruits contain more ascorbic acid than when fully ripe. Vitamin content and caloric value may vary somewhat with different varieties and growing envyronments. Following is an average evaluation.

Water	81.20
Protein	0.40
Fats	0.32

Sugars	13.54
Carbohydrates	1.48
Fiber	2.52
Ash	0.54

MANGO RECIPES

Mango Jam

12 cups ripe mango slices
4 cups water 2 cups sugar

Cook mango slices in water until tender (about 15 minutes). Press through a sieve. Add sugar and boil until thick, stirring to prevent scorching. Spoon into hot sterilized jars and seal with parafin. More sugar may be used if desired.

Mango Butter

10 cups half ripe mango slices
2 to 3 cups water
6 cups sugar
1/2 tsp. ground cloves
1/2 tsp. ground allspice
1 tsp. ground cinnamon
1 tsp. ground nutmeg

Add water to mango slices and cook until soft enough to mash. Press through a sieve if mangoes are stringy. Add sugar and spices. Cook slowly until thick (45 min.). Stir frequently to prevent burning. Pour into hot sterilized glasses and seal with paraffin.

Mango Mousse

1 Tbsp. unflavored gelatin
1/4 cup cold water
3/4 cup sugar
1/2 cup hot water
Pinch of salt
1 cup insinuated sauce
1 Tbsp. lime juice
1 1/2 cups whipping cream or dairy whip

Sprinkle gelatin on cold water and let stand for 5 minutes. Combine sugar and hot water, bring to boiling, add softened gelatin and stir until dissolved. Cool, add mango, salt, and fruit juice. Freeze in refrigerator tray to consistency of muss, then fold in cream which has been whipped until stiff. Return to tray and freeze 4 to 5 hours.

Tropical Fruit Cocktail

Combine small mango and pineapple chunks with lychee halves and surinam cherries for a delicious tropical fruit cocktail.

Mango Brown Betty

2 cups half ripe mango slices firmly packed in cup.
3 Tblsp. margarine
2/3 cup bread crumbs
3/4 cup brown sugar
1 tsp. cinnamon
3 Tblsp. Water, unless mangoes are very juicy

Melt fat and add bread crumbs. Place layer of bread crumbs in oiled baking dish and add layer of mangoes. Sprinkle fruit with sugar and cinnamon and add another layer of crumbs, then of mangoes. Add water and place crumbs on top. Bake in moderate oven (350) until mangoes are soft (about 1 hour). Serve with lemon juice or ice cream.

Canned Mango

Select firm ripe or half ripe mangoes that are not fibrous. Peek and slice lengthwise into large slices. Use remaining pulp for sauce. Prepare sufficient medium syrup (1 cup sugar to 1 cup of water) to cover fruit.

Open Kettle Method

Add mango slices to hot syrup and cook 10 to 15 minutes, or until edges become transparent. One tablespoon of lemon juice may be added for each pint if desired. Pack slices in hot sterilized jars, cover with boiling syrup and seal at one.

Water Bath Method

Add mango slices to hot medium syrup (1 cup sugar to 1 cup water). Cook ripe fruit five minutes, half ripe fruit, ten minutes. Pack in hot sterilized jars and cover with boiling syrup, to within 1/2 inch of the top. Seal and process fifteen to twenty minutes.

Pressure Cooker

Pack partially cooked mango slices, prepared as directed in water bath

method, in hot sterilized jars. Seal and process five minutes at ten lbs. pressure.

Fruit Cup(Mangoes,Lychees,Papaya)

1/2 cup sugar
1/2 cup water
1 tsp. fresh ginger grated
1 Tbsp. lemon juice
1 cup seeded fresh lychee halves
1 cup sliced papaya
2 cups sliced mango

Into a small saucepan, bring sugar, water and ginger root to a boil and cook five minutes. Strain, cool and all lemon juice. Marinate fruit in the syrup 30 to 60 minutes. Serve as dessert or appetizer.

Fruit Mold

2 Tlbsp. unflavored gelatin
1 cup water, cold
2/3 cups boiling water
pinch salt
1 tsp. ginger root, chopped
1 cup mango sauce
1 1/2 Tlbsp. lemon or lime juice
1/4 cup pineapple juice
1 cup crushed pineapple, drained
1 cup ripe papaya cubed

Sprinkle gelatin over cold water and let stand for 5 minutes; add boiling water, and stir until dissolved. Add salt, ginger, then cool. Combine with mango sauce and fruit juices. Chill until mixture begins to congeal. Stir in papaya and pineapple. Pour into mold and chill until firm. Serve as dessert or with lettuce and mayonnaise as a salad.

Ice Cream

Use plain vanilla ice cream as a basis. To each pint, add one pint of ripe mango pulp and freeze.

Chutney (A)

2 cups vinegar
3/4 lb. br.sugar
1 lb peeled sliced mangoes
1/2 lb currents
1/2 lb raisins
1/4 lb blanched almonds
3 oz sliced green ginger
1 Tbsp. salt
1/2 Tbsp white mustard seed, tied in bag
1/2 cup chopped onions
1/2 cup chopped peppers
1 oz chili or hot peppers

Combine the vinegar and sugar and bring to a boil Add all the other ingredients and cook for about thirty minutes or until the syrup is thick and the fruit is clear. Discard the spice bag and seal in hot sterilized jars.

Chutney (B)

5 lbs. mangoes, peeled and sliced
2 lbs. apples, peeled and sliced
1 lb. preserved ginger
1/2 lb. pitted dates
1/4 lb. seedless raisins
2 Tblsp. salt
Juice of 2 lemons
1 Tblsp. cayenne pepper
1 Large onion
1/2 tsp. nutmeg
3 bay leaves
1 qt. cider vinegar
4 lbs.sugar
2 Tblsp. lime juice

Chutney (C) with Papaya

5 lbs green mangoes, peeled and sliced thinly
2 large chopped onions
2 green peppers chopped
4 oz chopped preserved ginger
1 cup chopped firm-ripe papaya
2 cloves garlic, chopped
1 lime,seeded & chopped
1 cup seedless raisins
1 Tblsp cinnamon
1 tsp ground cloves
1 tsp allspice
2 tsp salt
3 cups brown sugar
4 cups vinegar
1/4 tsp cayenne pepper
6 tamarind pods

In a preserving kettle, combine all ingredients except the tamarind pods. Bring to a boil and cook until the fruit is tender. Shell the tamarind pods and let the seeds and pulp stand in water to cover until the seeds can be easily removed. Add more brown sugar if the chutney is too tart and boil gently for 1 hour longer, stiring often. Turn into sterilized bottles or jars and seal.

Frozen Green Mango Sauce

Cook four cups green mango slices with

1 1/2 cups water until tender; stir in 1/2 cup of sugar. Press through a sieve, chill quickly, package and freeze. Serve with meat dishes, as a dessert or use as a tart filling.

MARKHAM PARK
HARRY ZEZ

***

HELP!! HELP!! HELP!!

MARKHAM PARK is in dire need of some able-body people to stave off the effects of summer. While summer is play time for many, the plants at Markham Park need:

1. Reppoting - when you gotta grow, you gotta grow! The plants are outgrowing the pots they are in at the present time and must have larger quarters to be healthy and make us wealthty! (at sale time)
2. Plants must be sprayed, fertilizer-fungicides and insecticides. (Somebody have been eating my leaves and I am feeling anemic)
3. Weeds must be pulled from the containers. No need for competition in the feeding department.
4. Many of our dedicated people are on a well deserved vacation and I am certain that some members, overflowing with T.L.C. will come to the aid of the needy fruits and vegetables.

***

I would like to pass on a tidbit or two pick up at Markham park:

1. do not smoke when working with tomatoes. The mosaic virus can be passed on to tomatoes. Suggestion is to wash hands with milk before tending to plants. (Sept. '85 bulletin)
2. August is the month to apply nutritional spray on avocados, mangos and citrus. Feed trees and shrubs lightly if heavy rain is frequent. Scales whiteflies cause sooty mold. Use soap & water or malathion spray.
3. Do not use malathion in papaya

***

Lack of knowledge is not an excuse for not coming to Markham Park. There are many basics that can be learned quickly and then the expertise seems to grow like topsy. For any effort you put into "playing in the dirt' you get much more in return.

We are in need of bodies to start, but you can rest assured the minds come along and it is amazing how these minds grasp the details and expand into experts. So, as if you have not heard these words before, let me say to you "Come on down to Markham"

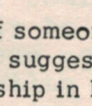
***

P.S. There have been requests for Sunday A.M. sessions at Markham park. Interested future horticulturists, folks with a zest for knowledge and a desire for hands on experience, please contact our secretary, Kiki Moriconi. If sufficient interest is expressed, possible these sessions could start either September or October.

" Keep your green thumb up."

Harry Dugowson

Think of someone that you can suggest for membership in RFVC.



REMEMBER!

Someone thought of YOU!

DO YOUR FRIENDS A FAVOR

WHEN YOU SEE our friends, neighbors, and relatives at social functions, it seems like we talk about everything under the sun - everything except RFVC, that is!

Especially when we've been members for a while, it's all to easy to take advantage of RFVC membership for granted - and to forget how much our friends, neighbors, and our relatives would enjoy them, too.

Think about it. Who else but RFVC offers you (and your spouse) so many valuble benefits and information in gardening, outstanding agricultural speakers at our monthly meetings, and a most informative newmagazine - for just $15.00 a year? Why not do them a favor and have them join. Do it today.

****
* SEED EXCHANGE *
* CHAIRPERSON *
* WINNIE GLOVER *
****

RALHP LYNAM again donated a rare treat
for our Oriental members; eight beautiful bitter melon (Foo Gua).

Also if you missed the table, you missed fresh seeds from Homestead. White Sapote, Wampi, Pitomba, yellow Jaboticaba, Kei Apple and Sweet Tamarind seeds were brought in by Winnie from the field trip of Al Will class.

Left over seeds will be planted up for later sales. The seeds would not be viable for next months meeting.

*****

THE TREE TOMATO
CYPHOMANDRA BETACEA

This small tree is found throughout tropical highlands and is a native of the Andean region of Peru. It also will grow quite well in sub-tropical lowlands.

It requires deep moist fertile soil, can be grown from seeds or cuttings. It is a fast growing tree that will fruit in 1 1/2 - 2 years and continues to bear for 5 or 6 years.

Some people enjoy eating the fresh fruit, but it is usually stewed or used for jelly or chutney.

STEWED TREE TOMATOES

Ripe tree tomatoes
Sugar
Water

Wash and place in pan, cover with water and bring to a boil. Add sugar to taste and simmer till fruit is soft.
Serve as you would any stewed fruit.

TREE TOMATO JELLY (JAM)

Ripe tree tomato
Sugar
Water

Wash and grater the fruit, cover with water and cools till fruit is muchy. Strain and remove all skins and seeds. Weigh the pulp and return to pan. For each 1 lb. of pulp add 12 oz. of sugar.

Add the sugar to the pulp and boil till it thickens. When setting point is achieved pour into sterile jars. Water bath for 10 minutes.

TREE TOMATO CHUTNEY

4 Lb. tree tomatoes
3 lb. sugar
4 oz. of garlic or shallots
2 pints vinegar
2 lb. raisins
Pinch salt and cayenne pepper

Wash and slice tree tomatoes, place them with the vinegar in a pan and bring to a boil; add sugar and simmer till jam-like. Mince the raisins and add them and chopped garlic to the mixture. Season with salt and cayenne. Boil 5 more minutes, bottle and water bath 10 minutes.

Winnie Glover

ONIONS AND BURNS

"JUICE OF ONIONS is good for scalds and burns." Onions are antiseptic and contain phosphorus, calcium, magnesium, sulphur, sodium, potassium and citrate of lime. Onions also contain vitamins A, B, traces of iodine zinc and a substance which resembles insulin in its ability to reduce sugar levels and a substance that stimulates the pancreas.&&&