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the pits

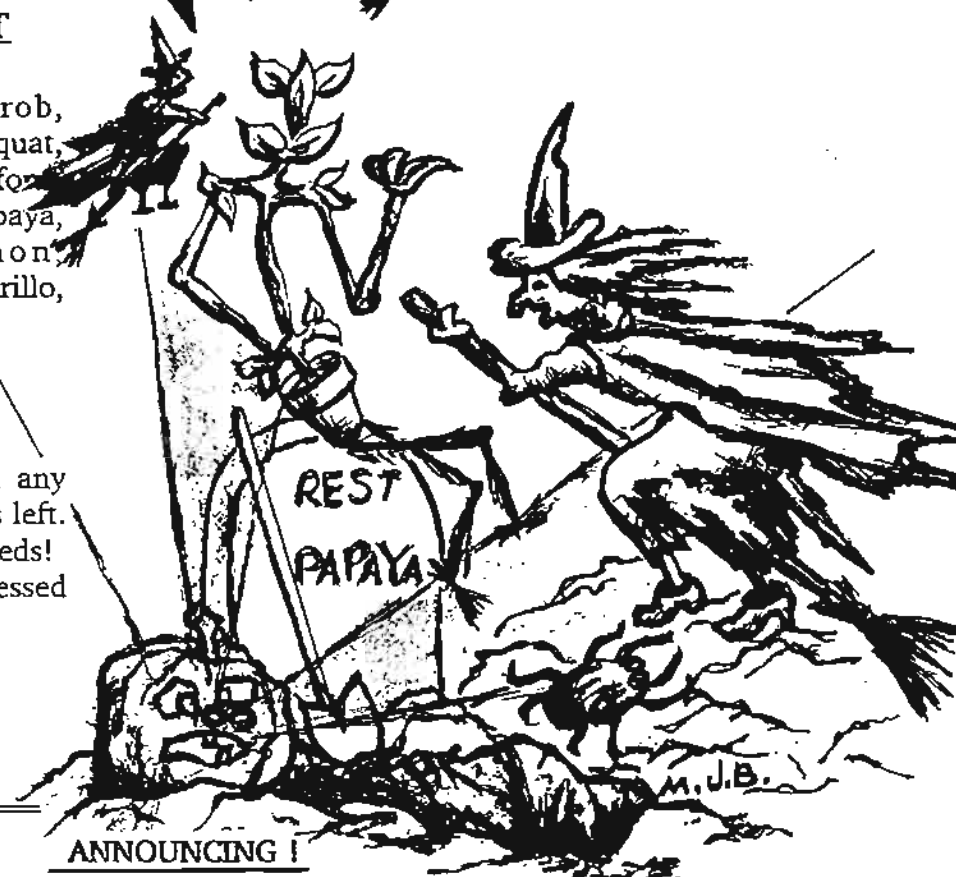
WHAT'S IN THE MARKET

Antimoya, Carambola, Carob, Cippolini, Date, Guava, Kumquat, Mamay sapote, Mango (the last for while), Monstera deliciosa, Papaya, Passion fruit, Persimmon, Pomegranate, Prickly pear, Tamarillo, Tamarind, and White sapote.

SEEDS

If you haven't been able to find any papayas, we still have some seeds left. It is not too late to sow your seeds! Send \$1.00 and a self addressed stamped envelope to:

Chris Serone
c/o Pops & Associates
225 Broadway
NYC, NY 10007-3001



ANNOUNCING!



CORNUCOPIA

A Source Book of Edible Plants

By Stephen Facciola

Cornucopia is the penultimate source book. If you are looking for a source for mushroom spawn, or confused about cocaine, caffeine, cola or cacao or looking for a source of heirloom vegetables, this is the book for you.

Steve lists 3,000 species and 6,000 cultivars of plants. Each is described as to its special merits, taste, medicinal or ornamental. If you want to know where to get seeds, plants, bud wood, or spawn, there is a complete nursery listing, 1,500 for the US and Canada, 150 overseas sources and a special listing of 150 botanical gardens and experimental stations.

Prior to the publication of this book, this type of information was available only through multiple sources, Sturtevant's Edible Plants of the World, The Garden Seed Inventory, Tanaka's Cyclopedia of Edible Plants of the World, and Gardening by Mail. Now all the plants and all the sources are combined in one very readable book.

The book is 700 pages long and available through, Kampong Publications, 1870 Sun Rise Drive, Vista, California 92083. The cost is \$35.00, California residents must add the appropriate tax.

Rare Pit & Plant Council

CASTANEA DENTATA An America Tragedy

When the first settlers came to the New World, they found forests of a tall majestic tree, *Castanea dentata*, the American Chestnut. Its natural range covered 200 million acres from the Canadian border to the Gulf of Mexico, and from the shores of the Mississippi to the Atlantic coast.

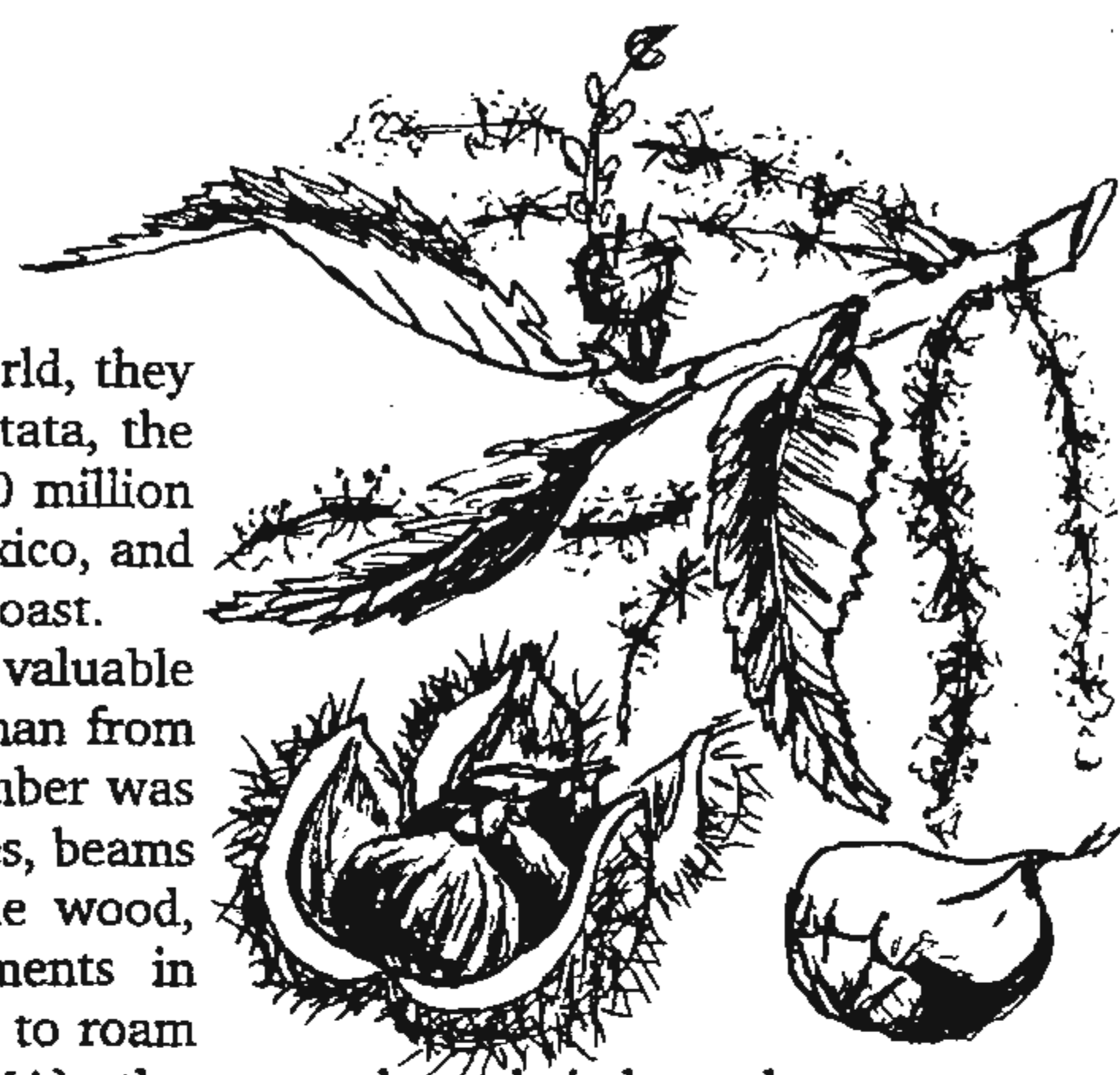
The Chestnut was our most bountiful and valuable tree. "It was said that Chestnut wood carried a man from crib to grave - crib to coffin." Its rot-resistant timber was used for, ships masts, mine props, furniture, shingles, beams and as the country grew so did the uses for the wood, railroad ties and telephone poles. Thoreau laments in *Walden Pond*... "It was very exciting at that season to roam the then boundless chestnut woods of Lincoln, (MA) they now sleep their long sleeps under the railroad."

A friend of ours, Tom Martin, asked a contractor to reshingle his 150 year old barn in Westport, Connecticut. Part of the estimate, included replacing the supporting beams. Imagine Tom's surprise, when the contractor returned some money to him. The beams were made of chestnut and just as solid as the day the barn was built.

Of all the chestnut species grown throughout the temperate world, the nut of the American was most prized for its sweetness and delicacy. The Indians would eat them raw, boiled or pound them to make flour. Irving Berlin immortalized them in song, "Chestnuts roasting on the open fire, Jack Frost nipping at my nose".. The most famous accolade to the Chestnut is by Longfellow. "Under the spreading chestnut tree/ The village smithy stands." Little did he know that in 50 years that neither the village smithy or the Chestnut would exist.*

Tragedy struck in 1904 when chestnut saplings from the Far East were planted in Long Island, New York. These small trees carried a fungus, *Endothia parastica*, which in the Far East does not seriously affect the trees. In America, however, the fungus swept through both the American and European chestnuts growing in this country. Strangely, the fungus, did not affect the European chestnuts growing in Europe.

"The blight fungus is spread by microscopic spores that can be carried by the wind, birds or other animals. A wood parasite, it invades the chestnut tree through wood or fissures in the bark and continues to grow around the trunks or limbs until it encircles them. The affected parts then die. Root sprouts appear and develop into small trees before becoming reinfected, killed and then followed by more sprouts. The roots are not normally infected by the blight. Efforts to develop a blight-resistant American chestnut have so far been unsuccessful. All attempts to put an end to this catastrophic blight have failed. As a result of it, the American chestnut has been eliminated as a commercial species and is no longer a source of market nuts."¹



¹. The Book of Edible Nuts, Frederic Rosengarten, Jr. Walker & Co. NY 1984

pg. 3. In 1930 Robert Frost wrote these prophetic lines:

"Will the blight end the chestnut?
The farmers rather guess not.
It keeps smoldering at the roots
And sending up new shoots.
Till another parasite
Shall come to end the blight."

From: Evil Tendencies Cancel



FRUITING BODIES
(BLISTERS)
BLIGHT FUNGUS

By 1940 there were no American Chestnuts. Or almost none.

Here is a tale straight out of On The Beach. In the early 1950s one lone American chestnut was found growing in a grove of dying chestnuts in Salem, Ohio. Dr. Robert Dunston, a botanist in Greensboro, North Carolina was able to develop a cross between the Chinese chestnut, *C. mollissima*, and the American chestnut, *C. dentata*. The new cross was called "Revival". Because chestnuts require two varieties for cross pollination there are several Dunstan hybrids available today.

Revival chestnuts average 24-32 nuts per pound; the Chinese chestnut, 40-100 nuts and the American averaged 75-150 per pound. They are not as large as the European chestnut, but are much sweeter and easier to peel.

(One very tragic note, the lone surviving unaffected American chestnut in Salem, Ohio has just been cut down to make way for a shopping mall.)

At this time year the streets of New York are filled with the wonderful aroma of roasting chestnuts. Almost every street corner has a vendor. The chestnut they are roasting is *Castanea sativa*, the Spanish chestnut or European chestnut which is imported from Italy. These are tall stately trees which can reach 100' at maturity and are native to S. Europe, N. Africa and W. Asia. They are not as hardy as *C. dentata* or the Dunstan hybrids, probably zones 6b - 9.

We have several members who have grown these chestnuts from their nuts. Ann Mc Duffie grows hers outside in her yard in Westchester County, New York. Gail Egol, who grows hers in a pot, always exhibits it at the NY Flower Show just as it is beginning to leaf out.

Seven years ago, just after Christmas, Gail Egol found 3 sprouting chestnut seedlings in a bag in her kitchen. Being the true pit grower that she is, he potted them up and put them in the basement. Three months later, she had some little chestnutnut seedlings. Two passed on within the year, the other, however, is doing just fine.

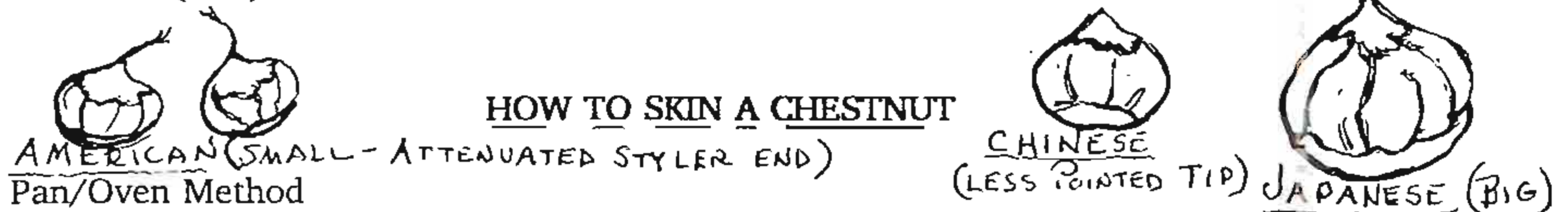
Gails chestnut lives in a 1 gallon pot. During the growing season, it is kept outdoors in a hot dry location. In the fall its leaves begin to yellow and drop, at which time, it is then brought into the basement of the house. She waters it maybe two times during its winter dormancy. Because she wishes to force it for the New York show, she slowly introduces it to light and warmth in early February. By the first week of March, the new lime green leaves are just emerging. Chestnuts have a tidy habit of growth. They have straight trunks and branch early. They are deciduous, but like oaks, they do not loose all their leaves. Gail regularly prunes her little tree to keep it under two feet. "So it will fit in my station wagon."

Unfortunately, the prognosis is not happy for these young trees. *Castanea sativa*,

is just as susceptible to the disease as the American Chestnut. Young trees can live for quite a few years, but we are told, eventually, they will develop the symptoms of the disease. There are isolated groves in Washington state, Oregon and northern California where the Spanish chestnut is grown. Perhaps, Ann and Gail, will develop an isolated grove in Westchester.

*There is rather substantial proof that Longfellow's "Chestnut" was in fact a Horsechestnut (*Aesculus hippocastanacea*, a totally unrelated species) which was cut down to widen Brattle Street in Cambridge, Massachusetts. "Under the spreading horsechestnut tree" just doesn't have the right meter.

Sources for the Dunstan hybrids: Chestnut Hill Nursery, Rt. 1, Box 341, Alachua, FL 32615 or (904) 462-2820



Cut a 1/2" gash on the flat side of the nut and put in a skillet, allowing 1/2 tsp. of butter to each cup of chestnuts. Shake over heat until butter is melted. Put in oven and let stand five minutes. Remove from oven and with a small knife take off shells. By this method shelling and blanching is accomplished at the same time, as skins adhere to shells.

Boiled Chestnuts

Place chestnuts in a sauce pan and half cover with water. Boil twenty minutes, empty water and leave chestnuts in the pan to dry off before shelling. By leaving on low heat and drying slightly, the chestnut kernels do not crumble on shelling.

Roasted Chestnuts

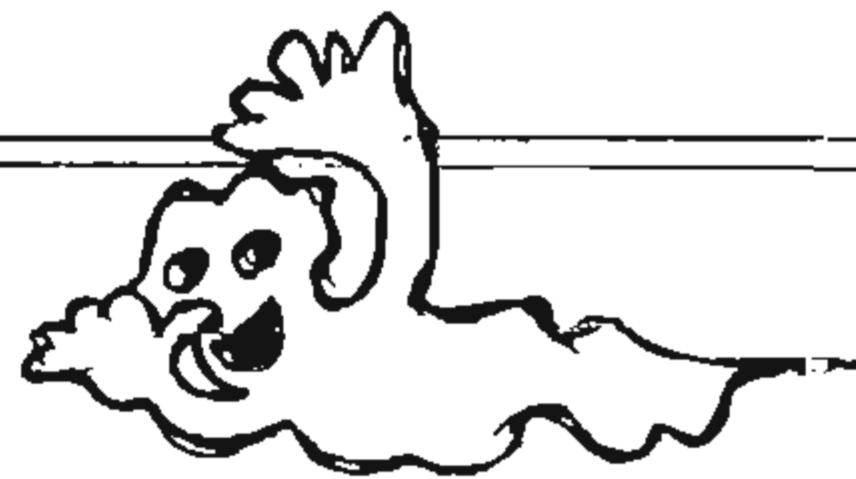
After making a cut through the shell near the base to avoid bursting or exploding during roasting, place the prepared nuts in a pan and put in moderate oven (375). When chestnuts appear about 3/4 roasted, remove from oven and place them in the folds of a wool cloth, to keep them soft while cooling down. Chestnuts prepared this way are very tasty.²

After you have peeled the chestnuts you are ready to make, Coupe de Marrons, Chestnut Cream Soup, Chestnut stuffing and Chestnut puree, or if you have the time and patience, marrons glaces.

². Ibid



PIT PURSUITS

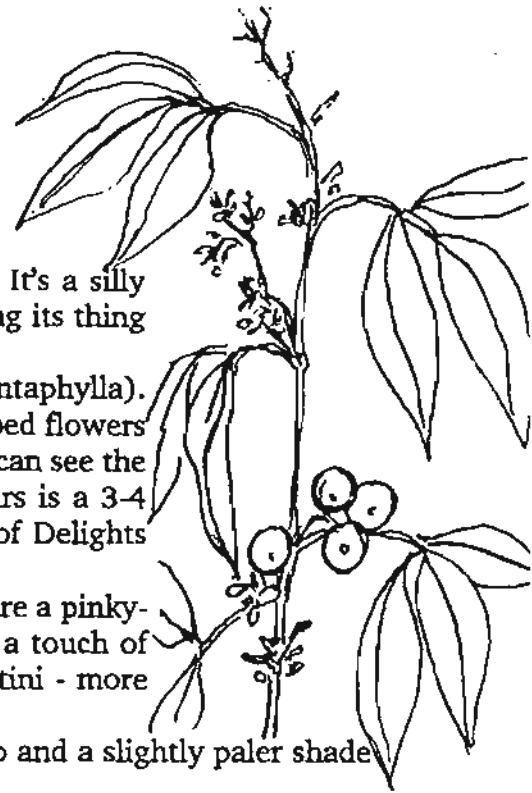


1. Poes Duo?
2. Shostaovichs Trio?
3. Ty Cobbs Pit?

4. Steinbecks Pits?
5. Billy Boys Pits?

ANSWERS pg 7.

GIN BERRY
Glycosmis pentaphylla



People frequently ask us, "What is your favorite Pit?" It's a silly question, we'll look around and whatever tree or shrub is doing its thing at that moment, will be our favorite pit.

This moment's favorite pit is, Gin Berry, (*Glycosmis pentaphylla*). Today each branch has a terminal spike of small white bell shaped flowers that are FRAGRANT!. Some of the flowers have faded and we can see the tiny fruits developing. This is our second crop this year. Ours is a 3-4 year old seedling (not a graft) that we bought from Garden of Delights early last spring.

The fruits are round and about 1/2" in diameter. They are a pinky-white and almost translucent. As the name implies - there is a touch of gin. We would, however, liken the taste to a very sweet martini - more vermouth than gin.

The 4" ovate leathery leaves are a soft lime green on top and a slightly paler shade beneath. Each petiole has 3-5 leaflets.

Gin Berries are natives to India, the Philippines and Northern Australia. Today, they are grown commercially in Jamaica where they have the local name of Jamaican mandarin- orange. They are small evergreen trees or large shrubs.

There is another species, *G. parviflora*, from China which has become naturalized in Key West, Florida.

If you had asked about our favorite pit last June, our Gin Berry would have been at the bottom of the list. It was so infested with mealy bugs, that we cut it back by half. We dug it into the garden...Die or Recover!

Recover it did! Where we cut it back, we have many new branches and each of these branches has a terminal cluster of flowers and fruit. The plant can obviously take heavy pruning and blooms on the new wood, as well as, the old.

Gin Berries are evergreen, have lovely foliage, fragrant flowers and will give you two crops a year. There is not much more you could ask of a pit. It may be a favorite for more than this moment.

Sources: Garden of Delights will have some seedlings in a couple of months and if our crop materializes as we hope, we will be able to offer the seeds in the next few months.

NOTES IN PASSING

Last month we printed a suggestion that those growing Miracle Fruit add some Epsom salts to the soil to prevent bud blast. Both Bob Jurgins and Debbie Peterson have seen immediate results. They both have fruit and flowers.

When forcing paperwhites, don't forget Gails tip; add a little gin to the water for compact growth.

Bring your houseplants in, before you start to heat the house. If they have hardened off to outside temperatures, and are brought into a much warmer environment, they might go into shock.

KNOW YOUR PLANT FOOD ELEMENTS

PRIMARY PLANT FOOD ELEMENTS

ELEMENT	SYMBOL	SOURCES	DEFICIENCY SYMPTOMS	EXCESS SYMPTOMS	FUNCTION IN PLANT	WHERE FOUND IN PLANT	LEACHING IN SAND	BEST pH RANGE
Nitrogen	N	Organics Synthetics Urea Ammonia Nitrates	Light green to yellow leaves. Stunted growth.	Dark green, soft growth. Retarded maturity. Loss of buds or fruit.	Stimulates growth.	In proteins. In chlorophyll.	Fast.	5.5-7.0 Ammonia may be lost when pH is above 7.0
Phosphorus	P	Superphosphate	Red or purple leaves. Cell division retardation.	Possible tie up of other essential elements.	In enzymes. Mastens maturity. Aids respiration. Required in all cells.	In proteins of the cell nucleus.	Slow.	5.5-7.0
Potash	K	Muriate or Sulphate of Potash	Reduced vigor. Susceptibility to diseases. Thin skin and small fruit.	Coarse, poor colored fruit. Reduced absorption of Mg and Ca.	Translocation of materials in plants. Regulates photosynthesis. Regulates formation of starch.	In the cell sap.	Fast.	5.5-7.0
SECONDARY PLANT FOOD ELEMENTS								
Magnesium	Mg	Magnesium Sulphate (Epsom Salts) Dolomite is 1/2 Mg.	Loss of yield. Chlorosis of old leaves.	Reduced absorption of Ca and K.	Aids photosynthesis. Key element in chlorophyll.	In chlorophyll.	Fast in acid soils. Slower in limed soils.	5.5-6.5
Manganese	Mn	Manganese Sulphate (Tecomangam)	Mottled chlorosis of the leaves. Stunted growth.	Small dead areas in the leaves with yellow borders around them.	In enzyme system.	In enzyme system.	Fast in acid soils. Slower in limed soils.	5.0-5.5
Copper	Cu	Copper Sulphate Neutral Copper	Multiple budding. Gum pockets.	Prevents the uptake of Iron. Causes stunting of roots.	Enzyme activator.	In cell sap.	Slow.	5.5-6.0

MINOR (OR MICRO) ELEMENTS

ELEMENT	SYMBOL	SOURCES	DEFICIENCY SYMPTOMS	EXCESS SYMPTOMS	FUNCTION IN PLANT	WHERE FOUND IN PLANT	LEACHING IN SAND	BEST pH RANGE
Zinc	Zn	Zinc Sulphate	Small, thin, yellow leaves. Low yields.	None known.	Aids in cell division. In enzymes and auxins.	In cell sap.	Slow.	5.0-5.5
Iron	Fe	Iron Sulphate (Copperas) Chelated Iron	Yellowing of leaves, the veins remaining green.	None known.	A' catalyst. In the enzyme system. Hemoglobin in legumes.	Part of chlorophyll.	Fast.	5.5-6.0
Sulphur	S	Sulphur Superphosphate	Looks like Nitrogen deficiency.	Sulphur burn from too low pH.	Helps to build proteins.	In proteins and amino acids.	Slow.	5.5-6.0
Calcium	Ca	Lime Basic Slag Gypsum	Stops growing point of plants.	Reduces the intake of K and Mg.	Part of cell walls. Part of enzymes.	In cell walls. (Calcium pectin).	Slow.	5.5-8.0
Molybdenum	Mo	Sodium Molybdate	Hibiscus (strap leaf). Symptoms in plants vary greatly.	Poisonous to livestock.	Helps in the utilization of N.	In enzymes.		6.5-8.0
Boron	B	Borax	Small leaves. Heart rot and corkiness. Multiple buds.	Leaves turn yellowish red.	Affects absorption of other elements. Affects germination of pollen tube.	Throughout the plant.	Fast.	5.5-6.5

ELEMENTS FROM AIR AND WATER

ELEMENT	SYMBOL	SOURCES	DEFICIENCY SYMPTOMS	EXCESS SYMPTOMS	FUNCTION IN PLANT	WHERE FOUND IN PLANT
Carbon	C	Air (Carbon Dioxide)	None known.	None known.	Keystone of all organic substances.	In cell walls and in sugars and starches.
Oxygen	O	Air and Water	White areas of leaf veins. High Nitrates.	None known.	Respiration.	Throughout the plant.
Hydrogen	H	Water	Wilting.	Drowning.	Necessary in all plant functions.	A part of sugars and starches.

pg. 7.

FIRST FRUITINGS

Bob Lester called us from Bucks County, PA. to report his 5 year old Tamarind seedling is now in full bloom. During the cold months of the year, his tree is grown in a cool greenhouse, and it is grown outdoors in the warm weather. The flowers are borne in drooping pale yellow clusters that resemble those of sweet peas.

Bob Jurgins has flowered and fruited Kiwi (Actinidia deliciosa). Bob's vines are 5 years old. The flowers are 2" wide, white and deliciously fragrant. The fruit is still ripening on the vine. These vines are grown outdoors in Queen's County, New York.

As the years roll by and our plants get bigger, we are all beginning to flower and fruit our pot-bound, house-bound tropical trees. Years ago, we used to give a gift membership to the Rare Fruit Council International, to any member who flowered and fruited a plant. Today we would be bankrupt, if we made that offer.

We are one of two organizations in the country who specialize in this bazaar form of horticulture. Our sister Organization is the Indoor Citrus and Rare Fruit Society in California. It would be extremely helpful to both organizations and our individual members if we could compile a listing of plants that will REALLY flower in the home.

We ask your help in this matter. If you have time, could you fill out the enclosed questionnaire and mail it back to us. (If you don't know the Latin name, just put in the common name). If you are game to be interviewed on the phone, add your phone number.

Thank you so much,

Debbie ~~and Marty~~

PIT QUESTIONNAIRE

Botanic name: _____ Common name: _____

Age at bloom/fruit: _____ Height: _____ Graft/seed: _____

How grown. Windowsill/ greenhouse: _____ Outside: _____

Botanic name: _____ Common name: _____

Age at bloom/fruit: _____ Height: _____ Graft/seed: _____

How grown. Windowsill/ greenhouse: _____ Outside: _____

Name: _____



Pits

5. "A cherry pie"

4. The Grapes of Wrath

ANSWERS

1. The Pit and the Pendulum
2. "A Love of Three Oranges"
3. The Georgia Peach