

the pits

NEWSLETTER

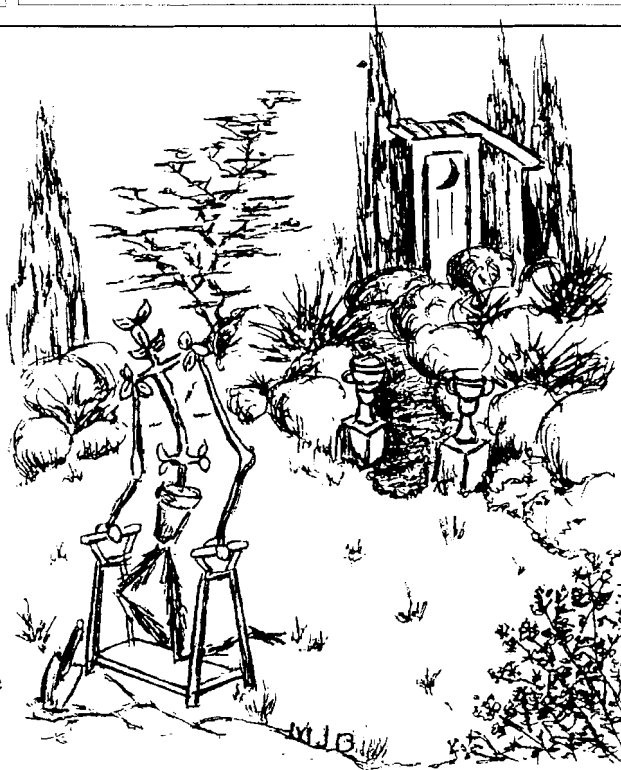
Winter -Spring 2003
Volume 22 #1

WHAT'S IN THE MARKET

Carambola, Cherimoya, Carob, Date, Feijoa, Kumquat, Lemon grass, Malanga, Mango, Name, Papaya, Passion fruit, Prickly pear, Tamarillo, Tomatillo, Taro, and Water Chestnut.

SEEDS

This month, Bob Jurgens is offering Rice seeds (from Debbie's plant- supply is limited.). If you are interested send, \$1.00 per packet and an SASE to: Bob Jurgens, 116-32 227th St., Cambria Heights, NY 11411. Checks should be made payable to the Rare Pit and Plant Council. These seeds are large, so be sure to send a **sturdy envelope**.



Something to Crow About

Duane Campbell wrote us last year that he germinated rice seeds bought at his local health food store. He used the paper towel method of sprouting sprouts. The seeds developed a pedicel but, unfortunately, he let them dry out.

A Tip for the Environment

Those of us who use computers and printers produce a hazardous waste with our ink cartridges. Special recycling envelopes are available at the post office or business supply centers. You simply put your cartridges in the already addressed and stamped envelope and drop them in the mail.



RETURN ADDRESS

This cartridge return program is not sponsored by or affiliated with the cartridge manufacturer.



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*You Can Make
A Difference!*

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1 Place empty cartridge into original packaging (or new cartridge packaging).

2 Enclose in this postage-paid envelope.

3 Place envelope in mailbox.

**It's
That
Easy!**

The Rare Pit & Plant Council

17 Circuit Ave. Scituate, MA 02066

BANANAS

Musa acuminata

'Dwarf Cavendish'

Yes we grew some bananas, we grew some bananas this year! We hoped they would taste as good as the ones we bought in the grocery store, they were much better! Our tree bore 18 fruits ranging in size from 6" to 3". Our 'tree', a Dwarf Cavendish' was purchased from Edible Landscaping in Afton VA 6 years ago. It came in a quart pot and was about 18" tall. We have always been suckers for the ads for those cute little bananas advertised in the back of magazines and have always had at least one banana in the house. Whether they fruit or not bananas are beautiful foliage plants and relatively undemanding.

If you want fruit, they need good light, lots of water and the kicker is space. The term 'dwarf' is relative. Dwarf Cavendish bananas will bear when they are between 7-9'. and they will be almost that wide. As our banana grew, we would elevate it on a table, then a stool so we could walk under it. In the end it was large enough to be on the floor (on rollers) and still give us space to walk under it. As the banana grew it was necessary to move it on into a larger pot each year, if not it would topple over. Each time it was transplanted it would grow another foot or two. We have one of our plants children growing in our gym, the light is not terrific and the air is very dry, but it looks robust and healthy. Unfortunately at its next transplanting we will have to elevate it and one day, we may have to move one of the exercise machines.

Much of the following information has been derived from a conversation with Glen Stokes of **Stokes Tropical Plants** and his excellent book **Bananas You Can Grow** and W. O. Lessard's book, **The Complete Book of Bananas.**

The bananas we buy in the grocery store are sterile. My first question to Mr Stokes was, "If they are produced vegetatively, how come there are so many

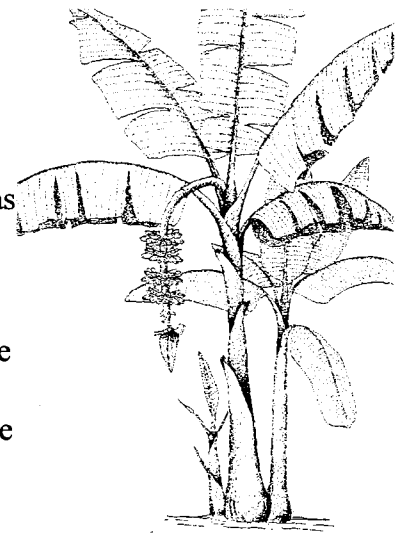
different types of bananas?"

Bananas are native to tropical Asia and have been cultivated since the dawn of time. There are some 30-50 wild species, but only two are the sources of our edible bananas, ***Musa acuminata***, the yellow desert banana and ***Musa balbisiana***, the plantain. Bananas develop suckers at the base of the mother plant, these sports not always identical to the mother plant. If one of these new plants is of exceptional quality, the grower will isolate it and begin to cultivate the new type.

"Botanists can determine just how much of a contribution each of these species has made to modern cultivars and these cultivars can be designated by a set of handy abbreviations. *Musa acuminata* in "shorthand" is AA for the diploid species. AAA for triploids and AAAA for tetraploids. Similarly, plants that are derived completely from *Musa balbisiana* are indicated as BB, BBB, or BBBB depending on the number of chromosomes. Hybrids between these two species can have a variety of abbreviations including AAB (which are the typical plantains)."¹

A homey way to understand this is, (forgetting the chromosome counting) if blond blue-eyed aunt Helen (A) has a brown haired blue-eyed boy, he will have uncle Clarence (B) sex and brown hair but his mothers blue eyes. BBA?

Bananas are not trees, but large herbaceous plants that grow from a single



¹ **Bananas you can Grow:** Waddick, James W. and Stokes, Glen M. Stokes Publishing Co. 2000 e-mail: info@stokestropicals.com

corm. The 'trunk' is called a pseudo-trunk and is actually composed of leaf sheaths. When the old leaves yellow and fade, cut them off and you will see the sheaths. The actual trunk is the stem of the inflorescence that pushes its way up through the leaf sheaths.

New corms will form at the base of the pseudo-trunk. If you were growing these outside you would allow 2 of the pups to grow. One pup would be half grown and the next just starting. This is not possible in the home. I don't think there are pots large enough to accommodate three growing bananas. I would let one pup grow until it had 4 sturdy leaves and was about 12" tall and then cut it out and pot it.

When grown under ideal conditions, out doors in a tropical environment, bananas will flower and fruit in 15 months. Why did it take ours 5 years. Mr. Stokes explained: "You only have 3 months of ideal growing conditions a year, multiply that by 5 and you get 15 months".

Growing Bananas in Containers:

Don't stint on the pot size. Mine was moved on from an 8" to its eventual size of 15" diameter. It was repotted each year to the next size pot.

Put your banana outdoors when night time temperatures are at 60° in a spot that is protected from strong winds. If you are growing it in full sun, slowly introduce the plant to the intense light (otherwise it will scorch). It can remain outdoors until night time temperatures fall below 57°. During the summer vacation be sure to keep it well watered and fertilized. It will literally double its size outdoors. Eventually ours became too big to move outdoors, plus we live on the coast where even summer winds can blow at 45 kts., this may further explain why it took 5 years to fruit.

Winter is a holding action for the banana. If one leaf yellows off, don't be concerned as long as new velvety leaves are developing. Once the day light increases, the banana will go into active growth and

must be watered regularly and fertilized. We used 10-10-10. Mr. Stokes suggests, when it is getting ready to bloom, use 6-2-12.

How to know when it will fruit: The plant will have between 9-12 large healthy leaves and the trunk will have a caliper (circumference) of 9-12". I noticed the new leaves on my plant were smaller and sort of formed a large cup. I thought it might be dying, but low and behold the

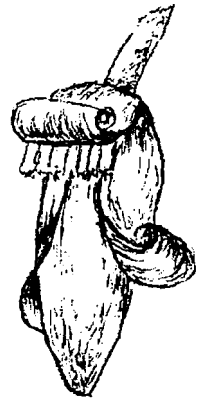
inflorescence emerged! It took about 3 months for the fruit to develop and only 24 hours for the whole stalk to ripen at once.

Once the banana has fruited the mother plant will die. If it has not sent up a pup yet, one will develop quickly at the base of the old plant. My mother plant had one chunky pup, and once the mother was removed it tripled its size and now has 9 leaves, is 6' tall with a caliper of 10". It may flower within the year.

I don't think any event in our gardening career has been so exciting. The whole neighborhood, the postman, the contractors and anyone who entered the house watched this miraculous flower and fruit develop. It was more than worth the wait and the extra space.

Sources:

Stokes Tropicals, PO Box 9868, New Iberia, LA 70562-9868, tel: 800-624-9706 e-mail: www.stokestropicals.com, Edible Landscaping, 361 Spirit Ridge Ln. Afton VA 22920, 800-524-4156, e-mail 222.www.ediblelandscaping.com There are other sources, these are the ones we have used. One word of caution, there is a charming "Super Dwarf" on the market. It makes a lovely foliage plant, but if (unlikely) it bears, it will only have one fruit.



PEANUT

Arachis hypogaea

What a charming little freak of nature is the peanut. It is not a nut, it is a vegetable. As the name implies, it is a pea inside of a nut. Peanuts are in the *Leguminosae*, the pea family. Unlike other legumes, the peanuts form beneath the soil. The plants have yellow pea-like flowers that are borne at the leaf axils. After about 3 days a pointed spur grows out from the center of the flower and into the ground where it forms the peanut. Maturing peanuts look like tiny banyan trees with all the aerial spurs hanging to the ground.

Peanuts are very attractive small plants, growing only about 6-10 inches. The foliage is trifoliate, similar to clover. At night the leaves close up only to open again the next day.

I used them this past summer as a ground cover in the Herb Garden at the Massachusetts Horticultural Society's property at Elm Bank. My friend and nurseryman, Doug Litchfield started them in his greenhouses. Alas half the crop was lost to the local invading squirrels. Protect your young plants from critters! I also grew some in a pot at home and these also bore peanuts.

The peanut is native to South America. The remains of peanuts were found in Peru and have been dated between 1,500 and 1,200 BC. The Spanish brought the plants home to Europe and the Portuguese Explorers brought them to the Philippines, from there they spread to all of Asia. Today the most of the peanuts are grown in America, China, India, Indonesia, Senegal and Nigeria.

It is a total mystery how early man discovered these plants were edible. Fresh peanuts are bitter, rivaled only by fresh olives! Like deer, I guess if your hungry enough you'll eat

anything. Roasted, however, they developed a sweet nutty flavor. The primary use of peanuts in underdeveloped countries is for oil. Again, how did early man learn to extract the oil?

To Grow:

1. Use only fresh un-roasted peanuts. We buy ours in Chinatown, but they are also available at our local feed and grain store. If all else fails, Park Seed, Geo. W. Park Seed Co. Inc., 1 Parkton Avenue, Greenwood SC 29647-0001.
2. Shell the peanuts, being careful not to split the seed.
3. Sow the seeds to a depth of 2 ½ times their depth in a moist sterile soil mix.
4. Cover the pot with plastic to insure humidity and if possible give gentle bottom heat. They germinate within a week or two.
5. When the ground has warmed up to 60° the young plants can be transplanted to the garden.
6. If you cannot grow them outside you will have to pollinate them by hand. Not to worry, this is fun. After 3 mos. the plants will flower. Gently brush the pollen (use a fine paint brush) from one flower to another. This must be done the first day the flowers open. In a few days, the spur will develop.
7. When the plants begin to fade and the leaves turn yellow, it is time to harvest the peanuts. Gently pull up the plants and there will be 4-5 peanuts per plant.

Growing peanuts is a wonderful project with children. They love the leaves that close up, the spurs that grow out of the flower and the greatest joy is harvesting.



To Roast Peanuts

1. Preheat oven to 350 degrees
2. Place raw peanuts in a single layer in a shallow baking pan.
3. For unshelled peanuts: Bake 20 to 25 min.
4. For shelled peanuts: Bake 15 to 20 min.
5. Stir once or twice during cooking time.
6. Cook until slightly underdone, peanuts continue to cook when removed from the oven.
7. Store unshelled roasted peanuts in an airtight container up to one month in the fridge or 12 months in the freezer.

Peanut Butter: In a food processor.

2 cups roasted shelled peanuts, 1 tbl peanut oil, ½ tsp salt

Using the metal blade, process ingredients continuously for 2-3 minutes. The ground peanuts will form a ball that will slowly disappear. Continue to process until the desired consistency is obtained. If necessary, stop machine and scrape the sides of the container with a rubber spatula. For crunchy peanut butter, stir in ½ cup chopped roasted peanuts after the processing is completed.

Book Review

Bananas You Can Grow

by James W. Waddick and

Glenn M. Stokes

Stokes Tropicals Publishing, Co, 2000,
New Iberia, LA. \$19.95 (now on sale for
\$12.95)

Bananas are not the easiest plants in the world to understand. Our edible bananas are derived from two wild species, *Musa acuminata* and *Musa balbisiana*. They are monocots, "seed bearing angiosperms" that do not have seeds! How so many varieties or "types" have developed from these two plants is a mystery that is unveiled in 'Part II'. Also discussed are; growing in containers, growing in the landscape, forced dormancy, propagation, etc.

Part III the Gallery: The Family, The Genera and The Species. Each section has a hanging side-bar that gives a quick overview; full color picture of the foliage, fruit and flower and a brief text describing the plant in detail. Do not read this section with the Stokes catalog in hand, you will be

have to move out of your house for your bananas.

Scattered throughout the book are "factoids" small hanging bars with such miscellaneous information as: "The New England Journal of Medicine reported that a banana can cut the risk of death from strokes by as much as 40%." Dr. John questions this.

Part IV Essential Information: includes a glossary, recipes, zone map and bibliography. If these exotic plants fascinate you, this is the perfect book for further reading.

See above e-mail address on page 2

Quick Views

Musa acuminata
Dessert Banana

Type: S

Height: Variable to 18ft. (5.4m)

Form: M

Zone: 8 and higher

Remarks:

There are seven subspecies in this species. Some have contributed to dessert bananas and some hybrids are important in the development of other types of bananas.

Some primitive dioloid and natural triploids produce edible fruits. These natural species and hybrids were selected by early man for their edibility.

RICE

Oryza sativa

This will be our third year growing rice and what a pleasure.! Rice is an annual grass-like plant. The 18" slender leaves are a deep burgundy and the inflorescence is a day-glo chartreuse-a stunning combination. It is becoming an "in" plant now and we can only thank Doug Litchfield for introducing it to us 3 years ago. Try it, you'll love it!

How to grow.

To prepare the seed, put the seeds in a small paper bag and gently roll them with your hand. You must remove some of the outer husk without cracking the seed. The seeds can be stored in an air-tight jar until you are ready to plant. We suggest starting them in February for a September crop.

1. You will need a water tight container that is at least 6" wide and 6" deep. A mixing bowl is adequate.

2. Enough soil to fill the container to within 2 ½" of the rim. **IMPORTANT** do not use commercial potting mixes that contain perlite and peat, they are too light..

Tamarind

Tamarindus indica

Tamarind is one of the easiest and lovely pits to grow. The lime-green leaves are feathery and resemble a mimosa tree. At night, the leaves close up and open again in the light. The fruit of the Tamarind looks like a plump brown lima bean. The outer shell is brittle and easily cracked, revealing a sticky brown pulp. Within the pulp there are 5 or 6 shiny, black seeds.

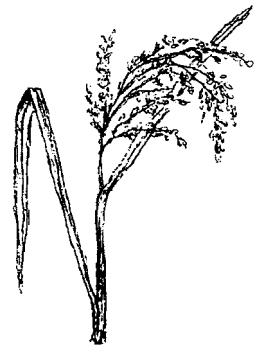
Tamarinds make wonderful houseplants. The little trees have nine pairs of leaflets and resemble a mimosa tree. Several of our members have created bonsai trees and they are elegant.

How to Grow: Nick the seed and soak until the seed swells,

You want ordinary garden soil. You are building a muck!

3. Mix the soil until it has the consistency of mud. Sow the seeds 2 ½ x the width of the seed (horizontally). Slowly fill the container with water until you have about 1/2" above the soil level. If possible, give the plants some gentle bottom heat (ca 80°). Germination is slow and may take a month. At first, the seedlings look like wisps of grass. As the days lengthen, the plants will grow rapidly. Keep the water level at the same depth.

The leaves will be a lovely shade of maroon. Ours that we grew inside, had green leaves, the plants grown outside had red leaves. This is a reflection of the intensity of the sun, both pots of rice have produced seed. Rice makes a very handsome ornamental plant and is a breeze to grow. Just keep it wet.



usually in a couple of hours. Plant up according to the instructions in growing tips. The seeds will germinate in a couple of weeks. Tamarinds are water loving plants and should never dry out.

As they grow, pinch them back. When you have six pairs of leaves, pinch out the top growth. Continue to do this with the side branches.



Book Review

The Essential Reference Vegetables from Amaranth to Zucchini. Schneider, Elizabeth. Photographs by Amos Chan. New York: Harper Collins. 2001. 777 pp. \$ 60.00 USA, \$ 89.95 Canada.

This was a hard book to review because I was continually distracted from a critical look by the sheer pleasure of reading this large volume. The title states that there are 500 recipes and 275 photographs. The introduction begins with a list of the main vegetable entries, numbering about 80. Ms. Schneider's definition of vegetables is somewhat idiosyncratic, more like a grocer than a botanist. I could understand why she didn't list melons, clearly fruits. And so I understood why she didn't list tomatoes which are also fruits. When she then included eggplant and cucumber and bread fruit I threw up my hands. This book is mostly about what we call vegetables in the kitchen.

A sample chapter is on Tomatillo. This "tart queen of salsa and mole" is a native of central America and sometimes known as the Mexican Husk Tomato. Indeed it is like the Tomato and Potato and Eggplant a member of the Solanaceae. It grows with a husk similar to the American Ground Cherry and Cape Gooseberry and is commonly green. They are not ordinarily eaten raw but added to sauces and broths. She comments (in each case) on selection, storage, preparation and



cooking. Recipes include: Herbed Tomatillo and Grape Salsa, Tomatillo Gazpacho and Salmon Poached on a Bed of Tomatillos, Onion and Chili.



The later offering a tart green sauce to contrast the richness of the salmon. We plan to try this soon. A special feature of these chapters is a section called "Pros Propose" in which prominent chefs offer 5 or 6 alternative ways of using the vegetable. This section offers culinary ideas rather than detailed recipes.

As noted she writes about what interests her. Eight pages on specialty potatoes lists numerous varieties but only two recipes. However Pros Proposes includes 8 suggestions including baked eggs with white truffles and potatoes and warm potatoes salad with creme fraiche.

Not every entre is common. The section on potatoes is followed by 4 pages on Puff Balls and 4 pages on Purslane.

Color photographs by Amos Chan are clear and among the best I have ever seen in a food or plant text. The more exotic entrees are well enough done that the reader will have no trouble identifying them. In the front of the book recipes are listed by category: appetizers, salads, main dishes, pasta and eggs and vegetable sides and condiments.

This is a wonderful book fun to read and to use. Of all the books under our Christmas tree this was the one that everyone picked up. Dr. John