

Gulf Coast Fruit Study Newsletter

Volume 14, Issue 4

April 11, 2000 Meeting

Planning Committee:

Bill Adams
Leon Atlas, M.D.
Yvonne Gibbs
Prema Kuratti
George McAfee
Bob Marx
Ethan A. Natelson, M.D.
David Parish
Bob Randle, Ph.D.

Current Meeting:

The next Gulf Coast Fruit Study program will occur on April 11, 2000 at 7:00 PM and will be devoted to figs and brambles.

Contact Us!

Harris Cty Extension Service
2 Abercrombie Road
Houston, TX 77080
Phone: 281/855-5611
Fax: 281/855-5638

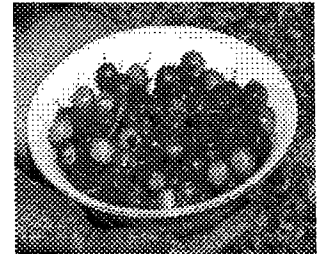
Mayhaw Production in Texas

Mayhaws are members of the *Rosaceae* family with the subclassification of *Crataegeae*. There are more than 60 species in this group, with most local backyard and commercial interest in cultivars of *Crataegus opaca*, *aestivalis* and *rufula*. Other species are sources for a variety of medicinal compounds, particularly various cardiac stimulants. There has been a great deal of interest in **Mayhaws**, over the past 10 years, primarily stimulated by the observations and writings of Mr. T. O. Warren, an amateur horticulturist from Hattiesburg, Mississippi. Some have tried to make this into a successful commercial crop.

The trees were initially thought to grow only under shaded, swamp-like conditions, but modern study shows them to actually be best adapted to well-drained soils and full sun. They produce a nice landscape tree, generally at 20-30 feet tall with full growth, and may live and produce for as long as 100 years. They require 250-500 chill hours for flowering and generally bloom from as early as February 26th, to as late as

April 4th, depending upon the cultivar. The fruit matures rapidly and is usually ripe in late May (hence the name, **Mayhaw**). Many trees are not self-fertile, so that more than one cultivar is necessary for full production.

The **Mayhaw** is easily propagated from seed (90% of the fruit will each have 5 seeds). Germination generally occurs within 3 weeks from seed removed from ripe berries and immediately planted. If stored, the seeds go into dormancy and then require a period of stratification to germinate. The seeds are often **nucellar**, like most citrus, and will reproduce the parent tree. Hybridization does occur in a certain number of seeds, however, and unique plants have thus been successfully produced in breeding programs. Softwood cuttings may be rooted, under mist, and grafting techniques (whip and tongue, cleft, T-budding, etc.) are very successful in propagating favored cultivars.



The fruits vary from yellow to red in color and may also have a red pulp, which usually connotes higher sugar content. They also vary in size and weight, among cultivars, from 0.5 to 0.9 inches in diameter and from 1.4—3.7 grams in mass. Some mature named varieties, such as **Heavy**, may bear 400 lbs. of fruit per tree each season. Most cultivars have an extended period of ripening, but some, such as **Lori** and **Elite**, will have all of the berries ripen on the same day. Usually 5-7 berries will be seen as a cluster on one spur. They are harvested by shaking the tree after a plastic sheeting has been placed beneath it. Only the ripe berries will fall.

(continued on next page)

(continued from previous page)

Mayhaws are compatible with many understocks, but in Texas, Mayhaw seedlings are favored. They seem to outperform the Washington Haw and Parsley Haw which were used heavily by T.O. Warren, although Mayhaw seedlings may have a slower growth rate. The species *C. uniflora*, *cuneata* and *mollis* have all been used to induce dwarfing, with *C. cuneata* the most favored in China. It produces a tree about 50% of standard size. The young trees are staked the first year and then trained

either with an open center or as a central leader. They may also be trellised.

Unpruned and untrained trees eventually become fairly dense, with fruit production only on the exterior. Fertilization is with balanced mixtures, such as 10-10-10 or 13-13-13. The Mayhaw can take a large amount of water, particularly during dormancy, but should not be flooded during the growing season. The prime pests are curculio moths and cedar rust. Because of the latter, growing Mayhaws near red cedar trees is not recommended.

Older, favored cultivars include **Super Spur**, which is a *C. opaca* and **Big Red** which is a *C. aestivalis*. Many others are hybrids. Current favorites are **Heavy** and **Texas Star**. The latter blooms in late March, in contrast to **Super Spur**, which blooms early in March. In general, late bloomers are favored to avoid unpredictable frost damage.

Mayhaws have been used primarily for teas and jellies. The following are some commonly cited recipes:

Mayhaw Jelly:

Boil 1/2 gallon of berries in 1/2 gallon of water, cooking until tender. Strain through a cloth, squeezing out all juice. This should make approximately 5 cups of Mayhaw juice. Add 4 cups of juice to 5 cups of sugar and one box of pectin (Sure-Jell). Add the sugar while stirring the heated juice and pectin. Continue to cook as per the pectin directions and then allow to jell.

Mayhaw Butter:

Mix 2 cups of Mayhaw juice as above with 4 cups of sugar, 1 tsp. of ground cloves, 1 tsp. of allspice, 1 T. of cinnamon, and 1/2 tsp. of nutmeg. Cook to desired consistency and store in sterilized jars.

Mayhaw Syrup:

Add 1 cup Mayhaw juice as above, 1/2 cup sugar, 1/2 cup of white Karo, and boil for 18-20 minutes.

And for those of you who like a challenge... This is an untried recipe we got off the Internet:

Mayhaw Wine:

Put 6 1/2 pints water on to boil. Meanwhile, cut stems off 3 quarts of ripe Mayhaws and wash fruit, discarding any that are unsound. Put fruit in primary and mash them with a piece of hardwood. Pour 2 1/2 lbs. granulated sugar over fruit and, when boiling, pour the water over that. Cover primary and set aside to cool. When at room temperature, add 1 tsp. pectic enzyme, 1/4 tsp. grape tannin, and 1/1/2 tsp. yeast nutrient. Re-cover and set aside for 12 hours. Add wine yeast. Stir twice daily for 8 days. Strain into secondary, squeezing pulp gently. Fit airlock and set in dark place for 6 weeks. Rack into sterilized secondary, top up and refit airlock. Return to dark place and rack again after 4 months, top up and refit airlock. Return to dark place for 8 months, checking airlock every few months to ensure water does not evaporate. If wine has not cleared, fine with gelatin, wait two weeks, and rack again. When clear, bottle. Age additional 6 months to a year. The taste will tell you when it is ready.

UPCOMING MEETINGS

Two upcoming National Fruit Study Section meetings may be of interest to members of the Gulf Coast Fruit Study Group. These meetings are designed to cover a broad base of topics as well as an interesting set of related tours. We are holding them on the beautiful campuses of two Southern universities because these locations allow us to use their lecture, housing and dining facilities at a fraction of the cost that we might normally pay.

**NORTH AMERICAN FRUIT EXPLORERS
2000 ANNUAL CONFERENCE
UNIVERSITY OF VIRGINIA
CHARLOTTESVILLE, VIRGINIA
AUGUST 10-12, 2000**

The program for the 2000 NAFEX Annual Conference is going to be a great one. We hope everyone will plan to attend. The Conference will be held at the University of Virginia in Charlottesville. Air-conditioned campus rooms and meals will be provided at about \$20.00 per day. The entire program may be seen at the NAFEX home page (www.nafex.org) and the registration forms will soon be available there, as well. They will also be published in the next issue of Pomona.

This attractive and historic setting puts us right in the middle of some of the most significant historic fruit exploring land in America. We'll visit the fruit gardens of Monticello and learn from Peter Hatch, Director of Gardens, how Thomas Jefferson and his peers explored for the best fruit and vegetable varieties. Incidentally, one of Thomas Jefferson's favorite pears, called Pope, is low-chill and flowering now in Houston. We hope to taste it and others at our annual pear tasting in August.

A wide variety of topics will be presented in concurrent sessions designed to give every NAFEX interest lots to choose from. Peaches, pawpaws, chestnuts, brambles, apples and dwarfing rootstocks are among the topics. We're even adding a whole track on cooking with fruits and nuts. Field trips will explore a variety of orchard types. A barbecue and winery tour are part of the package, as is entertainment, a book signing, an art show, and even a special orchard monitoring workshop held in an orchard.

**SOUTHERN FRUIT FELLOWSHIP
2000 ANNUAL MEETING
NORTH CAROLINA STATE UNIVERSITY
RALEIGH, NORTH CAROLINA
JULY 24-26, 2000**

The annual meeting of the Southern Fruit Fellowship will be held at Bragaw Hall, at North Carolina State University. See the next two pages of this newsletter for a listing of the entire program and registration forms.

**Program—Southern Fruit Fellowship Annual Meeting
Raleigh, North Carolina, July 24-26, 2000**

Monday, July 24, 2000:

6:00-9:00 AM Check in and registration at Bragaw Hall, which is located at the center of the Central Campus of North Carolina State University. Lectures, ground floor housing, parking and dining facilities are all at this location. We will have a "See Who's Here" session, business meeting, fruit tasting, scion exchange, etc., followed by a jam session.

Tuesday, July 25, 2000:

7:00-8:00 AM Breakfast in Fountain Cafeteria Hall

8:00 AM Introduction to Scientific Program—Bragaw Hall

8:15-9:00 AM Dr. James Ballington: New blueberry releases and their health benefits

9:00-9:45 AM Dr. Mike Mainland: Muscadine culture, cultivars and nutrition

9:45-10:15 AM Break

10:15-11:00 AM Taylor Williams: Bramble culture and research in North Carolina

11:00-11:45 AM Ray Givan: Successful fig cultivation in the Southeast

12:00-1:30 PM Lunch in Fountain Cafeteria Hall

1:30-2:15 PM Jeff Bloodworth: Latest breeding research with muscadine and bunch grapes including performance of hybrid cultivars

2:15-3:00 PM Dr. Ethan Natelson: Review of Feb. 2000 Annual Pear Research Review Meeting in Medford, Oregon and latest report on low-chill Southern Pears

3:00-3:30 PM Refreshment break

3:30-4:30 PM Panel discussion

7:00-9:00 PM Banquet buffet in Bragaw Hall, followed by a program by Tony Avent, owner of Plant Delights Nursery, on the beautiful flowers of North Carolina

Wednesday, July 26, 2000:

7:00-7:45 AM Breakfast in Fountain Cafeteria Hall

8:00 AM Board bus for Tour of Finch Blueberry Nursery

12:00 Noon Box lunch

2:00 PM Tour Lee Calhoun's antique apple orchard and nursery in Pittsboro

Dinner is on your own, but you may stay in your rooms on Wednesday night, if prearranged. You may also wish to tour A.J. Bullard's orchard on Thursday, July 27, also by pre-arrangement.

The entire package per person (includes two night's air-conditioned housing, two breakfasts, two lunches, evening buffet, refreshments, and air-conditioned tour bus accommodation) is \$105.00 double occupancy and \$110.00 single occupancy. Guest parking permit and optional phones in the room are \$1.50/day for each service. If you only wish to attend the Tuesday lectures series, the fee is \$25.00. There will be an optional carpool arrangement for shopping and touring on Tuesday, for the ladies. **See the next page for the registration form.**

Registration Form

Southern Fruit Fellowship (SFF) Annual Meeting, Raleigh, North Carolina July 24-26, 2000

Name: _____

Address: _____

Daytime Phone: _____

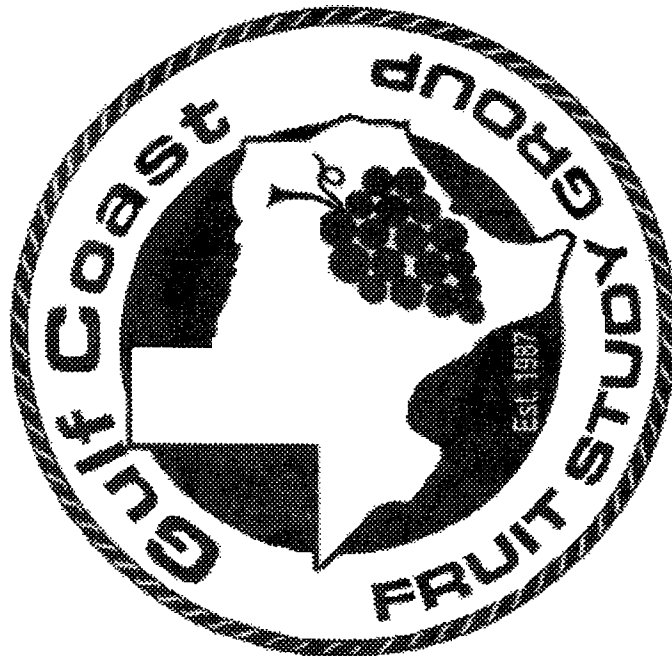
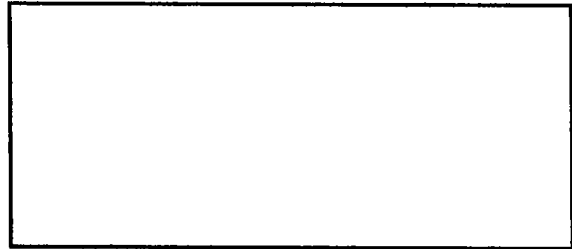
Fees:	Single Occupancy Package:	\$110.00/person	_____
	Double Occupancy Package:	\$105.00/person	_____
	Parking Permit:	\$1.50/day	_____
	Room Phone:	\$1.50/day	_____
	Lecture Series Only:	\$25.00/person	_____
	TOTAL:		_____

Please send payment **before July 10, 2000** to: A.J. Bullard, D.D.S.
307 West Henderson Street
Mount Olive, North Carolina 28365
Phone: 919-658-4424

Please note any additional requests such as Wednesday night stay, post-meeting tours, etc.

**HARRIS COUNTY
MASTER GARDENER ASSOCIATION
2 ABERCROMBIE DRIVE
HOUSTON, TX 77084**

Non-Profit Org.
U.S. Postage
PAID
Houston, TX
Permit No. 9216



**Texas Agricultural
Extension Service**
The Texas A&M University System