Ohio Pawpaw Growers Association

PAWPAW PICKIN'S

Volume 4, Issue 1

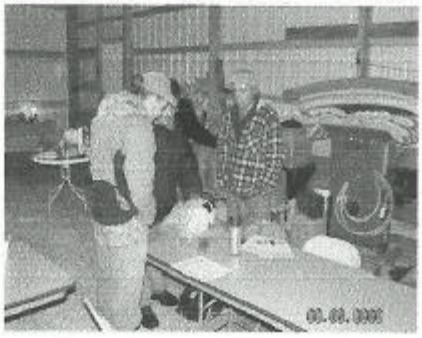
Fall 2005

2005 OPGA Spring Workshop - not a total rainout

Although April 23 belied spring with its wind and freezing rain, the pawpaw workshop went ahead as scheduled. Neither rain, nor sleet, nor gloom of day deterred 10 pawpaw enthusiasts from their appointed session on grafting, and the annual meeting at Fox Paw Ridge Farm in Adams Co., outside Aberdeen, Ohio. This was a 3 hr. drive for some folks! Owners Ron and Terry Powell tried to keep the chill off with coffee, and pulled pork BBQ sandwiches and ham/bean soup served up from the wood burning stove.

They were able to tour the farm in between the rain showers and observe several experts, Chris Chmiel and Richard Glaser, demonstrate several grafting techniques.

Gene Pouley, from the OARDC in Wooster, Ohio has volunteered to host the 2006 OPGA Spring Workshop.



Inside this issue:

Winning newsletter name chosen

After a long and sometimes desperate search for an appropriate and original newsletter name for the official publication of the OPGA, one has been selected out of the hundreds that were submitted to the selection committee. However, the winner wishes to remain anonymous. They feel that with the large prize that was offered for the winning name, they do not wish for their friends, neighbors, and relatives to think that they are now better than they are.

•2005

7th Annual Ohio Pawpaw Festival

Lake Snowden near

Albany, Ohio

September 17 [Saturday]

10:00 a.m. – 10:00 p.m.

September 18 (Sunday)

10:00 a.m. – 4:00 p.m.

Growing the pawpaw industry: Harvest technology possibilities

by Rory Lewandowski, OSU Extension Educator, Athens County, Ohio

Recently I was asked by a business class at Ohio University in Athens to give a presentation about mechanical harvest technology in the tree fruit industry and its potential application to the pawpaw fruit. Behind this invitation lurked the thought that developing the pawpaw industry would probably require mechanization of the harvest process. In this article I want to examine the current state of commercialization of the pawpaw and what, if any, harvest technologies might be available to pawpaw growers.

Currently, the pawpaw is in the early stages of commercialization, selling mainly to niche markets. The fruit that is sold is coming from small orchards or collected from pawpaw trees growing naturally in and along woodlands. Many people have yet to hear of a pawpaw or have actually eaten a pawpaw. In other words, while the pawpaw may have the potential to grow into a widespread commercial fruit, it isn't there yet by a long shot, both in terms of acres of bearing trees and in recognition/acceptance by the consumer. In order to take the next step and get pawpaws into the hands of mainstream consumers in regional grocery chains such as Krogers, more pawpaws will need to be grown and harvested. Promotion and marketing will be necessary.

Harvest does present some challenges for the pawpaw grower. Unlike many of the fruits we are familiar with, color change is not a reliable indicator of ripeness. A ripe pawpaw is not hard, but should give gently when squeezed and come loose from the tree with a gentle tug. Another factor in the pawpaw harvest is non-uniform ripening. Fruit can be harvested from the same tree over a period of several weeks. These are not characteristics that lend themselves particularly well to mechanical harvesting.

In the tree fruit industry as a whole, hand labor is still the method most used for harvest, particularly for the fresh fruit market. Mechanical harvesting that is used involves mainly fruit that will go into the processing market because the most common mechanical harvesters utilize a shake and catch system that bruises most fruit. It is unlikely that such harvesters could work for the fresh market, although they may present some possible use for pawpaws harvested for the pulp/frozen market.

New technologies that are being developed for the tree fruit industry are multi-disciplinary. A 2000 report by the Washington State Tree Fruit Commission entitled "The Technology Roadmap for Tree Fruit Production 2010" listed several things needed to advance mechanization of tree fruit harvest. Geneticists and plant breeders need to continue to modify fruit characteristics. Included in this would be such things as uniform ripening and resistance to bruising. Sensor technology needs to be employed to detect and differentiate fruit quality for both harvest and post-harvest use. Sensor technology linked with robotics and computer programming may provide the flexibility and adaptability needed for tree fruit harvested for the fresh eating market. Finally, research on bio-regulators to assist in mechanical harvest should continue. An example of a bio-regulator is a chemical sprayed on sweet cherries that cause the development of an abscission layer between the fruit stem and the cherry, facilitating mechanical harvesting by a shaker.

At this point the question must be asked as to how probable it is that mechanical harvesting will be used in pawpaw production. Several points need to be made in answering this question. First, the pawpaw due to its ripening characteristics mentioned earlier, is not well suited to mechanical harvesting where ideally a machine would make a one-time pass through an orchard. Second, the emerging technology being talked about for mechanical harvesting of tree fruit still needs lots of research and development dollars before commercial models will be available, and even when those emerge upon the market they are likely to be very expensive. At this point, the pawpaw is not on the radar screen of the tree fruit industry as a crop that needs mechanical harvesting. Finally, mechanical harvesting is best adapted to orchard style plantings, orderly rows and preferably, land with little slope. At this point in time, the developing pawpaw industry has little clout or economic incentive to influence the use of research and development dollars for a mechanical harvester. There are not enough acres in production to justify the cost or promise an economic return. Most pawpaw production is small scale and also a significant portion grown on hilly topography, neither characteristic favorable to mechanization. Taken altogether, it seems unlikely that mechanical harvesting is on the near horizon for the pawpaw industry.

At this point in the development of the pawpaw industry, what is needed more than a mechanical harvesting system is an increase in the number of pawpaw producers and the development of a marketing system that insures pawpaw growers of whatever scale can with relative ease sell their fruit.

From the Secretary

I was outside working in the garden trying to keep a few things dying from the heat and drought conditions when a neighbor boy came to me with an opaque white Kroger bag. He handed it to me and said it was from our elderly neighbor, Helen, on the corner who thought I would be interested in it. It was heavy. My other neighbor has been blessing us with tomatoes and squash all summer. I knew Helen didn't keep a garden but was always working outside keeping her yard nice. I looked inside the bag and couldn't believe my eyes—it was a pawpaw the size of a small melon!! The end had been nibbled off by some critter and insects had started their work, but it still weighed about 3 lbs. I knew Ron would absolutely *flip* when he saw it. While I waited impatiently for Ron to return home, I imagined how important the seeds and scion wood would be for this incredible pawpaw. Then I woke up. All a dream! Darn! Well, maybe someday!

Ohio University Students' Pawpaw Plan

By Stacey Swift, Ohio University, CoB Student

Business Law Professor Jesse Roberson led Ohio University's College of Business students in a group project to organize Chris Chmiel's pawpaw business. Four out of 10 weeks of the winter quarter were dedicated to the second of 3 projects taken on by business cluster students. Offered at the sophomore and junior levels, the "cluster" is an integrated class schedule in which students apply 4 business classes to a series of hands-on learning projects.

This particular group of students from the sophomore cluster was led by their business law professor this past winter (additionally applying concepts from and guided by professors of marketing, management information systems, and management). "Chmiel's business was a perfect candidate for the students to work with," says Roberson. "It reflects highly on the local Appalachian lifestyle and gave students a chance to be immersed in the community." Many of the students come from suburban areas unlike small-town Athens, and this project gave them a taste of alternate lifestyles. And what better way could students give back to the community than working with Chris Chmiel who is an alumnus of Ohio University. after all?

The class of 40 students was divided into 8 groups of 5 who worked separately to consult the business operations and come up with independent planning options. Students quickly came to naming Chmiel "Mr. Pawpaw" after simple research that revealed his vast and extensive involvement with the uncommon fruit. The general consensus however was for Chmiel to narrow his focus to place a stronger emphasis on certain areas of business. Group ideas ranged from entering the gourmet bread and food market in the New York area to producing and distributing a baby food product to producing and marketing the pawpaw pulp to various restaurants and food manufacturers.

In cooperation with Chmiel and his personal goals, all groups produced short-, mid-, and long-term plans and goals for their concepts to present to Chmiel. Similar fruit industries were compared and contrasted for harvesting and production ideas. A food preference survey was designed and conducted to learn about what consumers are potentially interested in. In the end students unanimously agreed that with the confirmed marketability of the product and Chmiel's genuine interest to see the fruit flourish opens doors for several promising options. While each of the groups' concepts varied vastly, all showed great potential for expansion nationally and even globally.

Pawpaw Tree Proves to be Hot by Terry Powell

Our company is in the midst of our Community Service Fund (United Appeal) drive and each department is encouraged to conduct fund-raising activities in addition to the company-wide payroll deduction campaign. I always seem to be in charge of this for my department. This year I solicited donations from 100 people for a "white elephant auction" (gently used items, or new items worth $15 or more). We got 17 items ranging from tents, vases, flower arrangements, DVD player, framed pictures, travel kit, neon sign, large potted plants, and our entry: a grafted pawpaw tree in 1 gal. pot which we set the minimum bid at $25. The auction lasted one week. The small items were displayed for viewing and the large items were pictured. I showed a picture of a 5 year old tree as an example of what they looked like along with descriptive paragraph and advice to see me if they needed more information. The interest proved to be high on the pawpaw right away and by mid-week the high bid was $60. I knew one person (not me) would be bidding on it but two more joined the bidding and by the last day (Friday) the top bid was $105.00! It outbid EVERYTHING in the auction and only one of the bidders really knew anything about pawpaws. So maybe the word is getting out that pawpaws are great trees. It was a good excuse to pass along information about pawpaws. Everyone in OPGA should have a few informational brochures handy to give interested people.

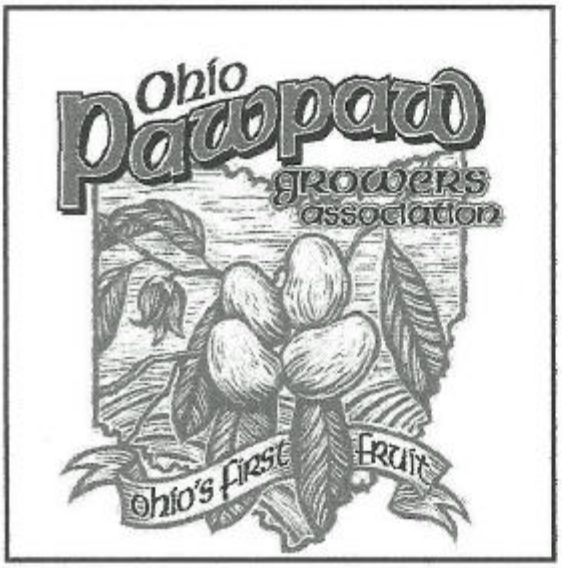
Recipe by Terry Powell

I have recently become interested in smoothies. These drinks are similar to milkshakes but substitute yogurt or silken tofu for ice cream, so they really are a healthy alternative (especially if you substitute Splenda for the sugar). A great summer treat and also a good way to get one of your "5 a day fruit/veggies". Pawpaws are perfect for smoothies. Here is a recipe adapted from Ladies Home Journal:

Tropical Smoothie

½ cup pawpaw pulp
1 container (6 or 8 oz.) low fat maple or vanilla yogurt (you could also use plain yogurt and add 1/4 tsp. of vanilla, coconut, maple, or lemon extract)
1 small ripe mango, chopped
½ cup orange juice
1 teaspoon sugar (or Splenda)
½ cup ice cubes

Puree all except ice cubes in blender. With machine on, add ice cubes one at a time through feed tube, until mixture is smooth and thick. Makes 2 servings.



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Growing Paw Paws from Seed.

by Barb Ernst

The easiest way to grow pawpaws is from seed. While grafted varieties are available, they are costly. Any trees, whether grafts or seedlings, purchased through the mail rarely survive being shipped bare root. Although the mature trees commonly sucker from roots, clonal root sprouts are difficult to transplant, even after being pruned the year before, due to the tender tap root, supported by few fine hairs.

Collection: Seed is abundant in producing patches, and with proper precautions and patience, will produce healthy trees. Collecting for desirable characteristics will not guarantee the same traits in offspring, but it's a good place to start. Whether choosing for taste, vigor, size, fruit color or tree form, seed treatment is the same.

Rule #1: NEVER LET THE SEED DRY OUT.

In my years of propagating native fruit trees, I occasionally collect seed from scat. This may have the benefit of some scarification, but seed will generally be collected directly from the fruit. I clean the seed thoroughly and keep them in a plastic freezer bag with some loose soil or peat moss. Either should be soaked and then wrung dry. Seeds then need cold stratification for at least 100 days. Do not keep them in the freezer. Check them periodically for dryness. It's possible to store the seed in the fruit. If left out over the winter, they must be monitored for moisture. If refrigerated that way, they may mold and kill the embryo, so keep an eye on them.

Planting: The seeds are slow to germinate, and don't sprout in my area until June, and into July. If you plant mid- May, light conditions and warmer temperatures should be right for germination. It may take over a month and some seed will lay dormant until the following year. Don't expect 100%. Plant more than you need.

Rule #2: NEVER LET THE SEED DRY OUT.

Seed can be planted directly in their desired location, or in a bed to be transplanted later. In either case, the young plant needs some shade. They can handle full sun once established, and will probably produce more fruit with more light, but for the first few years you should either locate them in a partially shady place, or provide artificial shade. I plant my seed in a bed with a thin layer of sand on top, to avoid stem rot (since the soil will remain moist!). I transplant the second year during the active growing season. In my experience, this has given the best results. Plant in well drained, rich soil. These trees are naturally found on the edge of openings, often reaching into the light, so this seems like a good location. They will not tolerate high ridges with shallow rocky soil. Always plant more than one in a location, as they are rarely self-pollinating. Be sure to water as necessary for the first couple of years until the roots get fully established.

Get involved in the 2005 Pawpaw Festival

OPGA members and potential members are welcome to get involved with the Festival. Help is needed in many areas of the Festival: OPGA membership and education booth, T-shirt sales, pawpaw beer booth, or helping with the many events taking place. You'll receive free admittance and a free T-shirt with 4 hours of volunteer help. What a deal!

Contact Ron or Terry at 513.777.8367 to sign up.