Ohio Pawpaw Growers Association

OPGA Newsletter

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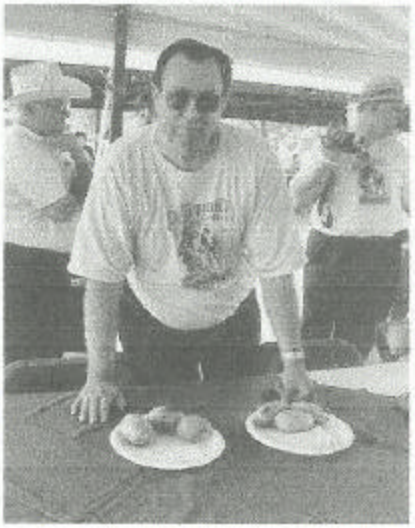
Spring 2004

2003 Pawpaw Festival a Success

The weather was perfect and so was the attendance at the 2003 Pawpaw Festival. The 2003 Festival was the first to be held for two days and was a great success with an expanded attendance of over 2,000 people.

Planning is underway for the 2004 Pawpaw Festival scheduled for September 18 and 19 at Lake Snowden, near Albany, Ohio in Athens County. Members of the Ohio Pawpaw Growers Association (OPGA) are welcome to get involved with the festival. Volunteers are needed to help with the planning and organization before the festival During the festival help is needed in the education tent, staffing the t-shirt sales table, staffing the membership table, or helping with any of the events that take place during the Festival. Members of OPGA helping at the Festival have free admittance to the festival and receive a free t-shirt or hat. For more information about the 2004 Pawpaw Festival or to volunteer to help, contact OPGA President, Chris Chmiel, at 740-698-2124 or by email at pawpaw@frognet.net.



Richard Glaser has taken home the trophies and prize money for the Best Fruit competition at the Festival for the last two years. He is pictured with Shawnee Trail (left) and Quaker Delight (right), his two winning entries.

This competition is open to anyone who has a pawpaw patch. Three ripe fruit of each variety are needed to enter this competition. The fruit is judged by a panel of food editors and special guests.

Inside this issue:

Best science competition by Diane Cuson

This past March 6 was an exciting time at the 15th South Eastern Ohio Regional Science and engineering Fair (SEORSEF). OPGA recognizes the accomplishments of students who have created the best pawpaw project. A student is awarded the OPGA Certificate of Excellence Award for outstanding achievements in pawpaw research and development and also receives a check for $50. By Diane Cuson,

•2004

6th Annual Ohio Pawpaw Festival

Lake Snowden near Albany, Ohio

September 18 (Saturday)

September 19 (Sunday)

Landscaping with pawpaws by Mason Chambers

The Pawpaw (*Asimina triloba*) is a stately little native tree that is woefully underused in home landscapes. The occasional plantings which do occur were installed primarily for fruit production or were remnants that escaped destruction when homes were constructed in a woodland setting. Pawpaw planted primarily for fruit production often were not sited well in relationship to the rest of the landscape and integrating existing stands present design problems. The reason for this is that the Pawpaws unique habit and beautiful structure do not fit in with more traditional landscape schemes. This does not have to be the case. This article will discuss integrating existing stands and orchard plantings into home landscapes as well as the installation of Pawpaws as ornamental trees.

The habit and cultural requirements of Pawpaws ensure that the trees will never be as popular to homeowners as a crabapple or flowering pear. They have a place in urban and suburban landscapes, especially with the expanding interest in native plant material. When you start looking for them, Pawpaw trees are everywhere. I have observed many trees in the Columbus, Ohio area. Individual trees planted in full sun, as small stands on the edges of urban lots or colonies populating the patchwork of open spaces along the rivers and tributaries that run through the city. What these observations offer are that Pawpaws are opportunistic and flexible, thriving when sited and planted in the proper environment.

Finding a Pawpaw tree can be tough because most nurseries and garden centers do not carry them. Specialty growers and mail order catalogs are often the only options. The trees are best planted from containers with fully developed root systems. They will grow in sun or shade. Those planted in sun will tend to have a fuller habit with more potential for fruit production. Pawpaws planted in shade will have an open habit with a higher canopy. Generally, the planting site should be moist but well drained, with sufficient organic material.

The habit of Pawpaws planted in sun or shade have great architectural and functional potential when used as an ornamental landscape tree. As an individual specimen, the Pawpaw is a great choice for smaller yards. When planted in full sun, the tight pyramidal habit can offer screening and shade for outdoor living areas. They are also great focal points providing an interesting texture not found with any other trees of this size. Formal landscape elements such as hedges, well defined and maintained beds, and cutting gardens work will with this landscape application. In larger yards, Pawpaw trees can be massed together in defined bed areas used for screening or focal points. As the planting matures, the individual trees will reach various heights. This layered effect becomes striking, offering great contrast between the lawn and other landscape plantings in the yard. A mass of Pawpaws in front of a line of evergreens or in the midst of a perennial garden would work very well. Pawpaws used for naturalizing, either at the edge of woods or as an understory planting is another landscape use. At the edge of the woods, Pawpaws can fill the spatial void between the open lawn and the higher canopy of the woods. Edge plantings also offer great beckoning points, drawing visual interest out of the open and into the woods. Understory plantings offer the potential for recreating a naturalized colony, providing the 'tropical' look and feel that is often associated with Pawpaws in their natural habitat. This can be challenging, but offers great visual and architectural reward as a Pawpaw colony is a wonderful and unique element in any home landscape.

Homeowners who are lucky enough to have existing plantings on their property often have to figure out how to integrate them into the overall landscape plan. The general rule is to not fuss over them too much. Existing trees and brush can be removed selectively to enhance the health and appearance of the Pawpaw trees. It's a good idea to determine the species of other plants prior to removing them because they may become part of the overall landscape plan. New landscape plantings and pathways can be designed in such a way that existing Pawpaw patches are now focal points and areas of interest. Occasionally individual trees and small groupings will remain in the open. Pawpaw trees have thin bark and do not flourish in compacted soils. If there is going to be a lawn or a fair amount of activity around the existing trees, bed areas should be put around them to help protect and define the trees.

Integrating Pawpaw plantings for fruit production into smaller home landscapes can be an interesting task. For people who have space for traditional orchards (plants lined up in a row) this is not a problem. Since most people who want Pawpaws for fruit have smaller yards and existing landscaping, placing trees is important. Massing the trees in a large defined bed is a good option. Cross pollination can take place, the trunks and root systems of the trees can be protected, and bed areas amended more readily to promote fruit production. Individual trees can be planted with a large tree circle to protect the trunk and can be sited with landscape principles in mind as well as providing for potential fruit productions.

Pawpaw trees merit greater consideration as an ornamental landscape tree. Thought should be given when placing them due to the fact that they are had to find and are generally sold as small containerized plants which will take time to grow into the stunning specimen trees or colonies found in nature.

Mason chambers is the owner of Five Springs Farm in Athens, Ohio. Web site: www.bamboofarm.com

FACTORS AFFECTING PAWPAW FRUIT SET

by Rory Lewandowski, Extension Agent, Ag/NR Athens County, Ohio

The serious pawpaw grower would love to see trees loaded with fruit. Unfortunately, the pawpaw is a tree that is not known for high yields, particularly when compared to other domestic fruit trees. It is not uncommon to see yields of 8 to 10 lbs. (or lower) per tree with yields of 50 lbs. per tree considered very high and also uncommon. A summary of pawpaw fruit production at the Kentucky State University regional variety trial from the 2000 and 2001 growing seasons shows the top varieties averaging 15 to 20 lbs. of fruit per tree, with just one variety averaging more than 30 lbs. per tree in that period. So, given this seemingly rather low natural productivity of the pawpaw tree, is there anything the grower can do to maximize production? The answer to this question begins with understanding the factors that affect pawpaw fruit set.

Factors that affect pawpaw fruit set can be divided into two broad categories, factors growers have no control over, and factors that the grower can manipulate. Let's consider those factors growers have no control over and begin with the pollination of the pawpaw tree. Good pollination is vital to fruit production. It appears however, that nature has stacked the deck against the pawpaw when it comes to pollination. To begin with the pawpaw is protogynous, meaning that the pawpaw flower is not self-fertile. The stigma or female part of the pawpaw flower is receptive to pollen shed by the anther or male part of the flower before the pollen is mature. In addition, should by some chance the pollen mature in time to catch the stigma in the receptive phase, this pollen is almost always self-incompatible. What all of this means is that pollen is needed from another, genetically different, pawpaw tree to insure fertility. Even in this regard the odds again seem to work against the pawpaw, since in the wild pawpaws produce root suckers that result in patches that are basically clones of one another. Unless a genetically different patch is close enough to provide pollen, fruit set will be low. The next factor that the grower has no control over is the pollinators themselves, the agents responsible for transferring pollen from one tree to another. In the case of pawpaws these pollinators are thought to be various species of flies and beetles, which are not very efficient or dependable pollinators. Finally, there is the weather itself. It is thought that cool, cloudy weather during the pawpaw bloom period may depress insect flight, leading to lower pollination activity and a corresponding lower fruit set. Should by some chance good pollination be achieved and fruit set look promising, there is always the chance of an unseasonably late frost, like that experienced in 2002 in Ohio that can diminish fruit set and production.

Although at this point a beginning pawpaw grower may be tempted to throw his or her hands in the air, discouraged from ever seeing good fruit set, there are some things the grower can do to increase fruit set. Knowing that the pawpaw requires cross pollination and genetically different trees to ensure fertility, the grower can plant different pawpaw varieties in a patch or orchard. In wild patches an area could be cleared to plant a different variety or different varieties could be grafted unto already existing trees. With regard to the pollinators themselves, enterprising pawpaw growers have placed road kill in buckets hung in pawpaw trees to attract the types of flies and beetles that do the pollination work, thus increasing fruit set. For the grower really serious about improving pollination and fruit set, hand pollination can be done. While this ensures pollination, it is very labor intensive and time consuming. Fruit production is greatest in trees that have full sun. Management practices such as thinning the canopy above pawpaw trees in a wooded situation with wild patches of pawpaw will allow more sunlight to reach mature pawpaw trees and increase fruit production. Variety selection by growers that take advantage of genetic abnormalities in some pawpaw varieties may become another way to increase fruit production. In a paper by Pomper, Layne, Peterson and Wolfe published in 2003 dealing with results of the pawpaw regional variety trial, the authors say "It has been suggested by some hobbyists that the variety Sunflower may be self fruitful; however this has not been experimentally documented. Interestingly, 'Sunflower' did produce the greatest number of fruit per tree in this study, raising the possibility that self-fruitfulness in 'Sunflower' could have resulted in greater fruit set in this selection." Now before everyone rushes out to plant 'Sunflower' make sure that the flavor of the fruit produced is what you like since all pawpaw fruit is not equal as is seen (and tasted) each year at the Pawpaw Festival. Second, note that it has not been proven that this variety is truly self-fruitful, and finally, it is never a good idea to get into a monoculture or a single variety situation. In nature, diversity is good. May all the factors affecting pawpaw fruit set, controllable and uncontrollable, come together to make your 2004 season a productive one.

OU students developing pawpaw products this spring

With pawpaw varieties donated by regional growers, researcher, Melani Duffrin and the Experimental Foods class at Ohio University will be conducting consumer preference and sensory analysis testing on the donated varieties during the Spring Quarter. Additionally, the Experimental Foods class will work to create new and inventive uses for pawpaw puree. The plan is to challenge the students to come up with ideas making use of the fruit in anything from pawpaw smoothies to pawpaw casserole. Possibilities are boundless with student collaboration, and a pawpaw smorgasbord will undoubtedly take shape. Because pawpaw puree's unique characteristics offer a wide array of qualities – such as fat substitution – it can be used to modify old favorites or sued as the building blocks of original cuisine. Whatever the outcome may be, students will gain valuable experience working in the test kitchens, and the pawpaw frontier will be further expanded.

By Diane Cuson, an OU Dietic Student. Diane is a student of Melani Duffrin's and submitted several articles for this newsletter on OU's work with pawpaws.

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Spice up your springtime cookout with a zesty pawpaw recipe.

Your guests are sure to be stunned at your next get-together when you substitute pawpaw ketchup for the ordinary, predictable condiment. Instead of the run of the mill taste, they will encounter a flavor blast packed with all sorts of seasonings, sure to please any barbecuing crowd.

Pawpaw Ketchup (mild)

Ingredients:

5 ea. medium yellow tomatoes
(skinned and chopped)
1 cup pawpaw puree
3 ea. red long chili peppers
(skinned and chopped, with some of the seeds)
½ cup rice wine vinegar
½ cup honey
¼ t cayenne pepper
1 bag spice mix as follows
(place in small cheesecloth bag)
2 ea. dried oriental chili peppers
(i.e. the chili peppers used in Chinese cooking; use more for a hotter ketchup)
1 ea. bay leaf (tear up)
1 t cardamom seeds
1 T ginger root (crushed)
½ stick of cinnamon
1 T mustard seed
1 t whole allspice
1 t coriander
1 t peppercorns

Instructions:

In a medium pot, bring water to boil. In a bowl make an ice-water bath. Wash tomatoes and long chili peppers and put into boiling water. After 10 seconds, remove tomatoes and place in ice-water. Remove skins from tomatoes. By this time the long chili peppers will have been in the boiling water for several minutes, move them to the ice-water. Remove most of the skin from the long chili peppers (if skin won't budge, try more boiling). Remove stems and most of the seeds from the peppers. Chop peppers. (if peppers are really hot, wear gloves). Core and chop tomatoes. Put long chili peppers, vinegar, and tomatoes in a saucepan (stainless or enamel). Cook until soft. Puree with immersion blender. Add pawpaw puree. Put spice bag into vegetables and boil until thickened. Add honey and cayenne pepper (if needed for desired hotness). Continue boiling until desired thickness is obtained. Refrigerate for immediate use, freeze, or can using boiling water bath. (yield about three cups)

By Gary Saum