

# Gulf Coast Fruit Study Newsletter

Volume 18, Issue 1

Edited By: Ethan Natelson

February 10, 2004 Meeting

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## **Growing Fruit and Nut Crops in South-Central Texas and Along the Gulf Coast**

**By William D. Adams**

### *Current Meeting:*

Our program will begin at 7:00 p.m. on February 10, 2004 at the Extension offices at the Bear Creek Facility. The program will be devoted to various techniques of plant propagation, including grafting and pruning.

### *Contact Us!*

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Fruit and nut crops require an investment in time—as little as a year for blackberries to 3-4 years for peaches and apples—typically 7 years or more for pecans. And all the time you're waiting you still have to water, fertilize and spray them. They also require full sun and some growing room. Apples and pears need to be spaced 20 feet apart, peaches, plums and nectarines 10-15 feet apart and pecans 35-50 feet apart. What about dwarf trees? Dwarfing rootstock for apples works fairly well here, however pears on quince rootstock aren't too successful. Genetic dwarf peaches have po-

tential but finding a good variety for this area has been difficult and a practical dwarfing rootstock for pecans doesn't seem to be on the horizon.

Most fruit crops require full sun and a good deep soil. OK, so we can amend the soil to some extent, especially for the smaller trees like peaches but pecans on a shallow soil with a hardpan is a waste of time. It's a good idea to locate a good source of organic matter for mulching and sidedressing to build up the organic matter in your home orchard. Don't overplant to try and com-

pensate for bad soil. It's better to plant the tree slightly high and mulch with lots of organic matter than to plant deep and kill the tree or stunt it because the planting hole retains too much moisture. Most growers recommend not fertilizing trees the first year, but a slow-release fertilizer in the planting hole can be a big help in getting the tree established.

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## Growing Fruit and Nut Crops (cont'd)

What about chilling requirement? This is that illusive factor that beginning fruit growers find so frustrating to understand. Don't feel bad—universities like Texas A & M have been trying to pin down the complexities of this effect for years. Essentially, it isn't a mathematical science. Even though varieties are typically identified as requiring a given number of chilling hours (temperatures below 45 degrees F. and above 32 degrees F.), 500 hours one year may not be as effective as 400 hours the next year.

For example chilling hours received in January/February (late in the season) seem to be more effective than chilling hours received in the fall. Warm days during the dormant season may even cancel chilling hours. Does this mean you'll need a weather station in your yard to be able to grow fruit crops? The data might be of interest but what can you do about it anyway? A chemical known as Dormex® has shown promise to help trees break dormancy after a mild winter but it won't likely be available for homeowner use.

The best answer is to plant a range of varieties to cover your bases. With stone fruits (peaches, plums and nectarine) plant varieties in the 500-650 hour range to give you crops in the average year. Also include some low-chill varieties in the 150-350 range for mild winter years—and hope for the best. Late spring freezes may take out the low-chill varieties some seasons and the higher chill varieties will limp out of dormancy after a mild winter.

All deciduous plants (lose their leaves in the winter) probably have some chilling requirement, but these requirements are not well documented. For instance, we know that certain apples such as Anna and Dorsett Golden are very low chill—probably requiring only 100-200 hours of temperatures below 45 degrees F. to break dormancy while most others only grow well and produce apples some years. If your orchard is in the Hill Country then your choice of varieties can include some of the best new varieties like Gala, Braeburn, Mollie's Delicious and Fuji.

The chilling requirement of pear varieties is rarely mentioned in catalogs but the ones that grow best for us are probably in the 300-400 hour range. These include hard pear varieties like Baldwin, Garber, Kieffer, Pineapple and Orient. Higher quality pears like Warren, Le Conte, Southern Queen and Tenn (Tennessee) are also worth growing though Warren has a bit higher chilling requirement. Asian pears (mild flavor, very juicy) such as Hosui, Kikusui, Kosui and Ya Li have also grown well in this area.

Main season peaches should include TexRoyal, Mid-Pride, June Gold, June Prince, Red Baron and Tex Star. Low-chill varieties like Tropic Snow or Tropic Sweet should be included if you have room. Recommended nectarines include Karla Rose, Mayglo and Snow Queen.

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## Growing Fruit and Nut Crops (cont'd)

A number of plum varieties are low-chill enough to grow for us but bacterial canker which also hits peaches and nectarines is usually the limiting factor. Even though they are very susceptible to canker, the Japanese hybrids (sometimes referred to as California or Burbank varieties) are worth planting. They produce excellent fruit, most are good pollinators and when planted in the home orchard, they usually live eight years or more before bacterial canker takes them out. Examples include Beauty, Mariposa, Robusto and Santa Rosa. Others to try include Au Roadside, Au Rosa, Blaze, Methley and Wade.

Apricots make an occasional crop in this area and as you go west they are more dependable. They are very susceptible to disease and some years they don't get enough chilling. The Blenheim/Royal varieties seem to be the most likely to succeed though others like Flora Gold, Royal Rosa, Katy, Surecrop and Daecker have been recommended.

Blackberries are an especially good crop for this area. The old Texas A & M release Brazos is still recommended though it is a bit sour with large seeds. Newer A & M releases like Brison, Rosborough and Womack are better.

Thornless varieties like Navaho and Arapaho have also done well. Kiowa is a new University of Arkansas variety with excellent production of large berries. It also has lots of thorns. The key to good blackberry production is to cut out all of the bearing canes to the ground after the harvest is over—it's not much fun but it reduces the buildup of insects and diseases.

Raspberries have been less successful. Dormanred grows well here but the quality is poor. Heritage, Oregon 1030 and San Diego have been grown but production is limited.

Blueberries, if you can provide an acid soil, have potential. Some folks have gone to the extreme of building raised beds, 12-18 inches deep filled with a 50/50 mixture of sand and peat moss. This is a lot of trouble and expense but the blueberries will grow well in it until the roots grow into the surrounding alkaline soil. Then expect to spend lots of money on iron chelates. It's not that far to drive to a pick-your-own blueberry farm. Delite, Tifblue and Woodard are just a few of the many varieties adapted to the South.

Strawberries are relatively quick and easy. They are best planted in the fall, harvested in the spring and then ploughed under each year. In home gardens people often carry the plants through the summer and save new plants (about 1 foot apart) in the fall. Eventually insects, mites and diseases build up though and you may want to start over. Chandler has been the main variety in this area.

It seems that more people would like to grow grapes than just about any other fruit. Mostly they want to have a vineyard and of course, a winery. A few want to grow table grapes and even fewer would settle for a grape to cover an arbor or make a few jars of jelly from. Well, in Texas wineries have sprung up all over the place but lots of wineries buy their juice from producers further to the west and the grapes they plant near the winery are mostly for show. Pierce's Disease eventually takes out all of the European vinifera grapes and most of the hybrids. That leaves us with old varieties like Champanell (maybe better than a Mustang grape), Black Spanish,

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## Growing Fruit and Nut Crops (cont'd)

Mortensen Hardy, Herbemont, Lake Emerald, Stover, Favorite, Orlando (berries large enough to feed a small bird) and the wine grape Blanc Du Bois which is ravaged by anthracnose fungus. Muscadine grapes are easy if your soil isn't too alkaline and if you like a grape with lots of flavor and a few seeds. Favorite muscadines include Carlos, Fry, Hunt, Ison, Magnolia and Sweet Jenny.

Citrus fruits are extremely popular but they need lots of winter protection when you get away from the Gulf Coast. Kumquats, satsumas (tangerine like members of the mandarin group), and a few odd hybrids like Thomasville citrangequat are the most hardy. Growing them in large containers is one technique that allows you to move them in where it's warm on those few cold nights we have each year. If you're willing to give them some freeze protection then Meyer lemon, Bloomsweet grapefruit and oranges are a possibility.

Figs are an extremely popular and well-adapted fruit for this area. The Celeste or Blue Sugar fig is perhaps the best quality fig for our area, however a new variety LSU Purple

is similar and more productive. Varieties like Magnolia and Brown Turkey with an open eye are susceptible to fruit beetles that cause the figs to sour. Kadota type figs with a drop of honey in the eye are less susceptible to souring. These varieties include Anna, Excel and Tena.

Asian persimmons are not only delicious, the trees are attractive in the landscape. Some varieties even have fruit that is non-astringent before the fruits become soft-ripe. Some of the best non-astringent varieties are Fuyu, Jiro, Izu and Suruga. Astringent varieties include Giombo, Hachiya and Saijo.

There are many other minor fruit crops that we can grow such as pineapple guava, loquat, pomegranate, jelly palm, gumi, mayhaw, jujube and pawpaw. Some might even become major crops, as they become better known. The jujube is a popular Asian fruit that is good fresh or candied like a date (Red Date is a name you may see in Asian food stores). A neighbor recently produced bushels of 'Cloud' pomegranates that were excellent and after a mild winter loquats are wonderful for jelly (try them combined with strawberries in a jam).

The State Tree of Texas is the pecan and for good reason—it makes a heck of a pie. It's not always a great landscape tree, however. Many of today's landscapes aren't big enough for a pecan tree and if you decide to spray your pecan tree to control insects and diseases you are going to spray the neighbors yard too. Pesticide drift isn't appreciated as much as it used to be. The solution then is to plant disease resistant varieties that will occasionally produce a crop of pecans and fat squirrels—you will still be going to the farmer's market to buy yours.

Disease resistant pecan varieties to look for include Caddo, Candy, Cape Fear, Choctaw, Desirable, Elliot, Forkert, Houma, Melrose, Oconee, Shawnee and Sumner.

Carpathian walnuts, Black walnuts and Chinese chestnuts may have some potential for this area.

## Persimmon Muffins

1/2 cup persimmon pulp	1/2 tsp. nutmeg
1/2 tsp. baking soda	1/4 tsp. cloves
1 1/2 cups flour	1/2 cup chopped raisins
1/2 cup sugar	1 egg, beaten
2 tsp. baking powder	1/2 cup milk
1/2 tsp. salt	1/4 cup melted butter
1/2 tsp. cinnamon	

Mix together pulp and soda, then beat in egg, milk and butter. Sift flour, sugar, baking powder, salt, and spices together in separate bowl. Add raisins. Stir persimmon mixture into flour mixture until moistened. Batter will be lumpy. Spoon into muffin tins. Bake in 400 degree F oven 15-18 minutes. Makes 1 dozen.

Source: Old-Fashioned Persimmon Recipes, printed in Southern Fruit Fellowship Newsletter (Issue 46, October-December 1999).

## Blueberry Poundcake

1 box yellow cake mix  
1 8 oz. cream cheese (softened)  
1/2 cup oil  
3 eggs  
1 1/2 cups blueberries

Mix together all ingredients, except blueberries and blend until smooth. Fold in berries. Bake in greased tube pan at 325 degrees F for 1 hour or until done.

Source: Jackie Rawls, printed in Southern Fruit Fellowship Newsletter (Issue 44, April-June 1999).

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