

# FRUIT AND ROSE RESEARCH - OVERTON, 1983

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## FRUIT VARIETY RECOMMENDATIONS FOR EAST TEXAS

John A. Lipe and Stan C. Peters

Work was started at Overton in 1973 to evaluate new varieties of peaches, plums, blackberries, grapes and apples and to determine the feasibility of producing blueberries in East Texas. Highlights of these results are presented below.

### Peaches

An open-ended planting of more than 60 peach varieties was established at Overton in 1973. Trees were fertilized with surface applications of 12-12-12 beginning at 0.5 lbs/tree after planting and increasing to a single spring application of 4.0 lbs/tree on mature trees. Trees were irrigated with a drip system beginning in 1974, receiving a weekly maximum of 60 gallons of water in three applications. Insects and diseases were controlled by standard commercial practices. All varieties were evaluated for yield, bloom date, harvest date, size, firmness, attractiveness, flavor and soluble solids (S.S.).

Late May -- No variety ripening in this period was clearly outstanding. Springold and Springcrest were regarded as essentially equal with Springcrest ripening an average 2 days earlier than Springold. Camden was very attractive, but lacked production and had excessive split pit.

Early June -- Sentinel was the most productive variety during this period. Sentinel quality and firmness were not outstanding, but production was very consistent. Surecrop, ripening one week earlier than Sentinel, was promising.



Late June -- Harvester was one of the top varieties in the test. It combined consistent production, excellent firmness and acceptable quality to rate as a definite commercial variety. Velvet, Norman and Troy have also shown good potential. Red Globe, a commercial variety, has failed to produce well.

Early July -- Summergold, Denman and Milam have all exhibited good production and quality and have excellent commercial potential. Harmony and La Premiere have also shown promise. Loring, a popular commercial variety, has not produced well.

Late July -- Fayette and Redskin have been the best varieties in this period. Fayette production and quality has been better than Redskin. Madison has had very good production, but shape and firmness have not been good enough for commercial use.

August -- Tyler and Marqueen have been the best selections in this period. Good production has been difficult to attain on any selection ripening this late because of difficulty in maintaining insect and disease protection.

#### Plums

Seven plum varieties are under evaluation at Overton. Cultural systems used for them have been essentially the same as with peaches. Morris has continually proven to be the best variety in the test. Morris has consistently produced a good crop and was at or near the top in every quality attribute. Fruits average over 2 inches in diameter, have a dark purple peel and a sweet red flesh.

Bruce has yielded heavy crops of firm, attractive plums, but they lack quality. Ozark Premiere, from general observation, should be second to Morris in commercial importance. Santa Rose has been the



has been very light.

### Blackberries

A variety planting of 15 selections of erect blackberries was planted at Overton in 1973. Primary emphasis has been on machine harvest. Cherokee has been judged clearly superior for this with very erect canes and good production of medium size, firm berries.

Rosborough, Cheyenne and Brazos have been the best large fruited varieties for those only interested in hand harvest. Brazos and Rosborough ripen in mid May while Cheyenne and Cherokee ripen in late May - early June.

Small plots of several trailing and semi-erect blackberries, including several thornless varieties have been maintained. Georgia Thornless has been the most productive thornless variety but quality has been poor. Flint, a semi-erect, and Tree Blackberry, an erect variety, have had good production and quality, but both are prohibitively thorny.

### Raspberries

Several varieties have been tried, but Dorman Red is the only variety that has been well enough adapted to grow and produce a significant quantity of fruit. Canes of Dorman Red are trailing and fruit are medium size with satisfactory quality.

### Blueberries

A rabbiteye blueberry trial with eight varieties was planted in 1973. The plants are under trickle irrigation and they have been periodically mulched with hay, pinebark and sawdust.

It has been shown that rabbiteye blueberries will grow and produce well in East Texas, but cultural practices must be more



thorough than with other crops. Care must be taken to insure that the soil at the planting site is at proper pH and not compacted. Peat moss added to the planting hole is very beneficial to the young plant and irrigation -- preferably trickle -- should be considered a must.

Tifblue, Delite, Briteblue, and Woodard have been the top varieties in the original variety trial. New plantings indicate that Climax may also be a good variety. Woodard has ripened slightly ahead of the others beginning in early to mid June and continuing until almost mid July. Other varieties have all begun ripening within one week of Woodard.

#### Muscadine Grapes

A planting of over 30 varieties was started in 1974 and most have had good production. All selections have been judged on the basis of production, fruit weight, soluble solids (sugars), pH, titratable acidity, firmness, attractiveness, stem scar, peel slip, melting pulp, flavor, disease, percent pulp, percent peel and seed per berry.

Production, using a single wire training system, has ranged to near 10,000 lbs/acre on the top selections. Top rated bronze selections have been Higgins, Summit, Sterling and Carlos. Regale, Noble and Cowart have been the overall best purple varieties. Young vines of Watergate and Redgate (both bronze) have shown promise.

#### Bunch Grapes

A planting with over 20 selections of bunch grapes was started in 1975. Selections were rated on the basis of many of the same characters as indicated for muscadine grapes. Vines have been trained by a Kniffin system on a 2-wire trellis. Production totals as high as 18,000 lbs/ac have been reached.



Top rated selections have been Carman and Blue Lake plus several numbered selections. These varieties both have small, purple berries and are best suited for jams and jellies. Dessert-type grapes have also performed well -- especially Verdelet (Seible 9110). Himrod, the only seedless grape in the trial, has produced a reasonable crop of good quality berries, but black rot has been difficult to control. Two selections of Vinifera grapes were included to test for Pierce's disease and black rot has been almost impossible to control on these.

Season of ripening of top rated fruits in Texas Agricultural Experiment Station variety trials at the Texas A&M University Agricultural Research and Extension Center at Overton.

Date of Harvest	Varieties				
	Peaches	Plums	Apples	Blackberries	Blueberries
May 1					
15	Springcrest Springgold			Brazos Rosborough Cherokee Cheyenne	
June 1	Surecrop Sentinel			Dorman Red Raspberry	
15		Morris			Woodard Briteblue Tifblue Delite
	Harvester Velvet Norman Troy	Ozark Premiere	Jersey Mac		
July 1	Summergold Denman Milam				
15		Mollies Delicious			
August 1	Redskin Fayette Tyler Marqueen		Stark Laura Red		Verdelet (Seible 9110) Carman Blue Lake
15			Red Chief		Summit Regale Carlos Noble Coward Higgins Sterling
September 1					
			Starkspur Golden Delicious		