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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.).

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

<u>Early June</u> -- <u>Sentinel</u> was the most productive variety during this period. Sentinel quality and firmness were not outstanding, but production was very consistent. <u>Surecrop</u>, 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 acceptible quality to rate as a definite commercial variety. <u>Velvet</u>, <u>Norman</u> and <u>Troy</u> have also shown good potential. <u>Red Globe</u>, a commercial variety, has failed to produce well.

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

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

<u>August -- Tyler</u> and <u>Marqueen</u> 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. <u>Morris</u> has continually proven to be the best variety in the test. <u>Morris</u> has consistantly 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.

<u>Bruce</u> has yielded heavy crops of firm, attractive plums, but they lack quality. <u>Ozark</u> <u>Premiere</u>, 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. <u>Cherokee</u> has been judged clearly superior for this with very erect canes and good production of medium size, firm berries.

<u>Rosborough</u>, <u>Cheyenne</u> and <u>Brazos</u> 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. <u>Georgia</u> <u>Thornless</u> has been the most productive thornless variety but quality has been poor. <u>Flint</u>, a semi-erect, and <u>Tree Blackberry</u>, an erect variety, have had good production and quality, but both are prohibitively thorny.

Raspberries

Several varieties have been tried, but <u>Dorman</u> <u>Red</u> 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.

<u>Tifblue</u>, <u>Delite</u>, <u>Briteblue</u>, and <u>Woodard</u> have been the top varieties in the original variety trial. New plantings indicate that <u>Climax</u> 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 <u>Higgins</u>, <u>Summit</u>, <u>Sterling</u> and <u>Carlos</u>. <u>Regale</u>, <u>Noble</u> and <u>Cowart</u> have been the overall best purple varieties. Young vines of <u>Watergate</u> and <u>Redgate</u> (both bronze) have shown primise.

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 <u>Carman</u> and <u>Blue Lake</u> 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 <u>Verdelet</u> (Seible 9110). <u>Himrod</u>, 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.

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ties	Grapes						Verdelet (Seible	Blue Lake	Summit Regale Carlos Noble	Cowart Higgins Sterling	
	Blueberries			En e Foot	woodard Briteblue Tifblue Delite						
	Blackberries		Brazos Rosborough Cherokee Cheyenne	Dorman Red Raspberry							
Varieties	Apples				Jersey Mac	Mollies Delicious		Stark Laura Red	Red Chief		starkspur Golden
	Plums			Morris	Ozark Premiere						
	Peaches		Springcrest Springold Surecrop Sentinel		Harvester Velvet Norman Troy Summergold	venman Milam	Redskin Fayette	Tyler Marqueen			
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Date of	Harvest	Мау	June		July			August		September	