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RASPBERRY CULTIVAR TRIALS

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Production of true raspberries in hot climates has not been successful. The only raspberry that has been proven adaptable to Texas is a Mississippi release called Dorman Red, which is not a true northern red raspberry, but is seven-eighth Asian raspberry. Some reports have suggested that some northern raspberries can be grown in Texas if they are heavily mulched and well irrigated. Because of the high horticultural interest in growing berries, a research plot was established at Overton in 1985 to evaluate ten raspberry cultivars grown with and without a four inch sawdust mulch.

Yield in 1986 for each cultivar and soil treatment is shown in Table 1. All cultivars except Dorman Red had an unacceptable commercial yield. Mulch had an extremely beneficial effect on yield of most cultivars, increasing yield from two to thirty times that of the no-mulch treatment. Even the yield of Dorman Red was increased four fold by using mulch. Mulch was also influential in advancing maturity (Table 2). Forty percent of Dorman Red fruit matured at the first picking with the mulch treatment compared with only nineteen percent without mulch.

Fruit quality of red raspberries grown in Texas rated overall very poor (Table 3). None were rated excellent. Dorman Red is considered a tart, insipid flavored berry, but it rated comparable or better than most of the other true raspberries. Two of the sweetest tasting fruit were Bababerry and Southland. These had only been planted since the spring of 1986 and no comparable yield data was yet available.

It is apparent from this study that only Dorman Red is an acceptable cultivar for Texas. Even with heavy mulch, other cultivars did not perform adequately. Although Dorman Red does not have a tradition red raspberry taste, most consumers found it very desirable, especially for making preserves. A survey of red raspberry patches in East Texas indicated that without mulch Dorman Red averaged two thousand pounds per acre. Whereas with mulch, yields were reported up to twenty thousand pounds per acre. Price for you-pick berries ranged

from \$1.00 to \$1.25 per pound, with consumer demand being considerably greater than supply.

In conclusion, some supposedly heat tolerant red raspberries have yet to thoroughly be tested in Texas. This includes Bababerry, San Diego, and Southland. However, from this initial study it appears that only Dorman Red is suitable for the hot Texas climate with mulching being extremely beneficial for production. A poor performance of other raspberries can be attributed to several factors including plant decline due to viruses, severe winter injury of late fall growing canes and heavy leaf disease pressure.

Table 1. Raspberry Yield Performance at Overton in 1986

Variety	Soil Treatment	Yield (lbs/ac)
Oregon 1030	Mulch	71
	No Mulch	45
Titon	Mulch	255
	No Mulch	287
Royalty	Mulch	359
	No Mulch	365
Reveille	Mulch	367
	No Mulch	< 25
Latham	Mulch	216
	No Mulch	34
Canby	Mulch	< 25
	No Mulch	< 25
Sentry	Mulch	< 25
	No Mulch	< 25
Heritage	Mulch	800
	No Mulch	< 25
Dorman Red	Mulch	5613
	No Mulch	1318

Table 2. Raspberry Fruit Quality Performance at Overton in 1986

Variety	Size g/fruit	Soluble Solids %	Taste (1-bad, 10-excellent)
Oregon 1030	1.7	8.9	7.0
Titon	2.8	7.0	5.7
Royalty	2.2	6.7	2.0
Reveille	2.1	5.0	5.8
Latham	2.1	6.5	6.5
Canby	1.3	7.7	4.6
Sentry	1.4	4.6	1.0
Heritage	1.7	8.1	5.5
Dorman Red	2.3	7.5	6.0
Bababerry	2.4	9.1	7.5
Southland	2.3	12.0	7.5

Table 3. Effect of Mulch on the Fruit Maturity of Dorman Red at Overton in 1986

Date	% of Total Yield	
	Mulch	No Mulch
6/2	39	19
6/9	52	62
6/17	9	19