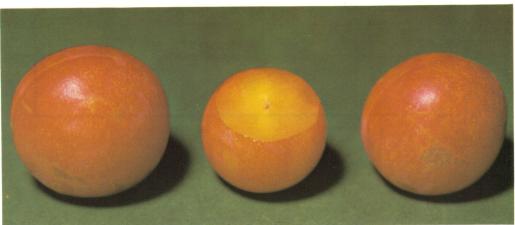
JULY 1975 CIRCULAR 218





AGRICULTURAL EXPERIMENT STATION/AUBURN UNIVERSITY R. Dennis Rouse, Director Auburn, Alabama

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HOMESIDE: An Excellent Quality Plum For Home And Roadside Market

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INTRODUCTION

MESIDE IS a new plum variety developed by the Auburn University Agricultural Experiment Station for growing in central and south Alabama, where sufficient chilling of 700 hours of temperature below 45°F occurs. This variety has proven its ability to produce good yields of high quality fruit where certain fruit and disease problems occur.

Homeside was selected from a cross between Methley and Ozark Premier varieties. It has resistance or tolerance to Black Knot, Bacterial Canker, Bacterial Fruit Spot, and Bacterial Leaf Spot, prevalent diseases of plum. Such resistance is particularly important in the Southeast where prevalence of these diseases and susceptibility of commercial varieties has discouraged plum production. It received resistance to bacterial and fungal diseases from Ozark Premier. Excellent fruit quality was inherited from both parents.

Trees of Homeside are vigorous, spreading with medium green foliage.

FRUIT QUALITY

Fruit of Homeside have an orange to light red skin and cream flesh. Homeside is a very large plum, usually the fruit is $2\frac{1}{4}$ to $2\frac{1}{2}$ inches in diameter. The excellent fruit quality makes Homeside well-suited for home and roadside markets, but fruit has inadequate firmness for handling in storage, packing, and shipping to chain stores and distant markets (Table 1). Skin color development is not as intense as Crimson, Methley, Purple, and Santa Rosa. Maturity date is approximately the same as Santa Rosa (Table 2). The plant is self-fruitful.

^{*} Professor, Department of Horticulture.

Variety	Fruit set	Flesh color	Skin color	Size	Shape	Flavor	Firm- ness	Stone freeness	Texture	Soluble solids
Bruce	5^1	orange to red	orange to red	1¾-2	5^{i}	3^1	3^{1}	cling	31	9.4
Crimson	5	crimson red	crimson red	$1\frac{1}{2}-1\frac{3}{4}$	5	5	5	cling	5	16.3
Methley	5	dark red	dark red to purple	1-11/4	5	5	3	cling	5	18.5
Homeside (Methley A-39)	5	cream	orange to light red	$2\frac{1}{4}-2\frac{1}{2}$	5	5	4	cling	5	18.8
Ozark Premier	5	cream	red to purple	2-21/4	5	5	4	free	5	15.7
Purple	5	cream	dark red to purple	1 3/4 -2	5	5	5	semi cling	; 4	14.8
Santa Rosa	4	red	dark red to purple	14-1½	5	5	5	cling	5	16.7

TABLE 1. FRUIT CHARACTERISTICS OF PLUM VARIETIES

¹Rating index: 5 = excellent, 4 = good, 3 = fair, 2 = poor, and 1 = very poor.

	A	uburi	1	Ca	mp H	ill	(Clantor	1	C	Cullma	n	F	airhop	e	Н	eadlar	nd
Variety	Bloom date	Har- vest date	Yield ¹	Bloom date	Har- vest date	Yield	Bloom date	Har- vest date	Yield	Bloom date	Har- vest date	Yield	Bloom date	Har- vest date	Yield	Bloom date	Har- vest date	Yield
Crimson		6-29 7-14	$\frac{2}{5}$	3-17 3-20	7-5 7-20	3 5	$3-17 \\ 3-19$	7-3 7-18	3 5	$3-16 \\ 3-19$	7-7 7-18	$\frac{3}{3}$	⁵	⁵ 	$1 \\ 1$	3-22 3-22	6-26 5-7	3 5
Ozark Premier Purple	3-22 3-20 3-24	7-5 6-10 7-10 7-20 7-5	$5 \\ 3 \\ 4 \\ 5 \\ 3$	3-18 3-20 3-18 3-22 3-21	7-12 6-16 7-18 7-23 7-9	$ 4 \\ 3 \\ 4 \\ 5 \\ 3 $	3-10 3-20 3-18 3-23 3-22	7-10 6-14 7-15 7-22 7-8	$5 \\ 3 \\ 4 \\ 5 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3$	3-16 3-17 3-15 3-20 3-19	7-14 6-18 7-15 7-25 7-11	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 3 \\ 2 \end{array} $			$2 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$	3-20 3-24 3-23 3-28 3-26	7-1 6-7 7-5 7-15 7-1	$5 \\ 4 \\ 5 \\ 5 \\ 4$

TABLE 2. BLOOM AND HARVEST DATES AND YIELD OF PLUM VARIETIES, 1965-1974

¹ Yield index: 0 = 0, 1 = very low, 2 = low, 3 = fair, 4 = good, and 5 = excellent. ² Trees short lived due to ring spot virus. ³ Trees short lived due to black knot and bacterial canker. ⁴ Trees short lived due to bacterial canker. ⁵ Bloom and harvest dates were too erratic to record.

YIELD

The variety has been in trials as Methley A-39 at several locations in the Auburn University Agricultural Experiment Station System and in grower trials. It compares favorably with other varieties in yield. Production has been highest in central and southeast Alabama (Table 2). Reduced yields in north Alabama have been due to flower bud kill from frosts and/or freezes. Southeast Alabama, the Headland-Dothan area, is relatively frost free during the bloom period; therefore, the plum crop is usually free from late frost and freezing damage. Thus, it should fill the need for a midseason variety for production for home and local market in these areas of the State.

STORAGE

Fruit of Homeside plum stores as well as Methley and Ozark Premier varieties. However, fruit of Homeside plum does not retain market quality as long as Crimson, Purple, and Santa Rosa varieties (Table 3).

DISEASE RESISTANCE

Homeside compares favorably with varieties currently being grown in home and roadside plantings. It is more resistant to bacterial fruit spot, bacterial leaf spot, and bacterial canker than Methley and Santa Rosa. However, it is less resistant to these diseases than Bruce, Crimson, and Purple (tables 4 and 5).

AVAILABILITY OF TREES

Trees of Homeside should be available for planting in the winter of 1975-1976.

37		W	eeks of stora	ige	
Variety	3	6	9	12	14
	Pct.	Pct.	Pct.	Pct.	Pct.
Bruce	20	5	0	0	0
Crimson	100	90	65	30	15
Methley	95	70	20	0	0
Homeside (Methley A-39)	90	65	15	0	0
Ozark Premier	90	65	15	0	0
Purple	100	85	55	25	8
Santa Rosa	100	80	45	20	5

TABLE 3. MARKETABLE PLUM FRUIT AT 35° F STORAGE

	Disease index ¹									
Variety	Bacterial spot	Bacterial leaf spot		Black knot	Brown rot	Av.				
Bruce	0	0	0	0	4	0.8				
Crimson		Ō	0	Ó	1	0.2				
Methley		5	5	5	3	4.2				
Homeside (Methley A-39)	Ō	Ō	1^{2}	1	3	1.0				
Ozark Premier	Ō	1	1	1	3	1.2				
Purple	Õ	0	0	0	3	0.6				
Santa Rosa		5	5	0	3	3.6				

TABLE 4. DISEASE RESISTANCE OF PLUM VARIETIES IN EXPERIM	ENTAL
Plantings at Auburn, Camp Hill, Clanton, Cullman,	
FAIRHOPE, AND HEADLAND, 1965-1974	

¹Disease index: 0 = 0, 1 = 1-20, 2 = 21-40, 3 = 41-60, 4 = 61-80, 5 = 81-100 percent of fruit, leaves, and tree infected with bacterial canker, bacterial fruit spot, bacterial leaf spot, and black knot.

² Two trees received a numerical rating of 3 at the Chilton Area Horticultural Substation for bacterial canker. Three trees were planted at Camp Hill and Headland. Six were evaluated at Cullman, and 15 trees were established at Auburn and Clanton.

TABLE 5. DISEASE INDEX¹ RATINGS FOR BLACK KNOT, BACTERIAL CANKER, BACTERIAL LEAF SPOT AND BACTERIAL FRUIT SPOT OF PLUM VARIETIES IN 5 ALABAMA ORCHARDS, 1974

Entry -	Number	of trees	Black	Bacterial	Av.		
	Planted	Living	knot	canker	leaf spot	fruit spot AV	
Crimson	1,087	1,061	0.0	0.0	0.3	0.0	0.08
Methley	275	239	4.5	5.0	5.0	5.0	4.87
Purple Homeside	775	744	0.0	0.0	0.0	0.0	0.00
(Methley A-39)	278	251	0.7	0.4	0.4	0.0	0.36
Ozark Premier Santa Rosa	$\begin{array}{c} 375\\ 150 \end{array}$	$\begin{array}{c} 180 \\ 124 \end{array}$	0.7 0.0	$\begin{array}{c} 1.3 \\ 5.0 \end{array}$	$\begin{array}{c} 2.0 \\ 5.0 \end{array}$	0.0 5.0	$0.55 \\ 3.75$

¹Disease index: 0 = 0, 1 = 1-20, 2 = 21-40, 3 = 41-60, 4 = 60-80, and 5 = 81-100 percent of tree, fruit, and leaves infected with black rot, bacterial canker, bacterial fruit spot, and bacterial leaf spot.

ACKNOWLEDGMENTS

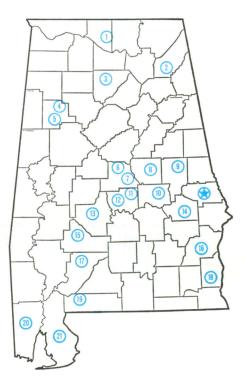
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The assistance of growers in conducting commercial grower trials of the material is deeply appreciated.

Alabama's Agricultural Experiment Station System AUBURN UNIVERSITY

With an agricultural research unit in every major soil area, Auburn University serves the needs of field crop, livestock, forestry, and horticultural producers in each region in Alabama. Every citizen of the State has a stake in this research program, since any advantage from new and more economical ways of producing and handling farm products directly benefits the consuming public.



Research Unit Identification

🛞 Main Agricultural Experiment Station, Auburn.

- Tennessee Valley Substation, Belle Mina.
 Sand Mountain Substation, Crossville.
- 3. North Alabama Horticulture Substation, Cullman.
- 4. Upper Coastal Plain Substation, Winfield.
- 5. Forestry Unit, Fayette County.
- 6. Thorsby Foundation Seed Stocks Farm, Thorsby.
- Thorsby Foundation Seed Stocks Failin, Thorsb 7. Chilton Area Horticulture Substation, Clanton.
 8. Forestry Unit, Coosa County.
 9. Piedmont Substation, Camp Hill.
 10. Plant Breeding Unit, Tallassee.
 11. Forestry Unit, Autauga County.

- 12. Prattville Experiment Field, Prattville.
- Black Belt Substation, Marion Junction.
 Tuskegee Experiment Field, Tuskegee.

- Luskegee Experiment Field, Luskegee.
 Lower Coastal Plain Substation, Camden.
 Forestry Unit, Barbour County.
 Monroeville Experiment Field, Monroeville.
 Wiregrass Substation, Headland.
 Brewton Experiment Field, Brewton.
 Ornamental Horticulture Field Station, Spring Hill.
 Guide Coast Substation Experiment
- 21. Gulf Coast Substation, Fairhope.