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'TAMU Denman' Peach

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'TAMU Denman' is a new cultivar of peach [Prunus persica (L.) Batsch] developed by the Texas Agricultural Experiment Station for home and commercial orchards in north and central Texas. 'TAMU Denman' is a consistently high-yielding, late-blooming cultivar with heavy bud set. These characteristics facilitate commercial production during years when late freezes reduce production from other varieties. It is named for T.E. Denman, Horticulturist at the Texas Agricultural Experiment Station, Stephenville for 31 years.

Origin

'TAMU Denman' is an open-pollinated Redglobe seedling planted in 1957 and selected for advanced testing in 1962. Orchard evaluations were conducted in Texas at College Station, Fredericksburg, Mexia, Montague, Overton, Stephenville, and Wichita Falls.

Trees are vigorous with large, upright, and easily trained limbs and well-suited for open center pruning systems. Limbs are highly branched, producing extensive quantities of fruiting wood. 'TAMU Denman' is more resistant to bacterial spot [Xanthomonas pruni (E.F. Sm.) Dows] than its parent 'Redglobe'.

Description

At Stephenville (central Texas), 'TAMU Denman' bloomed an average of 9 days later than 'Loring' and 7 days later than 'Redskin' over a 5-year period. 'TAMU Denman' bloomed 3 days later than 'Loring' and 2 days later than 'Redskin' at Overton (eastern Texas). 'TAMU Denman' has a long blooming period—about 2 days longer than the 'Loring'. The delayed and long-blooming characteristic should reduce the probability of late frost injury and crop failure.

'TAMU Denman' produced nearly twice as many marketable fruit as other cultivars in its season and has the potential to produce a commercial crop when others fail (Table 1).

Fruits attain 7.6 cm (>3 inches) diameter; however, the bulk of fruit ranges from 5.7 to 6.9 cm in diameter. Because of the unusually heavy set, fruit must be heavily thinned prior to pit hardening in order to attain suitable commercial size. Harvest is about 1 week later than 'Loring' and 10-14 days earlier than 'Redskin', depending upon the growing area and year.

Table 2. Comparative fruit quality of 'TAMU Denman'.

Cultivar	Titratable acidity as malic acid (%)	Soluble solids (%)	Sugar- acid ratio
Redglobe Loring FAMU Denman Redskin	0.85 1.00 0.94 0.80	12.6 10.5 12.4 12.7	14.8 10.5 11.7 15.9

The fruit is exceptionally firm and hangs for an extended time on the tree without softening. An attractive red blush covers 75% to 100% of the surface. Pubescence is medium. the fruit is round with no protruding suture



Fig. 1. 'TAMU Denman' peach.

Table 1. Comparative yield and 6 years total production of 'Loring', 'Denman', and 'Redskin' peach cultivars at TAMU Research and Extension Centers at Overton and Stephenville, Texas.

Cultivar	Yield (MT/ha)								
	1976	1977	1978	1979	1980	1981	6 yr total		
			Overton						
Loring	9.9	3.8	6.5	5.2	0.3	32.0	57.2		
TAMU Denman	18.7	5.1	18.7	21.2	15.4	34.2	112		
Redskin	11.9	11.3	6.5	15.7	0.8	26.3	71.6		
			Stèphenvill	e					
Loring	16.2	12.1	5.9	12.7	z	12.4	48.4		
TAMU Denman	22.6	11.3	22.6	12.2	5.5	19.3	9.3		
Redskin	13.6	7.7	2.6	1.6	1.5	18.4	45.4		

^zCrop lost to frost.

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or tip. Leaf glands are reniform and flowers are showy.

Fruit have yellow, fine-textured flesh with excellent flavor. Comparative titratable acidity and sugar content (soluble solids) are given in Table 2. Seed are comparatively small and free from the flesh at maturity. Shelf-

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'Vanier' Plum

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'Vanier' is a good quality, bright red, medium-sized, round, small-pitted, clingstone, Japanese plum (*Prunus salicina* Lindl.). 'Vanier' matures during the last week of August, the same season as 'Burbank' and 'Ozark Premier'. It is introduced primarily for fresh market consumption and for planting in areas where Japanese plums are grown.

Origin

'Vanier' is derived from a cross between 'Burbank' and 'Wickson' (1), made in 1930 by the late M.B. Davis, Division of Horticulture, Central Experimental Farm, Ottawa. Trees of cultivars have been under evaluation at the Horticultural Research Institute of Ontario since 1952, under selection number 'Ottawa-3010'.

Description

'Vanier' fruit are round and medium-sized, averaging 4.6 cm in height and 4.9 cm in width (Fig. 1). The average fruit weight is 67 g. The pit is clingstone and small, accounting for only 1.8% of the fruit weight. At picking maturity, the external fruit color, with bloom completely removed, is bright red (45D) (Royal Horticultural Color Chart, The Royal Horticultural Society, London, England) and at eating fruit maturity develops to a darker red (46A). The flesh is yellow-orange (23B), firm, and meaty. The quality is good and improves after fruit are picked and stored for 2 to 3 days at room temperature. The fruit is highly resistant to brown rot [*Monilinia fructicola* (Wint.) Honey.] and bacterial fruit spot [*Xanthomonas pruni* (E.F. Smith) Dows.]. The average ripening date at Vineland, Ont. is 29 Aug., the same as 'Burbank' and 'Ozark Premier'. 'Vanier' ripens unevenly and requires 2 to 3 pickings. Trees are moderately productive, precocious, vigorous, and have an upright growth habit. Trees have a high resistance to black knot [*Dibotryon morbosum* (Shiv) Th. and Syd.], bacterial canker [*Psue*-

life and flesh-browning characteristics are

similar to 'Redglobe'. Sliced fruit maintains

a pleasing texture when frozen making this

a desirable cultivar for home freezing. Based

on comparative bloom dates with other cul-

tivars, 'TAMU Denman' has an 850-hr chill-

ing requirement.

Availability

Budwood may be obtained from the Foundation Seed Services, Texas A&M University, College Station, TX 77843. Budded trees are available from several commercial nurseries.

domonas syringae Van Hall.] and bacterial leaf spot [X. pruni (E.F. Smith) Dows.].

Pollination

The flowers of 'Vanier' are self-unfruitful and require pollen from other Japanese plum cultivars for commercial fruit production. It is pollinated by 'Ozark Premier', 'Burbank', and 'Santa Rosa' cultivars and 'Myrobalan B' seedling. 'Vanier' is an excellent pollenizer for 'Burbank', 'Early Golden', 'Ozark Premier', and 'Shiro' Japanese plum cultivars (2).

Availability

Trees of 'Vanier' are available from major fruit tree nurseries in Ont., Canada. Bud and scionwood are available upon request from the Horticultural Research Institute of Ontario, Vineland Station, Ont., Canada LOR 2E0.

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Fig. 1. 'Vanier' plum.

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