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'Melrose' Pecan

W. A. Young,[2] R. J. Constantin,[2] W. A. Meadows,[3] Randy Sanderlin,[4] R. D. O'Barr,[4] and D. W. Newsom[5]
Louisiana State University, Baton Rouge, LA 70803

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'Melrose' pecan (*Carya illinoensis* (Wang) K. Koch) has been released to provide a high quality, disease resistant cultivar for both commercial and home orchards plantings. (1)

Origin

'Melrose' is a native seedling selected and identified as L15 in 1964 in DeSoto Parish, Louisiana. Parentage is unknown.

Description

Significant production (Table 1) of medium to large pecans possessing good cracking quality, high shelling percent of bright, clear kernels and attractive inshell traits (Table 2) may be expected 6 years from transplant. Nut shape is oblong with definite points on either end. Thin, light tan shells with black stripes on the blossom end are identifying nut characteristics.

Trees are vigorous, upright in growth and have strong crotches. Foliage is dark green, compound leaves number 7 to 9 leaflets, and leaf retention is outstanding.

'Melrose' is protogynous and requires a pollinizer cultivar, such as 'Cape Fear', 'Desirable' or 'Cheyenne'.

'Melrose' possesses outstanding resistance to scab, *Fusicladium effusum* (Wint.), and to shuck disease, an apparent physiological disorder which causes premature shuck opening and poor nut quality of certain cultivars, such as 'Success' (Table 3). 'Melrose', when evaluated for zinc deficiency symptoms, has not been observed to "rosette" as have 'Stuart' and other cultivars (Table 3).

Availability

Graftwood has been distributed to interested nurserymen for increase. A limited amount of scionwood will be available from the Department of Horticulture, Louisiana State University, Baton Rouge, LA 70803.

Table 1. Yield of pecan cultivars grown at Melrose, Louisiana.

Year[z]	Yield (kg/tree)					
	Candy	Desirable	Elliot	Stuart	Success	Melrose
1970	2.0	1.1	0.2	0.0	1.3	10.1
1971	12.9	9.2	3.1	3.0	3.1	9.2
1972	13.6	25.9	14.4	0.0	21.1	14.1
1973	40.0	15.8	22.4	19.5	22.7	15.9
1974	0.0	22.2	25.0	0.9	0.0	26.8
Cumulative	68.6	74.2	65.0	23.4	48.1	76.0

[z]Trees transplanted January 7, 1965.

Table 2. Nut characteristics of six pecan cultivars as an average of eight seasons.

Cultivar	Nut quality				Nut shape		
	Kernel color[z]	Kernel (%)	No. nuts (per kg)	No. nuts (per lb.)	Length (cm)	Width (cm)	L/W ratio
Melrose	5.5	54.5	109	54	5.1	2.3	2.2
Candy	5.8	44.9	138	68	3.7	2.1	1.8
Desirable	6.3	49.3	102	51	4.6	2.6	1.8
Elliot	7.1	51.3	141	70	3.5	2.2	1.5
Stuart	6.0	45.0	96	47	–	–	–
Success	5.9	47.1	96	47	4.2	2.6	1.6

[z]1 = Darkest (undesirable), 10 = lightest (excellent).

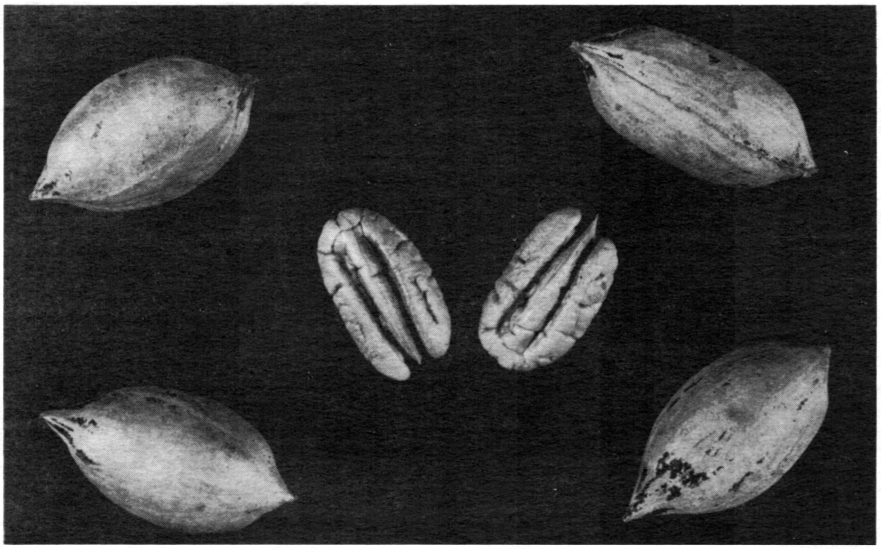
Table 3. Reactions of 6 pecan cultivars to scab (*Fusicladium effusum*), shuck disease, and zinc deficiency.

Cultivar	Scab rating[z]								Shuck disease[y] (%)	Zn deficiency rating[x]
	1975		1976		1977		Avg.			
	Leaf	Nut	Leaf	Nut	Leaf	Nut	Leaf	Nut		
Melrose	1	1	1	1	1	1	1.0	1.0	0	0.0
Candy	1	T	1	1	1	1	1.0	T	0	1.5
Desirable	1	4	4	3	3	4	2.7	3.7	8	0.1
Elliot	1	T	1	1	1	1	1.0	T	30	1.0
Stuart	1	5	1	4	3	4	1.0	4.5	0	3.2
Success	3	5	4	4	4	4	3.5	4.5	50	1.0

[z]1 = clean, T = trace, 2 = resistance, 3 = questionable resistance, 4 = susceptible, 5 = very susceptible.

[y]Percentage of nuts showing symptoms.

[x]3 yr. average; 0 = no symptoms; 1 = slight chlorosis; 2 = moderate chlorosis; 3 = severe chlorosis, leaf crinkling, rosetting; 4 = leaf necrosis, rosetting, twig dieback.



'Melrose' pecan.

Literature Cited

1. Young, W. A., W. A. Meadows, R. J. Constantin, F. N. Lee, R. Sanderlin, R. D. O'Barr, and D. W. Newsom. 1979. Melrose, a new pecan cultivar, La. *Agr. Expt. Sta. Cir. 108.*

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[2]Professors, Department of Horticulture.
[3]Specialist, Cooperative Extension Service.
[4]Assistant Professor, and Associate Professor, respectively, LSU Pecan Research and Extension Station. Shreveport, LA 71105.
[5]Professor and Head, Department of Horticulture.

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