# 'Nemared' Peach Rootstock

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Additional index words. Prunus persica, fruit breeding, root-knot nematode, Meloidogyne spp.

'Nemared' is a new peach rootstock [*Pru-nus persica* (L.). Batsch] that combines vigorous growth in the nursery to permit early budding, root-knot nematode resistance, and red leaves to facilitate identification (Fig. 1).

#### Origin

'Nemared' was originated and selected by John H. Weinberger (U.S. Dept. of Agriculture, Fresno, Calif.) from F<sub>3</sub> seedlings of 'Nemaguard' x a red-leaf seedling. The redleaf character came from the cultivar Bound Brook, which was discovered among 'Tennessee Natural' seedlings by M.A. Blake (Rutgers Univ., New Brunswick, N.J.). 'Nemared' was selected from seedlings screened for nematode resistance and the red-leaf character. Two F<sub>2</sub> trees were selected and F<sub>3</sub> seedlings grown. Selection among the  $F_3$ seedlings was based on progeny tests for rootknot nematode resistance, red-leaf character, seed germination, seedling vigor, and uniformity in the nursery row. Additional tests of compatibility, tree growth, and production have been made at Fresno and in cooperation with the Univ. of California at the Kearney Horticultural Field Station, Parlier.

#### Description

Trees of 'Nemared' blossom with 'Nemaguard' and require about the same chilling for flower and leaf buds. The flowers have large, light-pink petals. Leaves are homozygous for red color and reniform glands. The fruit ripens in the 3rd week of August at Fresno and averages 5 cm in diameter. The flesh is greenish-white, melting, and clings to the pit. Seed size averages 41 to 43 per kg. The percent of seed germination has been high (above 75%) and is equal to 'Nemaguard'. No incompatibility has been observed with peach, nectarine, plum, apricot, or almond cultivars. In a 5-year-old rootstock trial at Kearney Horticultural Field Station, 'Regina' peach budded onto 'Nemared' has been slightly more vigorous and as productive as when budded on 'Lovell' or 'Nemaguard'. In several field tests and one greenhouse test, 'Nemared' has shown more tolerance to *Meloidogyne incognita* (Kofoid & White) Chitwood and *M. javanica* (Treub) Chitwood than 'Nemaguard'. Seedlings of

'Nemared' have been uniform in the nursery row. They do not have as many side branches as 'Nemaguard', a condition which facilitates budding.

#### Availability

Limited amounts of budwood will be furnished to nurserymen and growers for starting trees for seed production. 'Nemared' has been indexed by Foundation Plant Materials Service, Univ. of California, Davis, and found free of *Prunus* ring spot virus. No other viruses have been detected during long-term indexing.



HortScience 18(3):376-377. 1983.

## **'Woodroof' Pecan**

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Additional index words. nut breeding, Carya illinoensis, Fusicladium effusum

'Woodroof' pecan [*Carya illinoensis* (Wang) K. Koch] has been released to provide a disease-resistant, very good quality cultivar for home orchards in the southeastern United States where scab [*Fusicladium effusum* (Wint.)] is a major disease. Within the past 20 years, scab has greatly reduced pecan yields in home plantings in the southeast where the small number of trees does not justify expensive disease-control equipment (3, 5).

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<sup>1</sup>Associate Professor, Dept. of Horticulture. <sup>2</sup>Professor and Head, Dept. of Horticulture. <sup>3</sup>Professor, Dept. of Food Science. It has been determined that 46% of the Georgia growers do not spray for disease or insect control in part or all of their orchards (1). Studies are in progress on the commercial potential of 'Woodroof' under irrigation.

 
 Table 1. Reactions of 8 pecan cultivars to scab (Fusicladium effusum) and leaf scorch.

	Scab rating <sup>z</sup>		Loof
Cultivar	Leaf	Nut	scorch index <sup>y</sup>
Woodroof	1.0	1.0	5
Mahan	3.0	2.5	60
Elliott	1.0	1.0	5
Farley	1.5	1.4	4
Choctaw	1.2	1.5	10
Desirable	4.1	4.5	20
Cheyenne	1.1	1.1	20
Rome	2.0	1.1	390

<sup>z</sup>Scab rating: 1 = no symptoms, 5 = very susceptible.

<sup>y</sup>Leaf scorch index = number of scorched or missing leaflets per 100 leaves at harvest.

Received for publication February 12, 1983. The cost of publishing this paper was defrayed in part by the payment of page charges. Under postal regulations, this paper therefore must be hereby marked *advertisement* solely to indicate this fact.

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