'Nesbitt' Muscadine Grape

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'Nesbitt' is a black-fruited muscadine grape (Vitis rotundifolia Michx.) released by the North Carolina Agricultural Research Service. 'Nesbitt' is named in memory of the late Dr. William B. Nesbitt, who was instrumental in muscadine grape improvement.

Origin

'Nesbitt' Originated from a cross of 'Fry' x 'Cowart' made by Dr. Nesbitt in 1967. It was selected in 1971, designated NC67A013-12, and placed in a replicated yield trial at the Horticultural Crops Research Station near Clinton, N.C. The trial was a completely randomized design with 8 single vine replications trained to the Geneva double-curtain trellis. Plants were distributed to the Florida, Georgia, and Mississippi Agricultural Experiment Stations as part of Southern Regional Trial S-142. Observation plots also were planted at Jackson Springs and Clayton, N.C.

Description

'Nesbitt' has perfect, self-fertile flowers which develop into large high quality (Table 1) black-fruited berries. Under North Carolina conditions, the vines are as productive (Table 2) and winter hardy as 'Carlos' and 'Noble', but tend to be slightly less vigorous. 'Nesbitt' blooms with 'Carlos' and 'Noble' but ripens over a longer time period than either. 'Nesbitt' ripens over 4 or 5 weeks starting in early September and ending early October at Clinton (Fig. 1), whereas 'Carlos' and 'Noble' ripen over a 1 or 2 week period

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in mid-September. The extended ripening of 'Nesbitt' is appealing to growers, since they do not have to market large amounts of fruit over a short period of time. This trait is especially useful to those growers interested in fresh fruit sales and pick-your-own operations. Because of the nature of its ripening and the fact that the pigments in wine made from 'Nesbitt' are not stable over long term storage (D.E. Carrol, personal communication), 'Nesbitt' is recommended only for fresh fruit sales, pick-your-own vineyards, or dooryard plantings. 'Nesbitt' tends to have'. a wet stem scar if allowed to stay on the vine beyond peak maturity; therefore, to maintain fresh fruit quality, fruit should be harvested at regular intervals.

Commercial production of 'Nesbitt' will require an adequate disease control program. It is similar to 'Carlos' and 'Noble' in tolerance to leaf diseases but has better tolerance of fruit diseases than 'Carlos' especially

Table 1. Characteristics of 'Nesbitt', 'Carlos', and 'Noble' grapes at Horticultural Crops Research Station, Clinton, N.C.*

Cultivar	Berry size (g) ^y	Berries/ bunch*	Soluble solids (%) ³ 16.8 b	
Nesbitt	11.5 a	8.2 b		
Carlos	5.4 b	7.8 ь	16.5 b	
Noble	4.4 c	19.3 a	17.7 a	

'Four-year averages from 8 replications. Numbers followed by the same letter are not significantly different at the 5% level (Duncan's multiple range test).

Mean of 10 randomly selected berries per replication over 4 years.

*Mean of 10 randomly selected clusters per replication over 4 years.

ripe rot [Glomerella cingulata (Stonem) Spaulding & Von Schrenck].

Reports from state experiment stations in Florida, Georgia, Mississippi, and other locations within North Carolina have been favorable regarding yield, disease, cold tolerance, and grower acceptability.

Availability

A limited number of dormant plants can be obtained by contacting Mike Baker, N.C. Foundation Seed Producers Inc., P.O. Box 33245, Method Station, Raleigh, NC 27606.

Table 2. Yield of 'Nesbitt', 'Carlos', and 'Noble' grapes at the Horticultural Crops Research Station, Clinton, N.C. Vines trained to a Geneva double-curtain trellis at 3.05 × 6.1 m spacing.

Cultivar	Yield (kg/vine)					5-year avg	
	1979	1980	1981	1982	1983	kg/vine	MT/ha²
Nesbitt	28.8	40.8	48.7	38.9	27.3	36.9	19.9
Carlos	34.5	49.4	43.6	45.8	27.8	40.2	21.6
Noble	33.3	42.3	39.4	41.2	29.6	37.3	20.0

²Values not significantly different at the 5% level using an F test.

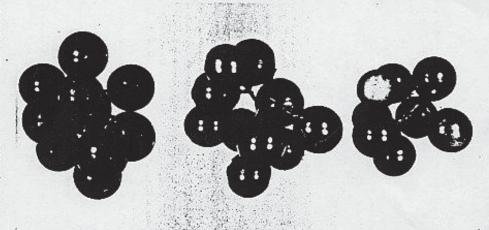


Fig. 1 'Nesbitt' grape photographed 18 Sept. 1984 showing range in ripening.

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