

'Duke' Highbush Blueberry

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'Duke' highbush blueberry (*Vaccinium corymbosum* L.) is a new cultivar originating from the cooperative blueberry breeding program of the USDA and the New Jersey Agricultural Experiment Station. It is a productive, early ripening cultivar with fruit that has the shipping qualities needed for commercial fresh market use. 'Duke' is intended for commercial growers and packers in areas where high-chilling highbush blueberries are grown successfully. 'Duke' is named in honor of S. Arthur (Duke) Galletta, to recognize his many significant and meaningful contributions, and those of his Atlantic Blueberry Company partners and their staff, in continuous support of the blueberry breeding work since 1949.

Origin

Tested as G-354, 'Duke' was selected in 1972 from a cross of G-100 ('Ivanhoe' x 'Earliblue') x 192-8 (E-30 x E-11) (Fig. 1) made by A. Draper at Beltsville, Md. 'Duke' was selected and evaluated on the farm of the Atlantic Blueberry Company, Weymouth, N.J., by A. Draper, D. Scott, and G. Jelenkovic. Evaluations were also made by N. Vorsa and G. Galletta.

Description and performance

Plants of 'Duke' are vigorous, upright, and consistently high-yielding. Canes are numerous, stocky, and moderately branched, exposing the fruit in all parts of the plant (Fig. 2). Leaf number and size are medium and the leaves form a dense canopy. Consistent high yields in the New Jersey test location indicate bud and wood tolerance to stress of fluctuating winter temperatures, as well as inherent prolificacy. Its berries are medium in size, have small dry picking scars, good color, and firmness (Table 1). Fruit of 'Duke' ripen early, about 2 days later than 'Bluetta'. 'Duke' fruit flavor is mild, but be-

comes more aromatic after several hours in cold storage. The outstanding characteristics of 'Duke' are its vigorous plants, earliness of fruit ripening, and consistent high yields. In 10 years of testing it has never failed to produce a heavy crop, probably due to its relatively late flowering. It flowers after 'Weymouth', about the same time as 'Bluetta'.

Diseases have not been a problem with 'Duke'. It has not exhibited susceptibility to common diseases such as red ring spot virus, Phomopsis twig blight, and the fruit rots at the test site. It is recommended as an alternative to 'Bluetta' for commercial growers

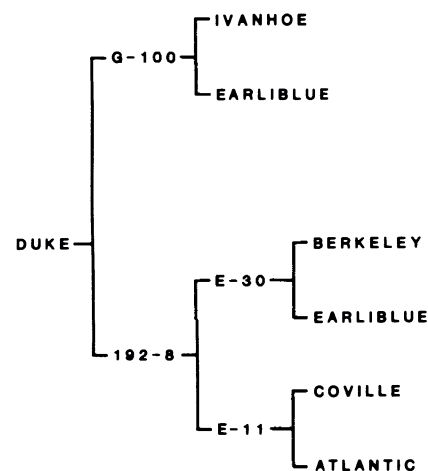


Fig. 1. Pedigree of 'Duke' highbush blueberry.

in areas where northern highbush blueberries are grown successfully.

Availability

Rooted cuttings of 'Duke' were distributed to nurserymen early in 1986. Plants should be available to the public in Spring 1987. Neither the USDA nor the New Jersey Agricultural Experiment Station has plants for distribution.

Table 1. Fruit ratings of 'Duke' highbush blueberry and three other early ripening cultivars rated the same day and year.

| Cultivar | Ratings ^a | | | | Size (g/berry) | Yield rating |
|-----------|----------------------|-----------------|----------|--------|-------------------|-----------------|
| | Color | Picking scar | Firmness | Flavor | | |
| Duke | 8 | 8 | 8 | 6 | 1.7 | 9 |
| Bluetta | 8 | 7 | 8 | 7 | 1.3 | 8 |
| Earliblue | 8 | 7 | 7 | 8 | 1.1 | 6 |
| Weymouth | 7 | 7 | 7 | 5 | 1.6 | 9 |

^a Rating scale 1-9, with 1-4 = inferior, 5 to 6 = acceptable, 7 = good, 8 = very good, and 9 = superior.



Fig. 2. Fruit of 'Duke' highbush blueberry.

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