‘Green Ice’ Muskmelon

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‘Green Ice’ is a green-fleshed muskmelon (Cucumis melo L.) adapted to the climatic conditions prevalent in the southeastern United States and is well-suited for both commercial and home garden production. It is a high-yielding ‘Honey Ball’-type muskmelon that produces round to oval, pale gray-green, medium-sized fruit that turn cream-colored and slip from the vine at maturity. The thick light-green flesh has a pleasing aroma and sweet flavor and is high in vitamin C. The vigorous plants are resistant to race 3 of powdery mildew [Sphaerotheca fuliginea (Schlect ex Fr.) Poll.] and tolerant to most pests and environmental stresses of the region.

Origin
‘Green Ice’ resulted from an F2 outcross of breeding line C381 discovered in 1960 by C.F. Andrus (Fig. 1). The parents of C381 were CU-5 “[‘smell melon’], or ‘Garden Lemon’ (Cucumis melo var. chito), obtained from Mrs. Irvin Tutum, Villa Rica, Ga.] and a rock melon-type selection of PI 193495. ‘Garden Lemon’ was resistant to cucumber beetles, downy mildew, and Alternaria leaf blight and the PI selection was resistant to powdery and downy mildews. This line was given the accession number C570. A series of sibcrosses, self-pollinations, and field mass selections in minimum and completely isolated blocks were used to improve the line until 1973. Next, a combination of fruit-to-row selection and greenhouse sibbing was used to develop round fruit. The first round fruit occurred in 1976 and subsequently improved by selecting the best fruit from healthy plants in an isolated fruit-to-row selection arrangement.

Description
‘Green Ice’ is especially adapted to the climatic conditions of the southeastern United States, but may do well in other geographic areas. In large-scale plantings at the U.S. Vegetable Laboratory, Charleston, S.C., at Clemson University Experiment Station, Blackville, S.C., and in commercial production on Edisto Island, S.C. over the past 4 years, ‘Green Ice’ has produced high yields of attractive, high-quality fruits. It produces at least 4 excellent fruit per vine in 75–80 days from transplanting and 85–90 days from seed. The fruit average 1.1–1.6 kg and can be produced without the use of pesticides when disease and insect pressure are low. However, it will produce a better crop under a well-managed program. The fruits have an attractive, firm, mild flavor and pleasing aroma (Fig. 2). Soluble solids average 12–14%, and ascorbic acid (vitamin C) content averages 40–50 mg/100 g flesh. The seed cavity is very small and compact. Two ripening indicators were incorporated into ‘Green Ice’ that should ensure quality by making it easy for growers to identify fully mature fruit: a) the light, gray-green rind that turns creamy (white) with sparse net formation and b) the full-slip trait when the fruit reaches the hard or fullripe stage. ‘Green Ice’ melons produced and packed by a commercial grower on Edisto Island, S.C. were included in his muskmelon shipments to various long-distance markets. In all cases, ‘Green Ice’ arrived in excellent condition and recipients inquired as to availability of additional melons. In taste tests conducted at supermarkets in Blackville, S.C., 78% of those queried preferred ‘Green Ice’ to a honey-dew type that was commercially available at the time.

Availability
A limited amount of breeder’s seed is available on a pro-rata basis to primary melon seed growers and breeders. Requests should be addressed to Perry E. Nugent, U.S. Vegetable Laboratory, 2875 Savannah Highway, Charleston, SC 29407.

Fig. 1. Pedigree of ‘Green Ice’ muskmelon.

Fig. 2. Fruit of ‘Green Ice’ muskmelon (ruler = 30.5 cm).

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