

obtained through a long process of breeding and selection, relatively small progenies might give the results wanted; the parental plants in such cases may differ in only a limited number of characters. The need for large populations in the F_2 generation becomes paramount when a wild species is used as one of the parents.

In general, for fruit breeding to be more than mere chance and good luck, the work must be well organized; and breeders should consider a number of essential points, such as the following: 1) A breeder should have broad knowledge of the parent material chosen; 2) he should realize that breeding is basically genetics, and he should therefore understand the principles of genetics and their application, or he should have the guidance and advice of a competent geneticist; 3) the progenies must be critically ex-

amined and evaluated; 4) there should be ample space for raising adequate populations; 5) care should be taken that the main task of breeding does not become subordinate to incidental operational routine; 6) results desired, especially in tree-fruit breeding, are slow and may not be achieved during a breeder's life-time. Therefore, if possible, some measures should be taken to insure continuity of the project undertaken.

The purpose of fruit breeding should be to originate varieties with quality fruits. Characters such as productivity, appearance, size, shipping quality, and keeping quality are important but should not be given preference over fruit eating quality. Without good eating quality, a fruit must be considered merely an ornamental.

Vesper, A New Fresh Market Strawberry for the Northeast*

J. N. MOORE† and L. F. HOUGH‡

New Brunswick, New Jersey

Vesper, a new strawberry variety, was released by the New Jersey Agricultural Experiment Station in July, 1962. Tested as N. J. 157, Vesper resulted from a cross of Utah Shipper and Jerseybelle made in 1955, and was selected from a seedling field in 1957.

Vesper is a very late-ripening variety, maturing its fruit from three to five days later than Jerseybelle. The fruit is very large, averaging slightly larger than Jerseybelle. The primary berries tend to be slightly rough, but

later fruit is smooth. The fruit is medium firm from New Jersey northward, and has a medium tough skin. The berries, which have much the same appearance as Jerseybelle, are very attractive, with a glossy surface and prominent yellow achenes. The flavor is slightly superior to Jerseybelle as a fresh fruit. The fruit is not satisfactory for freezing processing.

Plants of Vesper are vigorous and make a full fruiting row, but they are susceptible to red stele root rot, verticillium wilt, and leaf diseases. Vesper

*Paper of the Journal Series, New Jersey Agricultural Experiment Station, Rutgers—The State University of New Jersey, Department of Horticulture, New Brunswick.

†United States Department of Agriculture, Agricultural Research Service, Crops Research Division, Small Fruit and Grape Investigations, Beltsville, Maryland.

‡Professor, Department of Horticulture, Rutgers, The State University of New Jersey.

TABLE 1. Comparison (1961) of yield and size of Vesper and Jerseybelle strawberry varieties in five states.

Location ¹	Yield (qts/Acre)		Size (grams/25 berries)	
	Vesper	Jerseybelle	Vesper	Jerseybelle
Wooster, Ohio	12,560	7,260	324	245
Amherst, Mass.	13,446	6,127	436	396
Beltsville, Md.	15,528	14,773	346	310
University Park, Pa.	14,994	17,648	268	245
New Brunswick, N. J.	16,735	14,338	713 ²	672 ²
Average	14,653	12,029	417	374

¹Acknowledgment is gratefully extended to Dr. R. G. Hill, Jr., Professor John S. Bailey, Dr. D. H. Scott, Dr. C. W. Hitz, and Dr. C. R. Smith for conducting these tests in their respective states.

²Only the average size of first picking at New Brunswick is available. Sizes from other regions are averages of all pickings during the season.

has been outstanding in yield and size of fruit in New Jersey, New York, Pennsylvania, Maryland, Ohio, and Massachusetts (Table 1). This variety appears to be adapted to much the same geographic region as Jerseybelle. In New Jersey, it has performed best in central and northern counties. It has not performed well in North Carolina, being very subject to leaf diseases, and is not recommended for areas south of Washington, D. C.

Stocks of Vesper plants have been maintained virus-free since it was first selected. Sources of virus-free plants may be obtained by writing to Dr. C. R. Smith, Department of Horticulture, New Jersey Agricultural Experiment Station, New Brunswick, New Jersey.

Report of International Committee on Variety Nomenclature and Registration

J. M. S. Potter, Chairman of the Working Group on Nomenclature and Registration of Varieties of Fruit, of the International Society of Horticultural Science, recently reported for his Committee in *Chronica Horticultural*. It has been decided that each participating nation shall be urged to appoint its own National Registration Authority for Deciduous Fruits, and that an International Registration Authority shall be appointed to combine the national registers. Each National Registration Authority will be responsible for compiling registers of existing cultivars (varieties) of fruits being grown in their own country, using their own language.

It is hoped that, as a beginning, each country would develop a register of one fruit, and that these first registers will be ready for the 17th International Horticultural Congress, which will be held at the University of Maryland in 1966.

For further details about the system or registration and information to be included in the registers, see *Chronica Horticulturae*, Vol. 3, No. 1 (April 1963), page 5.

Apple Variety Trends in North Carolina

The apple industry in North Carolina is confined mainly to mountainous areas. The 1962 crop amounted to some four million bushels in this state, according to M. H. Kolbe, Extension Horticulturist, of North Carolina State College, at Raleigh. The chief varieties are Rome Beauty, Delicious, Stayman, and Golden Delicious. The varieties most popular in new plantings are Golden Delicious and the red sports of Delicious.