

- of *Eastern North America*. New York, Harper and Row Publishers.
3. Gray, A. 1908. *Gray's New Manual of Botany—a Handbook of Flowering Plants and Trees*. 7th ed. Ed. Robinson, B. L. and Fernald, M. L., New York: American Book Company.
 4. Polunin, N. 1959. *Circumpolar Arctic Flora*. Clarendon Press, Oxford, England. of *Vaccinium* species in Alberta. *Can. J. Plant Sci.* 42:82-90.
 6. Torrey, G. S. 1914. *The Partridge Berry*. Dept. of Agr. and Mines, St. John's, Newfoundland.

'Vista Bella' — A Red, Summer Dessert Apple from New Jersey

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'Vista Bella' is being introduced as a good quality, very early, red apple for fresh market. It ripens about with 'Melba', 'Julyred' and 'Quinte'. Experience to date suggests that 'Vista Bella' should replace these 3 early red cultivars.

Origin

The parentage of 'Vista Bella' is:

Vista Bella = 77349 × Julyred	cross made in 1956
77349 = 67634 × 122137	cross made in 1949
67634 = Melba × Sonora	cross made in 1934
122137 = NJ53 × USDA34	cross made in 1937
NJ53 = Williams × Starr	cross made in 1925
Julyred = NJ8 × 110037	cross made in 1949
NJ8 = Petrel × Early McIntosh	cross made in 1937
110037 = Melba × NJ53	cross made in 1937

Four generations of crossing and two generations of breeders were necessary for the development of 'Vista Bella'. Such genetic engineering has gone into the development of all the early apples introduced from this program (1, 2, 3). 'Vista Bella' was first selected in July 1962 and a few scions were distributed under the seedling number 117656. It was given the introduction number NJ36 in the fall of 1963 and was distributed widely for test that winter.

Fruit Characteristics

The fruit is similar to 'Julyred' in

appearance. The fruit is medium large, round and slightly oblate. When it is well grown it has up to $\frac{3}{4}$ medium red blush on a light yellow-green ground. At its best it has crisp, creamy white flesh with better firmness and shelf life than any other apple of its season. It has good dessert quality. Under high nitrogen conditions the red overcolor will be darker and duller, and the ground color will stay green. The fruit will be less firm, more acid, and will not hold up as well.

Tree Characteristics

The tree is a vigorous grower with large leaves. This is especially noticeable in the nursery row. Most of the crop can be harvested in two pickings. It does not drop excessively. Limited production experience suggests that 'Vista Bella' is more difficult to thin with chemicals than are other early apples. The same experience has indicated that, if allowed to set heavily, 'Vista Bella' will bear small fruit of mediocre quality and the tree may be thrown into biennial bearing. 'Vista Bella' has been used widely in the hybridization program as a female and as a pollen parent. It is completely fertile and its pollen is compatible

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The Parentage of 'Vista Bella' is:

with all the other cultivars and selections with which it has been used.

'Vista Bella' has been tested widely as NJ36. It has been rated promising for limited commercial production as the best dessert apple to start the season in New Jersey, Maine, Michigan, New York, Ontario, Poland, Yugoslavia and Guatemala. It seems to be widely adapted since there have been good reports from areas with cold winters such as Maine, Canada and Poland, as well as from areas with warm summers, such as southern New Jersey and central Yugoslavia. 'Vista Bella' bloomed normally and produced fruit of characteristic good quality and appearance on the finca Vista Bella at an altitude of 7500 ft. in the tropical highlands of Guatemala. There the winters are very mild, and during the growing season it is very cool, usually with cloud cover throughout most of the day. This unexpected good performance in the

tropical highlands of Guatemala is the basis for the selection of the name 'Vista Bella'.

The series of early, good quality apples from Rutgers (2, 3) will make it possible to have profitable production of summer dessert apples that can be competitive with fruit from the previous year's harvest that has been held in CA storage.

Trees of 'Vista Bella' are available from several commercial nurseries in the U.S. and Canada.

Literature Cited

1. Hough, L. F. and Catherine H. Bailey. 1962. Julyred, a new red summer dessert apple. *Fruit Vars. Hort Dig.* 16:53.
2. ————. 1968. Raritan and Mollie's Delicious, two more red, summer dessert apples from New Jersey. *Fruit Vars. Hort. Dig.* 22:63-64.
3. ————. 1972. Jerseymac—earlier and prettier than McIntosh. *Fruit Vars. Hort. Dig.* 26:17-18.

'Adria', an Early Ripening Peach from New Jersey Introduced in Yugoslavia¹

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The peach cultivar 'Adria' (formerly NJ224) is being released jointly by the New Jersey Agricultural Experiment Station at New Brunswick, N. J., USA, and the Agricultural Institute of Slovenia at Ljubljana, Yugoslavia, ('Adria' is the Latin name for the Adriatic Sea.) In 1960, selection NJ224 and several other selections were sent to Ljubljana for testing. 'Adria' has proved to be a hardy, productive, good quality, yellow-fleshed cultivar

for the very early season. It ripens about with the white-fleshed cultivar 'Springtime', or one week to 10 days before 'Collins', which is the earliest ripening yellow-fleshed cultivar grown commercially in Yugoslavia at the present time.

'Adria' has been tested extensively in cultivar selection test plantings at Gorica, Koper, Krsko and Ptuj, all in Slovenia, in northwestern Yugoslavia

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