

means of establishing a matted row. A twelve inch spacing in an alternate double row was superior to the wider spacing. Transplanted sods containing intact mature rhizomes also became established with relative success. Rooted cuttings exhibited a slower rate of spread but after 3 years formed an acceptable matted row. With seedlings, rooted cuttings and sods, the largest number of plants per acre resulted in the most rapid establishment of beds. Direct planting of rhizomes in the row was entirely unsuccessful because of high initial mortality. Depth of planting had no apparent effect on the rate of spread of rooted cuttings or seedlings. Seedling, sod, and rooted cutting rows produced fruit within three years.

In summary, evidence has been obtained to demonstrate the benefits of intensive lowbush blueberry culture. This fruit can be adapted to a row culture consisting of 2 to 3 foot wide permanent beds to produce improved quality and quantity. Under an intensified cultural program cultivation and chemical weed control have significantly reduced weed populations. Fertilization and pest control have become more efficient and level land aids in all practices involving the operation of machinery. Row cultures also lend themselves readily to mechanical harvesting.

Lowbush blueberries are also being recommended as a ground cover in the ornamental garden. The plants make an attractive as well as tasty addition to the home landscape. They are particularly effective on steep slopes or where it is necessary to control soil erosion.

These pioneering efforts to develop an entirely new cultural system for the Small Fruit Industry hold a promising future for commercial growers and home gardeners.

#### Literature Cited

1. Kender, W. J. 1965. Some factors affecting the propagation of lowbush blueberries by softwood cuttings. *Proc. Amer. Soc. Hort. Sci.* 86: 301-306.
2. Kender, W. J. and F. P. Eggert. 1966. Several soil management practices influencing the growth and rhizome development of the lowbush blueberry. *Can. J. Plant Sci.* 46(2): 141-149.
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### Sweet Cherry Breeding In England

Breeders at the John Innes Institute indicate (57th Annual Rpt., 1966) that the following sweet cherry crosses have given a high proportion of seedlings with above-average commercial quality:

Emperior Francis x Bedford Prolific  
 Ursula Rivers x Van  
 Ursula Rivers x Van  
 Ursula Rivers x J. I. Seedling 1464  
 Van x Late Black Bigarreau  
 Wellington 'B' x Merton Heart  
 Wellington 'B' x Merton Heart

Of 113 cultivars tested, the following have shown high resistance to bacterial canker: Black Elton, Black Oliver, Caroon "B", Chapman "B", Cleveland Bigarreau, Guigne de Winkler, Hedelfingen Riesenkirche, Ludwig's Bigarreau, Maiden's Blush, Merton Premier, Nutherry Black, Purple Griotte, Reidern 2nd Early Black, Sam, Smoky Dun, Strawberry Heart, Turkish Black, Yellow Spanish. Such cultivars have been crossed with parents of high fruit quality. In addition, self-fertile seedlings have been crossed with the cultivars showing high resistance to bacterial canker.

Attempts are also being made to propagate dwarfing cherry rootstocks as seedlings. The most promising possibilities seem to be seedlings from open-pollinated cultivars known to be heterozygous for the dwarfing gene. One cultivar, Turkey Heart, has produced 318 dwarfs out of a population of 1490 open-pollinated seedlings.