'Cherokee' and 'Pocahontas' New Red Raspberry Introductions from V.P.I.

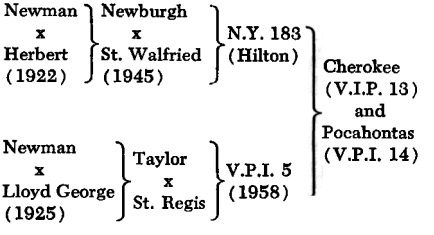
G. D. Oberle[1]

As a feature of the VPI Centennial year, the Horticulture Department announces this year the naming and introduction of several new varieties of fruits developed from the breeding program that has been underway at Blacksburg for more than 25 years. The first of these to be announced are 'Cherokee' and 'Pocahontas', red raspberry varieties that appear to offer exceptional promise for at least the cooler areas of Virginia.

Prior to 1948, a breeding project concerned with the development of improved varieties of bramble fruits, i.e. red raspberries (of American, European and Oriental derivation), black raspberries (their hybrids) and blackberries (of both erect and trailing cane types) was activated at V.P.I. An extensive collection of varieties, selections, plant introductions and seedling material had been assembled by the late Quentin B. Zielinski and, Professor Emeritus, R. C. Moore.

Evaluation of the material by the author for several seasons revealed that much of it was not adapted to the environment prevailing at Blacksburg. Lack of winter hardiness of the canes and buds, susceptibility of the plants to fungus, bacterial and virus diseases, rapid perishability of the fruit, mediocre quality, blossom sterility, lack of productivity and difficulty of propagation soon made obvious that much of the material was of no value for either direct production or as parental material for our breeding program. After evaluating more than 5,000 seedlings of black raspberry, 3,000 purple cane hybrids, 2,000 blackberry seedlings and hybrids and 2,000 hybrids of American red raspberry, the decision was made to confine the breeding efforts to American/European red raspberry material. A few old red raspberry varieties and several selections from the breeding program of the New York State Agricultural Experiment Station performed reasonably well at Blacksburg and served as parents useful in breeding for adaptation to southwestern Virginia mountain conditions. Two additional generations of breeding and selection have resulted in several selections that appear to have promise for the mountain areas of southwestern Virginia. Two, 'V.P.I. 13' and 'V.P.I. 14' have performed well enough to justify naming and releasing them in 1972. They have been named 'Cherokee' and 'Pocahontas' respectively.

These varieties resulted from crossing a New York variety, 'Hilton,' with 'V.P.I. 5' in 1958. 'V.P.I. 5' was selected in 1951 from a population of 'Taylor' x 'St. Regis' parentage. The ancestry of 'Cherokee' and 'Pocahontas' may be presented as follows:



[1]Horticulture Department, Research Division, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061.

Both are midseason varieties averaging about 6 and 10 days after 'September' in ripening season or beginning about June 27 and July 2 at Blacksburg. 'Pocahontas' bears only the usual summer ripening crop of berries. 'Cherokee', in addition to the summer ripening crop, produces a second crop of berries on the new shoots, called primocanes, which ripens in late September and October. At Blacksburg the autumn crop begins to ripen about September 20 and continues until the first damaging frost occurs.

The berries of 'Cherokee' have been described as round conic in shape, with medium texture drupelets, good coherence, medium to bright red color with slight duskiness that may accentuate their attractiveness. They are above average in firmness. The flavor is described as sprightly. The quality has consistently been rated as good to very good which according to our scale places it slightly ahead of 'September'.

'Pocahontas' berries are described as being short conic, with small to medium durpelets, very good texture and above average in firmness. The color is medium red with a slight duskiness that accentuates their attractiveness. The seeds appear to be smaller or less noticeable than those of 'Cherokee'. The flavor is sprightly with an aromatic quality that enhances the quality to a shade better than that of 'Cherokee'.

Berry size of both varieties compares favorably with that of 'Hilton' although definitely averaging slightly smaller.

The canes of both varieties are sturdy. Both are heavy producers of suckers. The vigor of both has been rated much above average in most years. No particular incidence of diseases has been observed in either Japanese beetles feed heavily on the fruit, foliage and flowers for the autumn ripening crop. Thorough and timely spraying is necessary to protect them against these pests.

Prior to the winter of 1969-70 the plants had been given a rating of 1 with respect to winter injury. The winter of 1970-1971 was more severe than for a number of years and both selections were given a rating of 3 on winter injury. The official weather station for the Blacksburg area is located about 200 yards from and at slightly lower elevation than the raspberry plots. Temperatures of −2°, −5°, 0°, −12°, −1° and 0°F. were recorded on January 8, 9, 21 and February 4 5 and 12 respectively. Some damage may have resulted also from temperatures of 15°F. recorded on October 24 and 25. The winter of 1971-1972 with its severe freezes in early November and −10°F. temperature on January 16 damaged fewer canes and buds than the previous winter. Both varieties were given a rating of 2 on winter injury. In general both varieties have averaged at least as well as 'September' so far as their ability to withstand the fluctuating winter temperature complexes that prevail in the Blacksburg area.

Both varieties have been very productive at Blacksburg. A 75 foot plot of 'Cherokee' in 1972, its fourth fruiting season, yielded 99.5 pints of berries. A similar size plot of 'Pocahontas' yielded 123.5 pints. Plots of 150 feet length, in their second season of bearing, gave 167.5 pints for 'Cherokee' and 168 pints for 'Pocahontas'.

These new varieties appear well adapted to the cooler areas of Virginia but merit testing in Piedmont areas also.