

New Development In Raspberries

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Some remarkable work is being done in the development of new varieties of raspberries for the South. Red raspberry varieties produced by means of hybridizing with oriental species are now available which are adapted to regions hundreds of miles south of their former range.

The research workers of New Hampshire are interested in varieties for the more northerly regions, especially such climatic conditions as exist in the southern part of the state. In this territory, Latham, Chief, Taylor, and other varieties which grow quite well in inland areas, are killed back very severely most winters. This killing occurs despite a fairly uniform temperature range during the winter months and very infrequent temperatures lower than 15° F. below zero. During many years at Durham only the parts of the canes which are below the snow line survive and leaf-out in the spring.

The breeding program at the New Hampshire Experiment Station has emphasized everbearing varieties by means of which both winter injury and spur blight injury might be avoided. If autumn-bearing varieties could be developed which would produce good crops on new growth from the ground, it would not be necessary to winter the canes at all. Also, if the canes are not over-wintered, there would be no carry-over source of infection for spur blight. Thus two handicaps, spur blight and

winter injury, could be overcome at the same time.

The Durham Raspberry

Breeding work at New Hampshire is now concerned with crosses between some of the best standard varieties of everbearing red raspberries and unnamed selections, which, while not desirable so far as fruit was concerned, do bloom early enough in the fall to produce a reasonably good crop before frost.

Only one group of seedlings produced early blooming, early ripening plants. This group came from Taylor red raspberry, the blossoms of which were pollinated with Nectar berry. Since the seedlings do not show any visible evidence of Nectar berry, it is thought that they are probably only Taylor seedlings. In this group, one was outstanding in that it began producing ripe berries between the 15th and 20th of August at Durham. This meant that it had a month to six weeks fruiting time in the ordinary year before the growth was stopped by frost. Because of its prolific flowering habit, the crop was heavy enough for possible commercial production. This variety has been named Durham.

The fruits on Durham are medium in size, good in quality, and unusually firm. Freshly-picked Durham raspberries can be poured on a table from a height of 2 or 3 feet without much evidence of injury. This variety or other similar ones which may be pro-

duced later should have real value in sections where winter injury is severe and where the season is long enough for them to mature in the fall before freezing temperatures occur.

Low-Growing Raspberry Developed

In the swamps of Northeastern United States and Eastern Canada, there is a wild plant related to the raspberry called the Bakeberry, Baked Apple berry, or sometimes Salmonberry. In northern Europe it is called Cloudberry. It is not the same as the Alaska Salmonberry. Botanically it is *Rubus Chamaemorus*. This plant grows only a few inches in height, hence, in areas where snowfall is abundant, the plants are covered during the winter and thus escape severe weather.

Crosses were made between the Taylor raspberry and plants of this species which were secured from Lubec, Maine. A considerable number of seedlings were produced. The cross between these two berries produced a plant about 18 inches in height. The fruits on some of these plants are red like the red raspberry and on some others are yellow or salmon colored like the Bakeberry. Many of these first-generation plants were killed to the ground every winter, but some of them lived well enough to produce fruit. The hybrid seemed to be reasonably fertile.

Seeds from these first crosses were planted and a second generation has been brought into fruiting. In this generation plants varied from 8 inches to 8 feet in height. Some of the canes are unbranched like the red raspberry; others begin branching close to the ground.

Some of them winter kill to the snow line; others seem to be hardy. From this group a selection has been made which grows from 18 inches to 2 feet in height. It produces a good quality red raspberry early in the season — has been hardy, and is very productive.

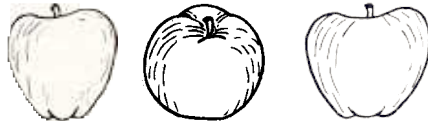
This particular selection is being increased for further trial. It may or may not be named, depending upon its behavior under propagation. The advantage of such a plant as this is that in a normal year at Durham, New Hampshire, it would probably get enough natural snow cover to protect the canes from severe weather in case they were somewhat tender. The same situation is true of many areas of Northeastern United States and Eastern Canada. This cross would seem to make possible red raspberries of any plant height from 6 inches up to 8 feet, if there is a desire for them.



Harvesting fruit from low-growing raspberries, the result of hybrids between Taylor and Bakeberry.

Other similar crosses and back crosses between selections of this material are expected to be a major feature of the raspberry-breeding program at the University of New Hampshire for some

time. Plant breeders at other Experiment Stations who are interested in this material will be supplied with limited amounts as long as surplus plants are available.



Pome Clubs Serve Young Fruit Growers

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A group of young fruit growers in 1943 decided that they wanted to form a horticultural club similar to one that had been organized many years before by an older group. The young fellows saw no hope of ever being able to join the senior society because of the restricted membership that it carried. As a result they assembled all interested young growers and formed not a "Hort Club" but a "Pome Club."

The original Pome Club has prospered during the past five years and has been copied by a club in the Wenatchee district and one in upper Yakima valley at Tieton. These clubs have a definite influence in developing leadership within the fruit growing industry.

During the past year the idea of Pome Clubs has entered the 4-H activ-

ity of the county. Some of the adult members of the already organized clubs became leaders of these 4-H groups and gave their experience to the boys who were carrying fruit growing projects. For once at least in the history of 4-H work more leaders than there were clubs have been available. This is an unusual circumstance.

Members of the American Pomological Society who recently visited Yakima had an opportunity to hear one of these Pome boys demonstrate before the combined meeting of the Washington State Horticultural Association and the American Pomological Society. We suggest that other fruit districts could do well to first organize some adult Pome Clubs and then, through assistance of leaders that are developed, 4-H Pome Clubs could be developed to instill interest in fruit growing to the younger generation.