Crowley, a New, Early Maturing Cranberry Variety[1] for Washington and Oregon

C. C. Doughty[2] and Ralph Garren, Jr.[3]

Crowley, formerly tested as WSU No. 72, is a new cranberry variety developed by Washington State University's Coastal Washington Research and Extension Unit, located at Long Beach, Washington. The name was selected by the Washington cranberry growers to honor Mr. D. J. Crowley, Superintendent of the Coastal Washington Unit until his retirement in 1954. Mr. Crowley started the cranberry breeding program in the early 1940's. He made the original selections from 1200 seedlings, primarily to develop a variety which would ripen earlier than the standard McFarlin.

One of thirteen seedlings selected for further trial and development, the Crowley, has shown itself to be worthy of introduction on the basis of its productiveness, early maturity, and high pigment content. It originated from a cross of McFarlin and Prolific. Prolific is an early maturing, large, blackish-red berry. McFarlin is a late maturing, medium to large, deep red berry that is particularly well adapted to the climatic conditions of western Washington and Oregon. Crowley is a medium to large berry, medium to dark red, matures earlier, and develops good color at least two weeks ahead of McFarlin. The berry is round-oblate, flattened on both ends, but especially on the calyx end, and has some bloom, although not as much as McFarlin.

The leaves of the Crowley are medium in size, and light green in color, similar to McFarlin. The uprights are relatively short and the wood is small. Runner growth is generally medium to heavy. Except for some increase in breakage of uprights during the first production year, the variety holds up well with water picking, and upright breakage is not a problem as the bog matures.

Although Crowley was developed in Washington it has proved more adapted in the Coos County, Oregon area. It has been a high yielding variety, consistently producing more than McFarlin. Tables 1 and 2 show yields in both Oregon and Washing-

Table 1. Mean[a] yield of McFarlin and Crowley cranberries grown at Coastal Washington Research and Extension Unit.

Year	McFarlin			Crowley		
	Plot yield		Wt g/100	Plot yield		Wt g/100
	g/sq ft[b]	Ext. lbs/A	berries	g/sq ft[b]	Ext. lbs/A	berries
1954	92.55	8880	——	150.54	14444	100
1955	56.28	5400	90.55	103.54	9931	81
1956	47.94	4600	126.14	82.51	7916	125
Average	65.59	6293.3	108.4	112.20	10763.6	102

[a]Based on non-replicated plots, 2 plots of each variety.
[b]Actual area of fruiting vines in each plot.

[1]Scientifica Paper No. 3499. Washington State University, Project No. 1560.
[2]Associate Horticulturist, Western Washington Research and Extension Center, Puyallup, Washington.
[3]Associate Professor of Horticulture, Oregon State University, Corvallis, Oregon.

ton. Yields per acre have been greater in Coos County, and berries, larger.

Crowley makes a useful addition to the cranberry industry because of its high pigment content (Table4), and its low in astringency. These two characteristics make Crowley especially adaptable to processing and juice production. Crowley fruit also compares favorably with other cranbery varieties in acidity, soluble solids and quantity of juice (Table 3).

Table 2. Yield[a] of McFarlin and Crowley cranberries on commercial plantings in Coos County, Oregon.

McFarlin		Crowley	
Year	Yield		
	lbs/A	lbs/1/31 A	Est. lbs/A
Bates bog:			
1961	8110	967.74	30000
1969	9450	---	25000[b]
Allinger bog:			
1967	10530	1200	37200
1968	8160	1200	37200
1969	9450	1900	58900

[a]Based on reports of Coos County extension agent.

[b]Actual yield on a one acre plot.

Table 3. Juice characteristics of fruit of Crowley and other cranberry varieties, means of samples harvested at two week intervals, September 14 to October 26, 1969.

Variety	Ml per 50 g	pH	% Soluble solids
Beckwith		2.80	9.50
Crowley		2.77	8.45
McFarlin		2.70	9.46
Searles		2.66	10.31
Stevens		2.73	9.09
WSU 41		2.68	9.79
WSU 108		2.74	10.29

Table 4. Optical density of Crowley and other cranberry varieties.

Variety	Harvest dates				
	9/14	9/28	10/12	10/26	Mean
Beckwith	.184	.228	.361	.362	.283
Crowley	.206	.416	.550	.544	.429
McFarlin	.077	.156	.334	.403	.242
Searles	.071	.187	.223	.292	.193
WSU 41	.069	—	.215	.228	.170
WSU 108	.159	.263	.294	.495	.345

Mutsu-Crispin Apple

The following item concerning the Japanese apple variety, Mutsu, by R. F. Carlson, is reprinted from "Compact Fruit Grower":

"Most pomologists, fruit growers, nurserymen and others are familiar with double named varieties. For example, the Beacon-Fenton apple, and Bartlett-Williams pear no doubt have puzzled many, but affected sales and taste very little. Now, another double-named apple has come to the fore—the Mutsu-Crispin. Some of our English counterparts came up with a name more descriptive for the Mutsu variety. The apple is crisp in bite and taste — hence the name Crispin, in place of Mutsu."

Variety Testing in Rhodesia

A fruit variety testing program initiated in 1962 by the Rhodes Inyanga Experiment Station, Private Bag, Rhodesia, now includes 250 apple varieties, 60 peaches, 24 plums, 12 pears, and several kinds of berries. Of the apples tested, a local seedling of the Granny Smith type, Beverly Hills from California, and Shorland Queen from New Zealand, appear the most promising.

The Station is located at an altitude of 6,100 ft., and has an annual rainfall of 44-48 inches. Inadequate winter chilling can be a problem with deciduous fruits, except with varieties having a very low chilling requirement.