

CRANBERRY CULTIVAR EVALUATION

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A total of 93 cranberry varieties or cultivars, has been collected and is being maintained at plots at the DuBay Cranberry Company Marsh. Twenty cultivars are being maintained in plots at the Jacob Searles Marsh. In addition, 25 cultivars grown from seed of open-pollinated flowers of the Ben Lear variety are in plots at the Dubay marsh and over 600 seedlings from crosses made by Dr. Nicholas Vorsa of the New Jersey Experimental Station have also been planted at the DuBay marsh.

This report is on the 69 selected cultivars all growing in one bed at the DuBay marsh. Data have been taken on these cultivars over the last 16 years, but the years 1983-1992 are included here, since the data are most complete for those years. Data for the 1993 season are being prepared for a report to the Wisconsin Cranberry Board, Inc.

Data on yield were obtained by hand picking the berries from two one-square-foot areas in each variety plot, weighing the berries and calculating the yield per acre. Berry weight data were obtained by weighing a two quart sample of berries, counting the berries in the sample and calculating the weight per berry. Berries per cup were also counted for several years. Storage rot was determined by sorting berries of a two-quart sample, counting and classifying the rotted, breakdown or sound berries per sample. The berries had been held in refrigerated storage for approximately four months. The Ocean Spray Company laboratory at Babcock, Wisconsin made the berry color determination.

Most of the highest yielding cultivars are little known in Wisconsin. The top ten were WSU 108, DF5, Centerville, AJ, F.N. Searles, AR2, Thunder Lake 3, HA, Wilcox and Bain Favorite #1. Other characteristics of these varieties need to be considered in evaluating them for planting. Highest color readings were obtained for Early Black, Franklin, Ben Lear, AA4, Bergman Bain 6, BE4, Bain 3, Crowley and Middleboro. The largest berries were produced by Bain favorite #1, Bain 10, Habelman 2, Pilgrim, Bain 8, Bain 11, Stevens, Hollister Red, Stankovich and Thunder Lake 3. Poorest keepers in storage were Prolific, Matthews, Habelman 2, Norman Le Munyon, 41, Hollistar Red, Paradise Meadow, Drever, Stankovich and Pilgrim. The best keepers were Howes, Centerville, BE4, Early Black, Early Richard, 35, Bain 11, Rezin McFarlin, WSU 77, Bain 5 and AA4.

Berry samples will be on hand at the March 16 Cranberry School for examination and further evaluation.

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6
Multi-year Summary of Evaluation Data of Cranberry Cultivars in DuBay Marsh Plots¹.

| Cultivar | <u>Yield</u> | <u>Color</u> | <u>Berry</u> | <u>Percent Storage Rot</u> | |
|------------------|---------------------|---------------------|---------------------|-----------------------------------|----------------------|
| | B bls/A | TAcy | size gm | Dry Raked | Wet Raked |
| AA4 | 235.0 | 57.1 | 1.03 | 3.3 | 7.7 |
| AJ | 305.8 | 40.2 | 1.18 | 4.3 | 13.8 |
| AR2 | 298.6 | 20.0 | 1.42 | 3.3 | 10.0 |
| AW2 | 227.9 | 44.6 | 1.04 | 5.0 | 12.3 |
| Bain 1 | 216.2 ² | 42.7 | 1.51 | 6.5 | 8.7 |
| Basin 2 | 256.3 | 36.6 | 1.15 | 4.3 | 10.1 |
| Bain 3 | 212.5 | 46.6 | 1.32 | 5.5 | 13.8 |
| Bain 4 | 279.3 | 40.3 | 1.24 | 3.2 | 10.8 |
| Bain 5 | 203.5 | 42.5 | 1.15 | 3.8 | 7.7 |
| Bain 6 | 235.2 | 50.5 | 1.40 | 4.4 | 12.3 |
| Bain 7 | 280.7 | 42.8 | 1.33 | 6.6 | 12.7 |
| Bain 8 | 259.6 | 35.2 | 1.56 | 6.3 | 14.0 |
| Bain 9 | 252.9 | 33.0 | 1.48 | 4.4 | 11.3 |
| Bain 10 | 271.3 | 32.9 | 1.65 | 5.2 | 10.5 |
| Bain 11 | 276.8 | 29.6 | 1.53 | 5.8 | 6.8 |
| Bain Favorite #1 | 284.6 | 17.3 | 1.72 | 4.2 | 11.9 |
| Bain Favorite #2 | 269.4 | 24.7 | 1.44 | 2.9 | 8.3 |
| Bain McFarlin | 222.3 | 31.6 | 1.35 | 4.2 | 7.9 |
| BD | 275.6 | 43.8 | 1.06 | 4.3 | 10.7 |
| BE4 | 284.0 | 48.2 | 1.14 | 2.7 | 4.6 |
| Beckwith | 281.2 | 32.5 | 1.43 | 4.8 | 11.5 |
| Ben Lear | 241.7 | 60.5 | 1.36 | 6.6 | 16.8 |
| Bergman | 253.5 | 53.1 | 1.29 | 5.9 | 10.3 |
| Biron Selection | 203.0 | 33.6 | 1.51 | 5.4 | 10.9 |
| Centennial | 275.9 | 34.7 | 1.43 | 4.8 | 8.7 |
| Centerville | 309.0 ² | 30.1 | 1.08 | 3.9 | 4.2 |

| Cultivar | <u>Yield</u> | <u>Color</u> | Berry | <u>Percent Storage Rot</u> | |
|------------------|---------------------|---------------------|--------------------|-----------------------------------|----------------------|
| | B bls/A | TAcY | size gm | Dry Raked | Wet Raked |
| CN | 282.6 | 33.6 | 1.34 | 4.6 | 14.6 |
| Cropper | 261.8 | 39.2 | 1.32 | 6.0 | 8.5 |
| Crowley | 277.6 | 46.1 | 1.48 | 6.3 | 11.3 |
| DF5 | 315.7 | 39.9 | 1.32 | 6.2 | 17.3 |
| Drever | 259.5 | 33.3 | 1.43 | 7.9 | 18.7 |
| Early Black | 220.2 | 65.1 | 0.81 | 4.0 | 4.8 |
| Early Richard | 181.7 ² | 40.1 | 1.11 | 3.3 | 5.8 |
| Eastern Variety | 269.0 | 24.9 | 1.21 | 3.3 | 8.6 |
| FN Searles | 301.6 ² | 27.9 | 1.47 | 6.0 | 11.7 |
| Franklin | 210.6 | 61.2 | 1.05 | 4.7 | 10.7 |
| Foxboro Howes | 195.2 ² | 29.0 | 0.91 | 2.3 | -- |
| Gebhardt Beauty | 280.7 | 25.3 | 1.48 | 4.1 | 12.1 |
| HA | 291.0 | 34.7 | 1.41 | 6.5 | 12.1 |
| Habelman | 230.6 | 35.4 | 1.11 | 4.1 | 8.3 |
| Habelman #2 | 243.6 ² | 39.5 | 1.64 | 9.3 | 12.1 |
| Holliston | 241.9 | 35.8 | 1.34 | 6.2 | 18.3 |
| Hollistar Red | 261.2 | 29.6 | 1.51 | 8.6 | 15.6 |
| Howes | 233.5 | 28.7 | 0.91 | 2.1 | 3.8 |
| Matthews | 246.4 | 34.7 | 1.40 | 9.5 | 15.4 |
| Middleboro | 149.3 ² | 46.0 | 1.05 | 3.0 | -- |
| New Jersey 10 | 266.3 | 40.6 | 1.13 | 4.3 | 8.5 |
| Norman Le Munyon | 200.6 | 34.3 | 1.30 | 9.1 | 13.4 |
| Paradise Meadow | 212.9 ² | 32.4 | 1.03 | 8.3 | -- |
| Pilgrim | 250.9 | 38.6 | 1.61 | 7.1 | 26.3 |
| Prolific | 276.6 | 28.4 | 1.33 | 11.7 | 25.3 |
| Rezin | 242.2 | 44.5 | 1.09 | 3.7 | 12.7 |
| Rezin McFarlin | 219.0 | 28.1 | 1.25 | 2.5 | 7.2 |

| Cultivar | <u>Yield</u> | <u>Color</u> | Berry | <u>Percent Storage Rot</u> | |
|-----------------|---------------------|---------------------|--------------------|-----------------------------------|----------------------|
| | B bls/A | TAcy | size gm | Dry Raked | Wet Raked |
| Round Howes | 202.0 ² | 27.1 | 0.88 | 1.8 | -- |
| Searles | 257.2 | 28.9 | 1.36 | 3.8 | 13.9 |
| Stankovich | 247.2 | 39.1 | 1.51 | 7.7 | 21.2 |
| Stanley | 151.0 ² | 40.6 | 1.01 | 4.6 | -- |
| Stevens | 268.9 | 31.8 | 1.52 | 4.0 | 9.0 |
| Thunder Lake 3 | 292.6 ² | 38.6 | 1.51 | 4.8 | 15.4 |
| Thunder Lake 4 | 247.7 ² | 35.6 | 1.50 | 3.9 | 9.0 |
| Wales Henry | 204.2 ² | 27.5 | 1.04 | 6.8 | -- |
| Wilcox | 289.8 ² | 30.0 | 1.00 | 2.9 | 8.1 |
| WSU 61 | 242.7 | 44.3 | 1.25 | 4.4 | 12.0 |
| WSU 77 | 255.7 | 23.0 | 1.34 | 3.7 | 7.3 |
| WSU 108 | 319.7 | 32.4 | 1.20 | 6.9 | 15.1 |
| 6 | 241.3 | 41.1 | 1.13 | 3.1 | 9.6 |
| 20 | 261.3 | 26.6 | 1.30 | 4.8 | 11.8 |
| 35 | 253.8 | 26.4 | 1.34 | 3.0 | 6.4 |
| 41 | 240.9 | 33.2 | 1.32 | 9.0 | 14.1 |

¹ Yield, color and berry size data are for the ten year period 1983-1992, with some exceptions where data for some years were lacking for certain cultivars. Storage rot data for dry raked berries are for the eight years 1985-1992, that for the wet raked berries are for the three years 1989, 1991 and 1992. Storage rot data were taken after four months of refrigerated storage.

² Yield data for the cultivars indicated are for only five to seven years.