

Title: EVALUATION OF NEW CRANBERRY GERMPLASM FOR FRESH FRUIT PRODUCTION IN THE PACIFIC NORTHWEST

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Objectives:

- 1) Maintain the new cranberry germplasm planting on the Pacific Coast Cranberry Research Farm in Long Beach.
- 2) Assess horticultural traits (yield, berry size, color, return bloom, vine cover, vigor, and upright density) of the germplasm.
- 3) Assess the incidence of diseases (fruit rot, cottonball, rose bloom and fresh fruit keeping quality) of germplasm.

Results:

A field planting, using a randomized complete block design was planted in summer 2003. Vines were obtained from Nick Vorsa’s breeding program at Rutgers University (njs98-23, njs95-37, cnj96-44-83, cnj97-105-4, cnj95-20-20, cnj93-9-42, cnj93-13-100, njs98-65, njs98-28) and from an old cultivar trial in Wisconsin (BE4, AR2, BAIN FAVORITE #1). Pilgrim and Stevens (DNA tested) from Rutgers were used for comparisons. Plots were maintained using standard horticultural practices. Vines are beginning to come into full production. Yield, fruit size and fruit rot at harvest were collected in 2005 and 2006 (Table 1). Based on these parameters, none of the germplasm selections has yet to distinguish itself as being superior to the current varieties in production. Other variables measured included incidences of rose bloom and other diseases, keeping quality, vigor and fruit color. There was no major difference between germplasm for these variables.

Table 1. Fruit size, yield and percent rot at harvest cranberry variety trials – Long Beach, Washington

Variety	Fruit Size (g/fruit)		Bbl/acre		% rot at harvest	
	2005	2006	2005	2006	2005	2006
NJS98-23	2.03 abc	1.87 abc	77 c	126 ab	6.43 a	1.94 a
NJS95-37	1.44 bcd	1.48 d	85 c	189 A	2.49 a	0.48 a
CNJ97-105-4	2.03 abc	2.09 a	23 c	74 bc	1.50 a	2.82 a
CNJ96-44-83	1.89 abc	1.78 bcd	54 c	149 abc	4.70 a	1.65 a
CNJ95-20-20	1.57 a-d	1.44 f	32 c	181 ab	2.98 a	1.22 a
CNJ93-9-42	1.62 a-d	1.53 ef	61 c	187 ab	4.13 a	1.17 a
CNJ93-13-100	1.40 cd	1.52 ef	46 c	136 abc	1.21 a	1.18 a
BE4	1.20 d	1.23 g	150 b	217 a	2.22 a	0.68 a
AR2	1.91 abc	1.69 bc	16 c	223 a	9.10 a	1.02 a
Bain Favorite #1	2.08 a	1.89 bc	46 c	178 ab	3.15 a	0.71 a
Pilgrim	2.14 a	1.89 bc	257 a	202 ab	5.49 a	0.65 a
Stevens		1.62 def	3 c	49 c		4.24 a
NJS98-65	2.11 a	1.93 b	11 c	201 ab	3.03 a	0.69 a
NJS98-28	1.58 a-d	1.65 def	27 c	171 ab	4.26 a	3.06 a