CRANBERRY
(Vaccinium macrocarpon)

Proposed denomination: **'NJS98-23'**
Application number: 06-5234
Application date: 2006/02/16
Applicant: Rutgers, The State University of New Jersey, New Brunswick, New Jersey, United States of America
Agent in Canada: Cassan Maclean, Ottawa, Ontario
Breeder: Nicholi Vorsa, Rutgers, The State University of New Jersey, New Brunswick, New Jersey, United States of America

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

Varieties used for comparison: 'HyRed' and 'Ben Lear'

Summary: *'NJS98-23' has larger leaves than the reference varieties. The berry of 'NJS98-23' is larger than the reference varieties. 'NJS98-23' has a higher mean berry weight than the reference varieties. Plot colonization, stolon growth and plot density of 'NJS98-23' are more vigorous than the reference varieties.*

Description:
PLANT: semi-erect, early flowering period

LEAF: ovate shape, obtuse apex, truncate base, entire margin, leathery texture

FRUIT: ovate shape in longitudinal cross section, large size, weak bloom, dark purple red (RHS 46A) to brown purple (RHS 187A) colour, strong intensity of colour, early maturity

Origin and Breeding: 'NJS98-23' resulted from the cross made in 1988 at Rutgers University, Chatsworth, New Jersey with 'Stevens' as the seed parent and 'Ben Lear' as the pollen parent. A single plant was selected in 1998 based on the following selection criteria: yield, fruit rot susceptability/resistance, scald, stolon and upright vigour, total anthocyanin content (TAcy), soluble solids and titratable acidity.

Tests and Trials: Tests and trials were established in 2000 in Richmond, British Columbia and were evaluated in 2006 and 2007. Plots consisted of fully established mats that were 4.6 meters by 4.6 meters in size with an approximate density of 30-40 uprights per decimeter squared which arose from stolons rooted along multiple points within the plot. There were 60 cm pathways between blocks and 3 replicates.

Comparison table for 'NJS98-23'

	'NJS98-23'	'HyRed'*	'Ben Lear'*
Leaf length (cm)			
mean (LSD=0.10)	1.00	0.90	0.80
std. deviation	0.10	0.15	0.11
Leaf width (cm)			
mean (LSD=0.02)	0.40	0.38	0.35
std. deviation	0.03	0.05	0.04
Fruit width (cm)			
mean (LSD=0.07)	1.6	1.5	1.4
std. deviation	0.1	0.1	0.2

Berry weight (gm)			
mean (LSD=0.3)	2.0	1.7	1.4
std. deviation	0.4	0.3	0.3
Total anthocyanin content (mg/100gm of fruit, mean of 2006-2007)			
mean	49	60	51
std. deviation	5.6	6.9	4.6
Yield (grams/0.9 squared. decimeter, mean of 2006-2007)			
mean	507	471	445
std. deviation	48.5	70.5	44.6

*reference varieties

Cranberry: 'NJS98-23' (top left) with reference varieties 'Ben Lear' (bottom left) and 'HyRed' (centre right)