

BIC INVITED PAPER:  
**PEDIGREES OF DRY BEAN CULTIVARS, LINES AND PIS**

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**SMALL WHITE, NAVY, PEA BEAN**

Cultivar	Pedigree
Agri-I	Upland*8/PI 326418
Albion	Seafarer/Turkish White
Aurora	Black Turtle Soup/Cornell 49-242
Bonita	12 generation selection of native strain
Bonus	Red Mex UI 35 selection/Calproof 38
C-20	Jamapa/NEP-2//W-20/Kentwood
Calproof 38	small flat bean with BCMV resistance
Centralia	Ex-Rico 23 BC <sub>6</sub> -are/Harokent
Clipper	Burbank/Beauty
Crawford	old navy bean variety
Crestwood	Ex Rico 23*3/PI 326418
Criolla	Bonita/Sel. 210 of SE U.S. Veg. Br. Lab.
CSW-73-11	Small White 53*3/Meador #1
Dresden	Fleetwood*3/Fleetwood/PI 326418
Early Prolific	pure line derived from a land race
Ex-Rico 23	Ex-Rico 23*6/Ex-Rico 23/PI 326418
BC <sub>6</sub> -are	
Fleetwood	Sanilac/California Small White
Gratiot	Sanilac*4/Sanilac//Michelite Bush X-Ray/B1788
Harkell	Monroe/4411-88C
Harofleet	Fleetwood*6/Fleetwood/PI 326418
Harokent	Kentwood*6/Kentwood/PI 326418
Hyden	Aurora/UI 114
Kentwood	Sanilac/Clipper
ICA-Bunsi	Magdalena/Japon 3 (apparently equals Ex-Rico 23)
L-226-10	MSU N80051/MSU N81009
L-227-1	MSU N80051/MSU X80101
Laker	ICA-Pijao/NEP-2//W-20/Kentwood
Mayflower	NEP-2/Black Turtle Soup//2W-33-2/3/C-20
Meador #1	Small White 53/Prestige #1
Michelite	Robust/Early Prolific
Michelite-62	selection from Michelite; resistant to Bean Common Mosaic virus race 1
Michelite X-Ray	X-ray mutant of Michelite

Midland	Seafarer//Seafarer/California Small White
Miluno	small, early-maturing Chilean white bean
Mitchell	Seafarer/Tuscola
Monroe	GN UI 1/Michelite
Monument	Aurora/CSW-73-11
MSU N76012	NEP-2/Black Turtle Soup
MSU N80051	MSU N76012//MSU N76012/2B-5-1
MSU X80101	W-18/Kentwood//ICA-Bunsi/NEP-2
MSU N81009	ICA-Bunsi/NEP-2
NEP-2	white-seeded bush derived from San Fernando through mutagenesis; carries the I gene
Northland	ICA-Bunsi/Seafarer
NW 395	Miluno/T-I-2204
OAC Rico	Ex-Rico 23*6/Ex-Rico 23/Narda
OAC Seaforth	Seafarer*6/Seafarer/PI 326418
Pulsar	Calproof 38/Red Mex UI 34
Refugee	Robust/Crawford
Robust	Indian landrace; selection for resistance to BCMV
Saginaw	Michelite*5/Michelite//Robust/Crawford/3/Emerson*5/ Emerson//Robust/Early Prolific Prolific
Sanilac	X-Ray mutant out of Michelite
Sanilac BC <sub>6</sub> -are	Sanilac*6/Sanilac/PI 326418
Seafarer	Michelite X-ray mutant*5/Michelite X-ray mutant/Emerson 847/4/Michelite X-Ray Mutant*5/Michelite X-ray mutant/3/ Michelite/Trag 279-1//Michelite/Florida Belle
Seaway	Michelite X-ray mutant*4/Topcrop
Small White	an old variety from the Eastern US
Small White 38	selection out of Small White
Small White 51	UI 2/Small White 38
Small White 52	UI 2/Small White 38
Small White 53	UI 2/Small White 38
Small White 59	Small White*7/Small White/Idaho Refugee
Small White UI 76	PI 282057/Idaho Ex. Line 4792
Small White UI 158	Aurora/UI 76
Stinger	ICA-Bunsi/Seafarer
Suncrest	Seafarer/Crestwood
Swan Valley	NEP-2/Black Turtle Soup
TARS-IM(BCMV)-1	BAT 338//IVT 7233/IVT 7214/3/TARS-253A
TARS-IM(BCMV)-2	BAT 338//IVT 7233/IVT 7214/3/TARS L-227
TARS-IM(BCMV)-3	BAT 338//IVT 7233/IVT 7214/3/TARS-144B
Tuscola	pure line from the 4th intercross generation of a 10 X 10 diallel involving two navy bean varieties and eight experimental true-breeding navy bean selections as parents
Wesland	Kentwood//Seafarer/California Small White
W-18	USDA line
W-123	early white bean from Puerto Rico
2W-33-2	Bonita//Bonita/La Vega
5W-372	B-190/XR-235/3/NEP 2/Black Turtle Soup//W-126

**PINTO**

Bel 4-844	Fiesta/5/Fiesta/4/Olathe/3/Olathe//Olathe/CNC
Bel 4-2537	Fiesta/6/Fiesta/5/Fiesta/4/Olathe/3/Olathe//Olathe/CNC
Beldak RR-1	Bel 4-844/3/Bel-4-844//Olathe/Mex 235/4/Bel 4-2537
Beldak RR-2	Bel 4-844/3/Bel-4-844//Olathe/Mex 235/4/Bel 4-2537

Bill Z 3526/Gloria  
 Cahone A56244-39/UI III//A56244-8/3/Yellow Jacket  
 Columbia Pinto #5/GN UI 123//UI 78  
 Common Pinto land race of pinto  
 Fiesta UI 111//a Great Northern cultivar/UI 111  
 gh 196-2 UI 114//UI 114/PI 203598/3/UI 114/4/Red Mex UI 35/  
 PI 203598/5/red-seeded early maturing Japanese bush bean  
 Holberg Viva/3/UI 114//UI 114/PI 203958  
 JM-126 NW 410//NEP 2/NW 410  
 Luna a cross among Golden Gate Wax, UI 123, Pinto #4, UI 78  
 Navajo USDA 2207/NM 56-778  
 Nodak Red Mex UI 35//Red Mex UI 35/PI 203958/3/Royal Red  
 Kidney/4/GN 1140  
 NW-410 Sutter Pink/UI 114  
 NW-590 Red Mex UI 35//PI 203958/Red Mex UI 35/3/UI 114  
 Olathe B23/4/Dark Red Kidney/3/UI 78//UI 78/4500  
 Ourary Sanilac/UI 111/4/Dark Red Kidney/3/Pinto #4/4500//Pinto #5  
 Othello NW-410//Victor/Aurora  
 Pindak red-seeded Japanese bush bean (name lost)/3/UI 114/  
 PI 203958//UI 114  
 Pinto #4 #780/Idaho Pinto  
 Pinto #5 #780/Idaho Pinto  
 RS 101 single plant mutant found in Olathe; appears to be like  
 CSU 81-12034  
 UI 72 Red Mex UI 34/Common Pinto  
 UI 78 Red Mex UI 34/Common Pinto  
 UI 111 Red Mex UI 34/Common Pinto  
 UI 114 UI 111/GN J-378  
 UI 126 R764/UI 114  
 UI 129 volunteer selection from a previous year's breeding nursery  
 Wyo 167 Wyo 166/UI 114  
 3526 A56244-39/UI 111//A56244-8  
 4500 Pinto #4/3/Golden Gate Wax//Idaho Pinto/Pinto #5

### GREAT NORTHERN

Belneb-RR-1 GN Harris/6/GN Harris/5/GN Harris/4/GN 1140//GN 1140/  
 B-190/3/Olathe  
 Belneb-RR-2 GN Harris/6/GN Harris/5/GN Harris/4/GN 1140//GN 1140/  
 B-190/3/Olathe  
 Bulgarian White a large, white-seeded breeding line from U of Nebraska  
 Common Great land race of Great Northern  
 Northern  
 DB 620341 selection from PI 282096  
 Emerson PI 165078/GN 1140  
 GN 1140 Pinto #5/GN UI 123  
 GN CT 32 curly top resistant Great Northern of unknown parentage  
 GN Harris bulk of early maturing GN Valley plants  
 GN J-378 GN UI 123/GN CT 32  
 GN Montana #1 selection from Great Northern field run  
 GN Montana #5 selection from Great Northern field run  
 GN Nebraska #1 P. vulgaris cv. Montanas/P. acutifolius var. latifolius  
 cv. Tepary  
 GN Star GN Nebraska #1 sel.27\*6/GN Nebraska #1 sel. 27/PI 165078  
 GN UI K0425 GN UI 61/R544//Emerson

GN UI 1	selection from Common Great Northern
GN UI 16	GN UI 59/Common Red Mexican
GN UI 31	GN UI 59/Common Red Mexican
GN UI 56	selection from Common Great Northern
GN UI 59	selection from Common Great Northern
GN UI 60	GN UI 61/R 221
GN UI 61	GN UI 59/Common Red Mexican
GN UI 81	selection from Common Great Northern
GN UI 123	selection from Common Great Northern
GN Valley	GN Nebraska #1 sel. 27*6/GN Nebraska #1 sel. 27/GN 1140
JM-24	NW-410//NW-410/NEP-2
Jules	GN Nebraska #1 sel. 27/GN 1140
Snowball	DB 620341/3/Bulgarian White//GN 1140/DB 620341
Tara	GN Nebraska #1 sel. 27/GN 1140

**RED AND RED MEXICAN**

Big Bend	Liborino/Red Mex UI 34
Borinquen	10 generation selection of native red bean
Common Red Mexican	land race of red Mexican
Coulee	Red Mex UI 34/a pinto type//Red Mex UI 34
Liborino	landrace from Colombia, SA
NW-59	PI 203958/Red Mex UI 35//DRK 801/3/Sutter Pink
NW-63	PI 203958/Red Mex UI 35//DRK 801/3/Sutter Pink
Red Mex UI 3	GN UI 1/Common Red Mexican
Red Mex UI 34	GN UI 1/Common Red Mexican
Red Mex UI 35	Red Mex UI 34/GN UI 31
Red Mex UI 36	Red Mex UI 34/GN UI 56
Red Mex UI 37	Red Mex UI 34/GN UI 56
Red Mex UI 42	Red Mex UI 36/R-370
Ruddy	G01562/Redcloud
Rufus	PI 203958/Red Mex UI 35//PI 203958

**KIDNEY**

B23	USDA strain
California Dark Red Kidney	Michigan Dark Red Kidney/Maui Red Kidney
California Dark Red Kidney 82	Red Kidney/RedKote/4/RedKote/Red Kidney//California Dark Red Kidney/3/RedKote
California Early Dark Red Kidney	Sacramento//Red Kidney/RedKote
California Light Red Kidney	old landrace of kidney
Charlevoix	Dark Red Kidney/Brazilian Red Kidney
Dark Red Kidney	old variety from Michigan
Isabella	Redcloud/Mecosta
Kardinal Red Kidney	Manitou/4/UI 114//UI 112/PI 203958/3/Jacob's Cattle
Karniakin Red Kidney	Royal Red Kidney/Redkote
K-59 Red Kidney	Mecosta//Royal Red Kidney/Redkote
Lark	bulk of 12 selections out of Redcloud
Lassen	white-seeded mutants of Sacramento

Linden	Red Kidney/RedKote
Mauí Red Kidney	Large, late, high producing bush type from Hawaii
Mecosta	GN Nebraska #1/Manitou
Montcalm	Great Northern #1/Dark Red Kidney
Red Kidney	an apparent South American variety known before 1857
Red Kidney M	Red Kidney/RedKote
Redcloud	early maturing selection from California Light Red Kidney
RedKote	a light red kidney resistant to BCMV
Royal Red Kidney	Dark Red Kidney//Dark Red Kidney/Curlly top res. bush
Sacramento	selection from California Light Red Kidney
3M-150	Michoacan 68-B-1/27-R
3M-152	Michoacan 68-B-1/27-R
27-R	a light red kidney with wide Central America adaptability

**BLACK**

B-190	Mex 309/50600
Black Magic	NEP-2/Black Turtle Soup
Black Turtle Soup	very old variety which probably originated in the lowlands of South America
CNC	Compuesto Negro Chimaltenango, composite of Guatemalan black beans
Domino	NEP-2/Black Turtle Soup
Ebony	Calproof #38/Red Mex UI 35
ICA-Pijao	an improved black bean released by ICA
Jamapa	local black bean from Jamapa, Veracruz, Mexico
La Vega	a tropical, multiple disease resistant black bean
Loop	plant selection from Black Turtle Soup
Michoacan 68-B-1	selection from field collection Michoacan 68
Midnight	bulk of composite NY lines 70001, 70002, 70003
Rico	selection from Costa Rican landrace "chimbolo" exhibiting short, upright stature
Rico-23	selection from Rico
San Fernando	selection from local El Salvadoran black bean cultivars
2B-5-1	La Vega/15R-55//Mex 309/La Vega
50600	tropical black bean

**CRANBERRY**

Cardinal	selection from Cranberry UI 50
Cran 74	selection out of Cran 028
Cran 75	vine selection out of Cran 028
Cran 1466	MSU breeding line
Cranberry	similar to the Chilean Araucano bean; introduced to the eastern US before 1860
Cranberry UI 50	61-2942/Cran 1466
Cranberry UI 51	61-2942/Cran 1466
Michigan Improved Cranberry	selection from Cranberry
Pilgrim	Taylor Cranberry/3/DB 610525//Taylor Cranberry/DB 610248
Taylor Cranberry	selection of Horticultural Cranberry

**PINK**

Early Pink	a selection by a Japanese farmer
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Early Pink 38 selection from Early Pink and Seventy Day Pink  
 Gloria Red Mex UI 35/PI 203958//virus-resistant red-seeded bush  
 line/3/Sutter Pink  
 Harold Victor/Aurora  
 Roza Red Mex UI 35/PI 203958//virus-resistant red-seeded bush  
 line/3/Sutter Pink  
 Salinas selection from pink beans  
 Standard Pink 38 selection from Standard Pink  
 Sutter Pink Standard Pink/Early Pink  
 Victor Red Mex UI 35/PI 203958//Red Mex UI 35/3/Sutter Pink/  
 Viva Red Mex UI 35/PI 203958//Red Mex UI 35/3/Sutter Pink

**OTHER**

A56244 rust resistant introduction from Zaumeyer USDA program;  
 A56244-39 and A56244-8 are selections from this introduction  
 Are-Steuben Steuben\*6//Steuben/PI 326418  
 Berna Ceka/Beka  
 DRK 801 California Dark Red Kidney/Red Mex UI 35  
 Golden Gate Wax garden bean  
 PI 165078 PI resistant to yellow, orange and purple strains of  
Corynebacterium faccumfaciens (bacterial wilt)  
 PI 203958 fusarium root-rot resistant plant introduction; commonly  
 referred to as N203  
 R-221 selection from N203-4-10 which exhibits resistant to  
 Fusarium root-rot  
 R-370 selection from N203-2-10 which exhibits resistance to  
 PI 282057 late-maturing Chilean introduction with numerous pods and  
 very small white seeds  
 PI 326418 plant introduction carrying the "ARE" gene which imparts  
 resistance to the alpha, beta, gamma, delta and lambda races  
 of C. lindemuthianum; Cornell 49-242 appears to be  
 equivalent to this PI  
 R544 white-seeded selection from fusarium root-rot resistant line  
 5MF67-1  
 Topcrop bush snapbean carrying I gene  
 Wyo 166 interspecific hybrid;  
 A-6 Golden Pinto//A-6 Golden Pinto/P. coccineus var.  
 White Runner  
 Yellow Jacket selection from San Juan Select with mosaic seed pattern  
 3M-150 mixture of solid and pinto patterns on a kidney background  
 3M-152 Michoacan 68-B-1/27-R; a mixture of solid colors and pinto  
 patterns on a kidney bean background  
 61-2942 white-seeded garden bean from LL Dean  
 70001 single plant selection exhibiting striking upright growth  
 habit among 25 black-seeded CIAT germplasm lines  
 70002 single plant selection exhibiting striking upright growth  
 habit among 25 black-seeded CIAT germplasm lines  
 70003 single plant selection exhibiting striking upright growth  
 habit among 25 black-seeded CIAT germplasm lines  
 5MF67-1 Idaho breeding line resistant to Fusarium root-rot