

Characterising Institute code GBRASASA  
 Country of characterisation United Kingdom  
 Farm or Institute address Scottish Agricultural Science Agency, Gogarbank Farm, Gogarba  
 Latitude 55.57.00N  
 Longitude 003.13.2'W  
 Elevation 65  
 Evaluators name George Campbell  
 Evaluation environment Field

Institute code	Accession number	Species	Subtaxa
GBRSASA	7400041	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480013	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7488006	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7488007	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489059	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489015	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7400039	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489016	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489033	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480076	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479008	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7488008	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489063	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7488032	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479095	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479096	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479029	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7486003	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489050	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7499017	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492001	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7499002	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479035	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479066	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479037	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479036	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479034	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479031	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480016	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480020	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492002	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7490002	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7481001	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7481049	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489044	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489056	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7497046	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480066	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7486022	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479039	carota L.	sativus (Hoffm.) Arcangeli

GBRSASA	7492069	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479090	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479094	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479114	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7478032	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7484024	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7483004	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492096	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7486005	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7483016	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492062	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7498039	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7482036	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7481036	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7485033	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7485034	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480015	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480014	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479049	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7483023	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479047	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479075	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479050	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479082	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7485026	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7483009	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479080	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7400040	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492051	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492033	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7485041	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7479053	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480040	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7481028	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7485050	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7486009	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492027	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492038	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7481020	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7480052	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7400039	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7400039	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7400040	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7400040	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7400041	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7400041	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7401046	carota L.	sativus (Hoffm.) Arcangeli
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GBRSASA	7401046	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7401046	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7401047	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7401048	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7401048	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7401048	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7401048	carota L.	sativus (Hoffm.) Arcangeli





GBRSASA	7486001	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7486006	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7486011	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7487053	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7487053	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489001	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489028	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7489044	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492002	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492053	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492055	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7492055	carota L.	sativus (Hoffm.) Arcangeli
GBRSASA	7498002	carota L.	sativus (Hoffm.) Arcangeli

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 cultural Science Agency, Gogarbank Farm, Gogarbank, Edinburgh, EH12 9DR

Accession name	Sowing date	Harvest date	Anthocyanin in petiole
Amsterdam 2 Sweetheart	16/06/2000		3
Asmer Babycan	16/06/2000		3
Autumn King 2 Autumn King Improved	16/06/2000		3
Autumn King 2 Century	16/06/2000		3
Autumn King 2 Fakkell Mix	16/06/2000		3
Autumn King 2 Flam	16/06/2000		3
Autumn King 2 Vita Longa	16/06/2000		3
Autumn King 3 Karaf	16/06/2000		3
Autumn King Early Giant	16/06/2000		3
Autumn King Giant Improved	16/06/2000		3
Autumn King Winter Monarch	16/06/2000		3
Beacon	16/06/2000		3
Berlicum Asmer Berlicum Special	16/06/2000		3
Berlicum Cylinda	16/06/2000		3
Bermuda	16/06/2000		3
Bermuda	16/06/2000		3
Chantenay	16/06/2000		3
Chantenay	16/06/2000		3
Chantenay	16/06/2000		3
Chantenay a couer rouge 3	16/06/2000		3
Chantenay a couer rouge 3 Supreme	16/06/2000		3
Chantenay a couer rouge 3 Supreme	16/06/2000		3
Chantenay a couer rouge Asmer Red Coat	16/06/2000		3
Chantenay a couer rouge Asmer Winter Hardy	16/06/2000		3
Chantenay a couer rouge Cluseed New Stump Rooted	16/06/2000		3
Chantenay a couer rouge Concord	16/06/2000		3
Chantenay a couer rouge Fenman	16/06/2000		3
Chantenay a couer rouge Monarch Strain	16/06/2000		3
Chantenay a couer rouge Royal Chantenay	16/06/2000		3
Chantenay a couer rouge Stump Rooted Intermediate No 210	16/06/2000		3
Chantenay Canners Favourite	16/06/2000		3
Chantenay Spalding	16/06/2000		3
Classic	16/06/2000		3
Danvers Half Long	16/06/2000		3
Danvers Half Long Danvers 126	16/06/2000		3
Danvers Half Long Danvers 126	16/06/2000		3
Danvers Half Long Danvers 126	16/06/2000		3
Danvers Half Long Scarlet Intermediate	16/06/2000		3
Dawn	16/06/2000		3
Early Horn	16/06/2000		3

Favourite	16/06/2000		3
Fenace	16/06/2000		3
Flakrecord	16/06/2000		3
Flakrecord	16/06/2000		3
Fruebund	16/06/2000		3
Gallena	16/06/2000		3
Ideal Red	16/06/2000		3
Ideal Red	16/06/2000		3
Imperator	16/06/2000		3
James Scarlet Intermediate	16/06/2000		3
James Scarlet Intermediate	16/06/2000		3
James Scarlet Intermediate	16/06/2000		3
Jaune du Doubs	16/06/2000		3
Kinko Cross Hybrid	16/06/2000		3
Mademoiselle	16/06/2000		3
Merlin	16/06/2000		3
Nantaise Amtou	16/06/2000		3
Nantaise Asmer Ormskirk Market	16/06/2000		3
Nantaise Empire	16/06/2000		3
Nantaise Ideal	16/06/2000		3
Nantaise Marko	16/06/2000		3
Nantaise Nanta	16/06/2000		3
Nantaise Palisade	16/06/2000		3
Nantaise Primato	16/06/2000		3
Nantaise Scarletta	16/06/2000		3
Nantaise Westland Ideal	16/06/2000		3
Nantaise Westlandia	16/06/2000		3
Parmex	16/06/2000		3
Rothild	16/06/2000		3
Scarla	16/06/2000		3
Spartan Bonus	16/06/2000		3
St. Valery	16/06/2000		3
St. Valery	16/06/2000		3
St. Valery	16/06/2000		3
St. Valery	16/06/2000		3
St. Valery	16/06/2000		3
St. Valery	16/06/2000		3
Touchon	16/06/2000		3
Touchon Prima	16/06/2000		3
Victory	16/06/2000		3
Autumn King 2 Vita Longa (harvest 1)	04/06/2001	03/09/2001	1
Autumn King 2 Vita Longa (harvest 2)	04/06/2001	30/10/2001	1
Parmex (harvest 1)	04/06/2001	03/09/2001	1
Parmex (harvest 2)	04/06/2001	30/10/2001	1
Amsterdam 2 Sweetheart (harvest 1)	04/06/2001	03/09/2001	1
Amsterdam 2 Sweetheart (harvest 2)	04/06/2001	30/10/2001	1
HRI 10205	04/06/2001	28/11/2001	6
HRI 10205	04/06/2001	28/11/2001	6
HRI 10205	04/06/2001	28/11/2001	6
HRI 10205	04/06/2001	28/11/2001	6
HRI 10212	04/06/2001	30/10/2001	7 V
HRI 10213	04/06/2001	03/09/2001	7 V
HRI 10213	04/06/2001	03/09/2001	7 V
HRI 10213	04/06/2001	03/09/2001	7 V
HRI 10213	04/06/2001	03/09/2001	7 V
HRI 10213	04/06/2001	03/09/2001	7 V

HRI 10213	04/06/2001	03/09/2001	7 V
HRI 10214	04/06/2001	03/09/2001	3 V
HRI 10214	04/06/2001	03/09/2001	3 V
HRI 10214	04/06/2001	03/09/2001	3 V
HRI 10218	04/06/2001	03/09/2001	4 V
HRI 10255	04/06/2001	30/10/2001	8
HRI 10255	04/06/2001	30/10/2001	8
HRI 10257	04/06/2001	28/11/2001	7
HRI 10258	04/06/2001	28/11/2001	6 V
HRI 10258	04/06/2001	28/11/2001	6 V
HRI 10259	04/06/2001	28/11/2001	4 V
HRI 10260	04/06/2001	28/11/2001	2
HRI 10260	04/06/2001	28/11/2001	2
HRI 10265	04/06/2001	30/10/2001	8
HRI 10265	04/06/2001	30/10/2001	8
Zardak	04/06/2001	30/10/2001	6 V
Zardak	04/06/2001	30/10/2001	6 V
HRI 10271	04/06/2001	30/10/2001	4 V
HRI 10271	04/06/2001	30/10/2001	4 V
Havij	04/06/2001	28/11/2001	5 V
Havij	04/06/2001	28/11/2001	5 V
Havij	04/06/2001	28/11/2001	5 V
Hauy (yellow/green carrot)	04/06/2001	03/09/2001	5 V
Hauy (yellow/green carrot)	04/06/2001	03/09/2001	5 V
Zardak	04/06/2001	30/10/2001	7
HRI 10282	04/06/2001	28/11/2001	1
HRI 10282	04/06/2001	28/11/2001	1
HRI 10282	04/06/2001	28/11/2001	1
Nargesi Shiraz	04/06/2001	30/10/2001	8
Nargesi Shiraz	04/06/2001	30/10/2001	8
Nargesi Shiraz	04/06/2001	30/10/2001	8
Nargesi Shiraz	04/06/2001	30/10/2001	8
Habitch	04/06/2001	30/10/2001	5 V
Habitch	04/06/2001	30/10/2001	5 V
Habitch	04/06/2001	30/10/2001	5 V
Havij Or Zardok	04/06/2001	30/10/2001	1
Havij Or Zardok	04/06/2001	30/10/2001	5 V
Biriucekutskaja 415	04/06/2001	28/11/2001	1
Dolg	04/06/2001	30/10/2001	3 V
Dolg	04/06/2001	30/10/2001	3 V
Dolg	04/06/2001	30/10/2001	3 V
Dolg	04/06/2001	30/10/2001	3 V
Dolg	04/06/2001	30/10/2001	3 V
Dolg	04/06/2001	30/10/2001	3 V
Domasen	04/06/2001	28/11/2001	1
Domasen	04/06/2001	28/11/2001	1
Dolg	04/06/2001	30/10/2001	1
Dolg	04/06/2001	30/10/2001	1
Dolg	04/06/2001	30/10/2001	1
Dolg	04/06/2001	30/10/2001	1
Dolg	04/06/2001	30/10/2001	1
Dolg	04/06/2001	30/10/2001	1
Natanya no 1	04/06/2001	30/10/2001	8 V
Lozin 147	04/06/2001	28/11/2001	1
Himuro Fuyugosi Gosun no 2	04/06/2001	28/11/2001	3 V
Kinkou 3 Sun	04/06/2001	19/11/2001	1



Natsumaki Kinkou Beni 5 Sun	04/06/2001	28/11/2001	2
Kinkou Ettou 5 Sun no 2	04/06/2001	28/11/2001	2
Sakata Senkou Ohnaga Carrot	04/06/2001	30/10/2001	1
Kuroda 5 Sun	04/06/2001	28/11/2001	4 V
Shi Kuroda 5 Sun	04/06/2001	28/11/2001	3 V
Kinkou 7 Sun	04/06/2001	28/11/2001	3
Kinkou 4 Sun	04/06/2001	28/11/2001	2
Rondino	04/06/2001	13/11/2001	1
Rondino	04/06/2001	13/11/2001	1
Lange Rote Stumpfe Ohne herz*	04/06/2001	28/11/2001	1
Muscade	04/06/2001	03/09/2001	1
Cleopatra	04/06/2001	13/11/2001	1
Chantenay Redco	04/06/2001	13/11/2001	1
Chantenay Redco	04/06/2001	13/11/2001	1
Chantenay	04/06/2001	13/11/2001	1
Afghan Purple	04/06/2001	28/11/2001	1
Lobbericher Gelbe	04/06/2001	28/11/2001	1
Lobbericher Gelbe	04/06/2001	28/11/2001	1
Armenian	04/06/2001	28/11/2001	1
Beta III	04/06/2001	28/11/2001	1
White Belgium	04/06/2001	28/11/2001	1
White Belgium	04/06/2001	28/11/2001	1
Amsterdam Forcing 3 Minicor	04/06/2001		1
Shiraz	04/06/2001	28/11/2001	1
Nantes Amelioree	04/06/2001	13/11/2001	1
Early Nants	04/06/2001	13/11/2001	1
Early Nants	04/06/2001	13/11/2001	1
HRI 10195	04/06/2001	30/10/2001	2 V
HRI 10195	04/06/2001	30/10/2001	2 V
HRI 10195	04/06/2001	30/10/2001	2 V
HRI 10195	04/06/2001	30/10/2001	2 V
HRI 10196	04/06/2001	03/09/2001	3 V
HRI 10196	04/06/2001	03/09/2001	3 V
HRI 10199	04/06/2001	03/09/2001	5
HRI 10199	04/06/2001	03/09/2001	5
HRI 10200	04/06/2001	28/11/2001	6
HRI 10203	04/06/2001	28/11/2001	3 V
HRI 10203	04/06/2001	28/11/2001	3 V
HRI 10203	04/06/2001	28/11/2001	3 V
HRI 10203	04/06/2001	28/11/2001	3 V
HRI 10204	04/06/2001	30/10/2001	7
Autumn King Torch	04/06/2001	28/11/2001	1
Amsterdam Forcing 3	04/06/2001	13/11/2001	1
Amsterdam Outdoor	04/06/2001	13/11/2001	1
Amsterdam Outdoor	04/06/2001	13/11/2001	1
Early French Frame	04/06/2001	13/11/2001	1
Autumn King Asmer Kingston	04/06/2001	28/11/2001	1
Royal Chantenay 2 Gold King	04/06/2001	13/11/2001	1
Royal Chantenay	04/06/2001	13/11/2001	1
Carrissima	04/06/2001	28/11/2001	1
Early French Frame Kardinal	04/06/2001	13/11/2001	1
Royal Chantenay	04/06/2001	13/11/2001	1
Sunrise	04/06/2001	28/11/2001	1
Fischenicher	04/06/2001	28/11/2001	1
Amsterdam Outdoor	04/06/2001	13/11/2001	1

Amsterdam Outdoor	04/06/2001	13/11/2001	1
Lunga cilindrica d`Ingegnoli	04/06/2001	28/11/2001	1
Early French Frame	04/06/2001	13/11/2001	1
Nantaise	04/06/2001	13/11/2001	1
Nantaise	04/06/2001	13/11/2001	1
Amsterdam Forcing 3 Minicor	04/06/2001		1
Chantenay Redco	04/06/2001	13/11/2001	1
Danvers Half Long	04/06/2001	28/11/2001	1
Chantenay Canners Favourite	04/06/2001	13/11/2001	1
Lobbericher	04/06/2001	28/11/2001	1
Lobbericher	04/06/2001	28/11/2001	1
Lobbericher	04/06/2001	28/11/2001	1
Cleopatra	04/06/2001	13/11/2001	1

Leaf dissection	Foliage width crown	Root length	Root diameter	Relative core diameter	Root shape longitudinal	Root shoulder shape	Root skin colour	Root Skin RHS code	Root skin intensity
6	3	6	3	3	4	3	3	nr	4
6	6	4.5	5	5.5	3	2	3	nr	5
5	6	6.5	6.5	6	5	2	3	nr	5
5	6	6.5	6	6	5	2	3	nr	5
4	7	6.5	6.5	6.5	5	2	3	nr	4.5
4	7	6	6	6.5	5	3	3	nr	5
3	6	7	6.5	7	5	2	3	nr	6
4	6	6.5	7	6	5	1	3	nr	5
4	7	6.5	6	6.5	5	2	3	nr	5
3	7	6.5	6	6	5	2	3	nr	4.5
5	7	6.5	6.5	6	5	2	3	nr	4
6	6	6	5.5	6	5	2	3	nr	5.5
6	6	5.5	5	4.5	5	2	3	nr	5
6	5	7	6	6	4	3	3	nr	5
4	5	6.5	6	4.5	5	2	3	nr	4.5
4	5	6.5	5	5	5	2	3	nr	4.5
5	6	5	7	5.5	3	1	3	nr	4
6	6	5	5.5	5	3	1	3	nr	4
5	5	4	5	5.5	3	1	3	nr	4
5	5	5	5	5.5	3	1	3	nr	4
6	6	4.5	5.5	5.5	3	1	3	nr	4
5	6	5.5	5.5	6	3	1	3	nr	4
5	6	5.5	5	5.5	3	1	3	nr	4
5	6	5	5	5.5	3	1	3	nr	5
6	6	5.5	5	5.5	3	1	3	nr	4
6	6	5	5	5	3	1	3	nr	3
7	6	5.5	5.5	5.5	3	1	3	nr	4
6	5	4	5.5	5	3	1	3	nr	3
5	6	5	5	5	3	1	3	nr	5
5	6	4.5	5	5	3	1	3	nr	4
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6	3	6	3	1	4	2	3	nr	7

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Root cortex colour	Root cortex RHS code	Root cortex intensity	Root core colour	Root core RHS code	Root core intensity	Petiole hairiness	Leaf hairiness	Root branching
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3	nr	4.5	3	nr	5			
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3	nr	6	3	nr	6			
3	nr	4.5	3	nr	5.5			
3	nr	4.5	3	nr	4			
3	nr	4.5	3	nr	5			
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3	nr	4.5	3	nr	5.5			
3	nr	5.5	3	nr	5.5			
3	nr	4.5	3	nr	5			
3	nr	4.5	3	nr	5.5			
3	nr	4.5	3	nr	5.5			
3	nr	4.5	3	nr	4.5			
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3	nr	4	3	nr	4.5			
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3	nr	5	3	nr	5			
3	nr	5	3	nr	5			
3	nr	5	3	nr	5			
3	nr	5	3	nr	5.5			
3	nr	4	3	nr	4.5			
3	nr	5	3	nr	5			
3	nr	4	3	nr	5			
3	nr	4	3	nr	5			
3	nr	5	3	nr	5			
3	nr	4.5	3	nr	5			
3	nr	5.5	3	nr	5.5			
3	nr	5.5	3	nr	5.5			
3	nr	5	3	nr	5			
3	nr	3.5	2	nr	4			
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3	nr	5	3	nr	5.5			
3	nr	4.5	3	nr	4.5			
3	nr	4.5	3	nr	4.5			
3	nr	5	3	nr	5.5			
3	nr	4	3	nr	4			



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2	nr	5	2	nr	1	2	2
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5	nr	7	2	nr	3	3	3
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2	nr	5	2	nr	5	3 V	3 V
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3	nr	6	3	nr	4	1.5	1.5
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3	nr	1	2	nr	1	2	2
3	nr	2	3	nr	1	2	2
3	nr	8	3	nr	6	4	4

Notes

root skin colour-strong purple over cream white

hint of orange in cortex

root skin colour-sparse purple over yellow, as bolted also, 100% bolted at 18/12/01

100% bolted at 18/12/01

skin colour at top 4cm root=orange, below this=yellow/green

yellow-orange skin colour

root skin colour-clear pale purple over white

100% bolted at 18/12/01

cream root skin colour with slight purple, cortex and core cream

pronounced root hair development, 1cm of petiole base white indicating root deep in soil, occasional roots with cores mixed yellow/orange colour, 50% bolted at 18/12/01

parsnip-like colour and shape

root skin colour-mild purple over pale yellow, strong circular striations in cortex like tree rings

skin colour purple (small patches to 90% cover) over yellow, no encroachment of purple into flesh

radial cracking on larger roots, green shoulders

strong tendency to root rot

skin colour light purple over yellow, cortex has irregular purple blotches, sometimes to core interface

cortex has purple in yellow as outer ring, sometimes broken. Sweet tasting, mild

50% bolted at 18/12/01

core and cortex mixed yellow and low intensity orange, 50% bolted at 18/12/01

root skin colour purple over yellow

50% bolted at 18/12/01

black purple root skin colour except yellow tips, mainly purple some yellow in cortex

purple (variable intensity) over yellow skin colour, some orange in yellow cortex

90% bolted at 18/12/01

purple blush present over yellow skin colour, greenish core/cortex interface

root skin colour purple over yellow, 60% bolted at 18/12/01

green shoulders

rough ridged skin, green shoulders

strong influence of gold/yellow in cores

mottled purple over yellow skin colour, some light purpling in cortex, 80% bolted at 18/12/01

cream skin

cream skin

light purple over yellow root skin colour variable

90% bolted at 18/12/01

root skin colour mottled purple over yellow, some light flecks of purple in outer cortex

40% with red/purple shoulders, usually those with strong petiole pigment

cores yellow with some low intensity orange, 40% bolted at 18/12/01

root cortex colour pale cream (white/pale yellow)

root skin colour purple over yellow, cortex mainly purple, some yellow

parallel shoulder shape vertically to broad foliage width, strong influence of red in orange cortex colour

60% bolted at 18/12/01

root skin colour-purple striations over pale orange

purple flecks in core and cortex sections

strong purple band in cortex

roots deep in soil-leaves have extended flare effect at petiole base, 50% bolted at 18/12/01

root skin colour intensity varies 3->8

root skin colour intensity varies 4->8, skin smooth, attractive roots, influence of red in cortex

50% have yellow in orange cores giving a gold effect

skin colour intensity varies 3->8  
skin colour intensity varies 4->8

root length varies 5->8, core/cortex tending to red-orange  
extensive root tip root, strong tendency to red colour in core and cortex  
traces of red on upper shoulder skin, cores square to star shape

narrow green core/cortex interface at widest point on all roots sectioned  
traces of orange in yellow cortex  
rough skin texture  
strong red colour on upper crown variably distributed occasionally entire root, 70% bolted at 18/12/01

skin colour purple varies 3->9 intensity, strong purple through cortex almost to core, rest yellow  
yellow skin colour, all cores/cortex yellow  
orange skin colour, all cores/cortex orange

cortex and core orange with strong red influence  
white skin colour, green shoulders  
yellow skin colour, green shoulders

variable skin colour intensity 3->9, root shape=short taper, not clearly 5 (closest) but not 3 either

bicolour root skin colour-yellow (main) under weak to med intensity purple flecks, cortex mixed orange/yellow

60% bolted at 18/12/01  
root skin colour purple over yellow, core has purple centre

root skin colour intensity varies 2->5  
100% bolted at 18/12/01  
100% bolted at 18/12/01  
skin colour some light purple over yellow, purple flecks mainly in cortex but also some cores  
root skin colour purple over yellow (varies from 5% to 95% cover), cortex has purple "tiger" stripes to core, root

cortex has solid purple outer ring, orange centre ring  
skin colour light purple through main colour yellow  
80% bolted at 18/12/01

not typical of Early French Frame

root shape 5 but tending to 3

bicolour cores, most cores outer orange, inner yellow/gold

root skin colour intensity varies 3->7  
huge roots, like heavy Autumn King, some variation in root colour intensity



parallel shoulder shape vertically to broad foliage width  
90% green shoulders, green core/cortex interface at widest point

root skin colour intensity varies 3->7

root shape 5 but tending to 3

clear skin colour range from yellow to yellow/orange with no discrete types identifiable. Most have orange influence  
yellow skin colour, all cores/cortex have orange influence  
orange skin colour





γ purple dotting, very strong carrot smell!, 100% bolted at 18/12/01

ts have concave sides, root splits healed over

uence in yellow core/cortex