

Unraveling the genetic origin of ‘Glera’, ‘Ribolla Gialla’ and other autochthonous grapevine varieties from Friuli Venezia Giulia (northeastern Italy)

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Table 1S - List of the analysed samples. Non-FVG varieties are in italics; additional varieties with known pedigree relationships used as reference for computation are in bold.

ID	VIVC prime name	Variety/accession name	Repository (Institute code)	Country of origin	Variety Number VIVC
1	AGHEDENE B	Aghedene	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	23351
2	BERZAMINO N	Berzamino	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24422
3	BIANCHETTA TREVIGIANA B	<i>Bianchetta trevigiana</i>	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	1329
4	BLANCJAS B	Blanchias*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24448
5	BRAMBANA	Brambana	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	1663
6	CIVIDIN BIANCO B	Cividin	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	2690
7	CIANORIE N	Cjanorie	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	2644
8	CJAVALGJAN N	Cjavalgian	ERSA, Maniago (Pordenone), Italy	ITALY	23349
9	CODELUNGE N	Codelunghe	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	2744
10	CORBINONA N	Corbina	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24567
11	CORDENOSSA N	Cordenossa	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	23018
12	CREMIN N	Cremin*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24451
13	CUNEUTE N	Cuneute	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	3293
14	CURVIN N	Curvin	ERSA, Maniago (Pordenone), Italy	ITALY	24452
15	DURIESE B	Durriese	ERSA, Maniago (Pordenone), Italy	ITALY	24530
16	FORZARIN N	Forgiarin	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	4202
17	FUMAT N	Fumat	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24418
18	GARGANEGA B	<i>Garganega</i>	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	4419
19	GLERA B	Glera	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9741
20	BELA DINKA B	Glera lunga	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	SERBIA	16848
21	GRAN RAP NERI N	Gran rap neri*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24455
22	HEUNISCH DREIFARBIG RS	<i>Heunisch dreifarbig</i>	JKI, Institute for Grapevine Breeding Geilweilerhof (DEU098)	AUSTRIA	24544
23	HEUNISCH ROTGESTREIFT B	<i>Heunisch rotgestreift</i>	JKI, Institute for Grapevine Breeding Geilweilerhof (DEU098)	AUSTRIA	5373
24	HEUNISCH WEISS B	<i>Heunisch weiss</i>	JKI, Institute for Grapevine Breeding Geilweilerhof (DEU098)		5374
25	HEUNISCH WEISS SEEDLESS B	<i>Heunisch weiss seedless</i>	JKI, Institute for Grapevine Breeding Geilweilerhof (DEU098)		699
26	HONIGLER B	<i>Honigler</i>	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	HUNGARY	5417
27	KLARNICA B	<i>Klarnica</i>	STS - Vrhpolje (Vipava) (SVN018)	SLOVENIA	40687
28	HEUNISCH WEISS B	<i>Liseiret</i>	CREA-Viticulture and Enology, Susegana (TV) (ITA388)		5374
29	MALVASIA BIANCA LUNGA B	Malvasia bianca lunga	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	7262
30	MALVASIA ISTRIANA B	Malvasia istriana	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	CROATIA	7269
31	MANZONI BIANCO B	Manzoni bianco	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	7360
32	MARZEMINA BIANCA B	Marzemina bianca	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	16944
33	MARZEMINO N	<i>Marzemino</i>	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	7463
34	MOCULA B	Mocula*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24456
35	NEGRAT N	Negrat	ERSA, Maniago (Pordenone), Italy	ITALY	8450
36	NERATA N	Nerata*	ERSA, Maniago (Pordenone), Italy	ITALY	24457
37	NIGRUT N	Nigrut*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24458
38	PALOMBA N	Palomba nera	ERSA, Maniago (Pordenone), Italy	ITALY	20370
39	PELENA B	Pelena*	ERSA, Maniago (Pordenone), Italy	ITALY	24459
40	PICCOLA NERA RS	Piccola nera	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9235
41	PICULE N	Picule*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24460
42	PICOLIT B	Picolit	Vivai Cooperativi di Rauscedo (Pordenone), Italy	ITALY	9236
43	PICOLIT NERO N	Piculit neri	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9238
44	PIGNOLO N	Pignolo	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9255
45	PINELLA B	Pinella	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9266

46	PINOT NOIR N	Pinot noir	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	FRANCE	9279
47	POLPOSA B	Polposa*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24462
48	RABOSO PIAVE N	Raboso Piave	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9864
49	RABOSO VERONESE N	Raboso veronese	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9865
50	RIBOLLA GIALLA B	Rebula	STS - Vrhopolje (Vipava) (SVN018)	ITALY	10054
51	HEUNISCH WEISS B	Rebula stara	STS - Vrhopolje (Vipava) (SVN018)		5374
52	REFOSCO BIANCO B	Refosco bianco	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24463
53	REFOSCO NOSTRANO N	Refosco nostrano	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9989
54	REFOSCO DAL PEDUNCOLÒ ROSSO N	Refosco dal peduncolo rosso	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	9987
55	REFOSCO GENTILE N	Refosco di Rauscedo*	ERSA, Maniago (Pordenone), Italy	ITALY	24536
56	RIBOLLA GIALLA B	Ribolla gialla	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	10054
57	RIESLING WEISS B	Riesling	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	GERMANY	10077
58	GOUSTOLIDI B	Robolla	Vivai Cooperativi di Rauscedo (Pordenone), Italy	GREECE	5000
59	RUACIT B	Ruacit	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24464
60	SAGRESTANA B	Sagrestana*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	23350
61	SAUVIGNON BLANC B	Sauvignon	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	FRANCE	10790
62	ZIMMETTRAUBE BLAU N	Sbulzina*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	SLOVENIA	24493
63	SCHIOPPETTINO N	Schioppettino	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	10830
64	SCIAGLIN B	Sciaglin	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	17607
65	SIORA N	Siora*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24467
66	TAZZELENGHE N	Tazzelenghe	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	12291
67	TEROLDEGO N	Teroldego	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	12371
68	TERRANO N	Terrano	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	12374
69	TINTORIA LLOYD N	Tintoria Lloyd	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24446
70	FRIULANO B	Tocai friulano	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	12543
71	GEWUERZTRAMINER RG	Traminer	CREA-Viticulture and Enology, Susegana (TV) (ITA388)		12609
72	UCELUT B	Ucelut	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	12753
73	VENERE B	Venere*	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24468
74	VERDUZZO FRIULANO B	Verduzzo friulano	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	12976
75	VINOSO ROSSO N	Vinoso rosso	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	ITALY	24469
76	VITOVSKA B	Vitouska	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	SLOVENIA	24412
77	VELA PERGOLA B	Volovnik	STS - Vrhopolje (Vipava) (SVN018)	CROATIA	22299
78	VUBOLA B	Vubola*	ERSA, Maniago (Pordenone), Italy	ITALY	24470
79	VULPEA N	Vulpea	CREA-Viticulture and Enology, Susegana (TV) (ITA388)	AUSTRIA	13186

*fantasy name made-up by the collector

Table 2S - Chlorotypes and nSSR profiles of the analyzed varieties. The original varietal names reported in Table 1S are here in brackets, when a different prime name is available. Chlorotypes are codified in letters following¹⁹; allele lengths are in bp. Non-FVG varieties recognized as members of trios or duos are listed as additional varieties.

Varieties of Friuli Venezia Giulia	Chlorotype	VVS2	VVMD27	VVMD7	ISV2 (VMC6E1)	VrZAG62	VVMD5	VMCNG4B9	VrZAG79	ISV4 (VMC6G1)	VVMD28	VVMD25	VVMD32
Aghedene	D	135 155	185 194	239 247	141 151	193 195	226 246	150 176	242 248	177 187	247 251	247 259	257 273
Berzamino	A	151 155	181 185	257 263	165 169	193 195	232 240	162 172	250 258	169 177	249 271	261 267	253 263
Blanchias	C	133 153	181 189	247 249	141 143	199 203	226 234	138 176	242 250	177 177	239 249	245 245	251 263
Brambana	D	135 151	185 189	247 257	151 161	195 203	232 236	158 158	242 250	169 191	261 271	253 259	273 273
Cividin	D	141 143	181 185	247 247	141 143	195 201	236 238	150 162	242 258	169 191	247 261	259 261	241 273
Cjanorie	D	133 155	185 194	239 249	141 151	187 199	226 228	158 162	242 248	169 197	237 251	243 261	265 273
Cjavalgian	D	139 151	179 194	247 263	151 161	193 203	226 228	158 158	250 250	169 169	247 261	243 253	241 253
Code lunghe	D	133 151	179 181	249 263	165 165	193 199	226 228	158 178	250 258	169 177	251 261	245 253	241 251
Corbina	A	135 155	185 189	249 257	151 165	191 195	232 232	162 178	242 250	169 169	239 267	259 261	263 273
Cordenossa	A	135 155	181 189	239 263	141 161	187 193	226 228	158 158	250 258	169 187	251 267	259 259	241 265
Cremin	D	133 143	189 191	239 263	151 151	193 193	226 236	150 168	250 250	169 177	239 247	245 259	273 273
Cuneute	D	143 155	185 185	247 263	141 165	193 203	232 236	162 166	242 250	169 197	231 237	259 261	263 273
Curvin	D	135 151	181 181	247 257	151 161	193 195	232 236	158 178	258 258	169 169	239 261	253 259	253 273
Durriese	D	133 151	185 189	247 257	141 165	193 203	228 228	162 166	248 250	169 177	237 237	245 267	253 253
Forgiarin	A	133 141	181 189	247 257	151 165	193 203	232 240	164 184	250 258	187 187	247 267	243 253	257 273
Fumat	A	133 151	185 191	249 261	161 165	193 199	228 236	168 172	242 260	191 191	231 271	245 257	253 273
Gran Rap Neri	D	155 155	185 189	247 249	141 165	191 193	226 232	176 178	242 250	169 177	247 267	247 261	263 273
Malvasia Istriana	D	143 143	179 179	239 239	161 165	187 187	222 240	138 168	236 254	191 197	257 281	259 259	257 273
Mocula	C	153 155	179 194	239 247	151 165	195 203	226 234	138 150	248 258	177 177	247 251	245 247	251 273
Negrat	D	133 135	185 189	247 257	141 151	195 203	232 232	158 158	250 250	169 169	231 237	253 259	241 253
Nerata	A	135 151	179 181	239 249	169 169	187 199	236 236	166 172	258 258	169 177	237 249	259 267	253 273
Nigrut	D	155 155	185 189	239 247	151 165	193 195	226 228	162 166	242 250	169 169	239 239	245 253	253 273
Palomba Nera	C	135 143	189 194	247 247	151 151	193 195	226 232	150 158	250 256	169 169	239 251	259 259	241 265
Pelena	D	133 145	179 179	239 239	151 165	187 195	240 246	150 166	242 258	177 197	247 257	243 243	253 263
Piccola Nera	C	133 133	181 181	239 249	141 165	195 203	228 234	138 158	242 258	197 197	231 239	243 243	257 273
Piciule	D	133 155	181 189	239 257	141 151	195 195	228 232	166 176	250 258	169 197	251 267	243 259	265 273
Picolit	D	135 139	181 185	247 247	141 161	191 203	232 238	164 168	238 258	169 177	231 237	243 259	241 251
Piculit Neri	A	135 151	179 194	239 263	141 145	193 195	232 246	158 162	248 250	169 187	239 267	259 259	241 265
Pignolo	D	133 155	179 191	247 257	141 167	193 195	226 232	150 158	250 258	177 177	239 247	247 259	241 273
Pinella	D	133 133	179 181	247 249	141 143	203 203	232 234	158 168	242 250	197 197	231 261	243 253	257 273
Polposa	A	133 155	181 185	239 249	165 169	187 199	226 232	162 164	242 250	169 187	237 249	243 261	253 257
Refosco Bianco	D	135 151	185 191	249 257	151 165	195 199	228 232	158 162	250 258	169 169	247 271	259 267	253 263
Refosco dal Peduncolo Rosso	D	133 133	181 189	239 247	141 165	193 193	226 232	158 168	250 258	169 177	237 239	245 259	251 263
Refosco Nostrano	A	151 155	185 185	249 263	165 165	193 193	226 232	162 168	242 250	169 169	237 271	261 267	253 265
Refosco di Rauscedo	D	133 155	179 185	247 263	143 165	193 203	226 226	150 168	250 258	169 169	237 247	245 261	253 263
Ribolla Gialla	A	143 151	179 185	239 249	165 169	195 199	232 234	158 172	236 250	191 197	231 237	259 267	251 253
Ruacit	C	143 151	181 194	247 247	141 159	191 203	226 226	138 176	248 258	191 197	237 249	259 267	263 273
Sagrestana	D	139 151	181 191	239 247	141 169	187 191	226 232	164 164	250 258	177 177	231 249	243 259	241 251
Zimmettraube Blau (Sbulzina)	C	143 143	181 194	239 255	141 169	193 203	226 226	150 158	250 258	177 197	249 263	253 259	253 273
Schioppettino	A	135 139	181 189	239 249	141 169	187 191	228 232	162 176	250 258	187 191	237 239	243 259	257 273
Sciaglin	D	133 135	179 179	247 263	141 161	191 193	228 232	150 162	250 258	169 169	231 237	259 259	257 263
Siora	A	133 139	181 181	239 249	141 165	195 199	228 232	158 178	248 258	169 197	237 239	243 243	265 273
Tazzelenghe	D	151 153	185 185	249 263	151 165	195 199	228 232	162 178	242 250	169 169	237 261	267 271	253 273
Terrano	D	135 155	189 189	247 249	141 143	191 193	226 228	150 158	238 250	169 169	221 237	245 259	251 273
Tintoria Lloyd	A	133 151	189 194	239 247	151 165	193 195	236 238	158 158	244 250	169 191	231 237	253 259	253 273

Tocai Friulano	A	133	151	185	194	239	257	141	151	187	193	228	238	164	166	250	250	169	177	237	251	245	253	241	257
Ucelut	D	133	143	179	189	249	263	151	159	193	199	228	236	158	176	250	254	177	177	237	237	245	259	263	273
Venere	D	135	151	181	185	247	263	141	169	193	203	226	232	164	168	238	258	169	177	231	239	259	259	241	251
Verduzzo Friulano	A	133	151	181	191	239	263	159	169	187	193	226	236	164	178	250	258	177	187	239	249	243	259	241	257
Vinoso Rosso	D	155	155	185	191	247	249	151	165	199	203	226	226	162	162	242	250	169	169	237	267	259	261	253	273
Vubola	A	135	143	185	194	239	257	143	167	187	195	226	228	162	176	242	248	177	187	247	251	259	259	273	273

Additional varieties

Bianchetta Trevigiana	D	135	151	185	189	247	247	151	161	195	203	236	238	150	158	242	244	169	191	247	271	253	259	241	273
Garganega	D	133	143	179	194	249	253	141	165	199	199	226	232	176	178	250	250	177	187	239	251	245	259	251	259
Glera Lunga	D	133	143	179	194	239	247	141	167	187	193	226	246	150	158	248	258	169	197	239	247	243	259	257	273
Goustoldi (Robolla)	C	143	145	179	181	239	249	161	165	195	201	226	234	158	172	236	258	177	197	231	261	245	259	251	273
Heunisch Weiss	C	133	143	179	181	239	249	143	165	195	203	234	240	138	158	236	242	197	197	231	249	243	259	251	273
Honigler	A	143	145	181	194	243	247	151	165	187	203	226	232	138	178	250	258	169	177	251	263	245	259	249	253
Klarnica	A	139	143	189	194	239	249	141	169	187	199	226	228	150	162	250	250	169	191	237	247	243	259	257	273
Marzemino	D	133	133	185	189	239	263	151	165	193	193	226	232	158	168	242	250	169	177	237	239	245	259	241	263
Sauvignon	D	133	151	175	189	239	257	141	151	187	193	228	232	168	172	244	246	169	177	237	239	245	253	241	257
Teroldego	D	137	155	179	185	239	247	161	165	193	193	226	228	158	168	242	254	177	177	231	239	243	245	241	263
Traminer	D	151	151	189	189	243	257	151	161	187	193	232	238	158	168	244	250	169	169	237	239	253	253	241	273
Vela pergola (Volovnik)	A	133	151	179	181	239	247	165	169	187	203	226	240	164	172	250	258	177	187	247	249	243	267	253	257
Vulpea	D	133	135	181	194	239	239	141	141	187	195	228	246	158	176	248	258	187	197	239	251	243	259	257	265

Supporting trios

Raboso Piave	D	135	143	185	189	247	257	151	151	195	195	228	232	158	158	242	250	169	191	237	237	259	259	273	273
Raboso Veronese	D	133	135	185	185	239	257	151	165	193	195	232	238	158	166	242	250	169	169	237	239	245	259	251	273
Marzemina Bianca	D	133	133	185	194	239	253	141	165	193	199	226	238	166	176	248	250	169	177	239	239	245	245	251	253
Glera	D	133	143	179	194	239	247	141	151	187	203	226	246	166	176	248	258	169	197	239	247	243	247	263	265
Vitouska	D	133	145	179	194	239	247	151	165	195	203	226	240	166	176	242	248	177	197	239	257	243	245	253	263
Malvasia Bianca Lunga	D	145	145	179	179	239	253	143	165	195	199	226	240	150	176	242	250	177	177	251	257	243	245	253	257
Pinot	A	137	151	185	189	239	243	151	165	187	193	228	238	158	162	238	244	169	177	221	239	243	253	241	273
Manzoni Bianco	A	151	151	181	185	243	249	143	151	187	203	226	228	138	158	238	242	169	169	231	239	253	253	273	273
Riesling Weiss	A	143	151	181	189	249	257	143	151	193	203	226	234	138	168	242	244	169	197	231	237	253	259	253	273

Table 3S - 14 SNP profiles of the analyzed varieties. In brackets the original names reported in Table 1, if a different prime name is available.

SNP name by Illumina	chr1_12168156_C_T	chr11_5406647_A_C	chr13_15640723_C_T	chr14_4353470_A_G	chr14_4947068_G_T	chr15_18127737_G_T	chr15_18567587_G_T	chr16_16198599_A_G	chr16_17950801_A_G	chr17_126505_A_G	chr18_11544918_C_T	chr3_5724485_C_T	chr8_12906774_C_T	chr9_5755442_C_T
Chromosome	1	11	13	14	14	15	15	16	16	17	18	3	8	9
Friuli Venezia Giulia varieties														
Aghedene	TC	TG	TC	GG	TG	TG	AC	AG	AG	AG	CC	TT	TC	AG
Berzamino	TC	TG	TC	AA	TT	TG	AA	AG	AA	AG	TC	TC	CC	AA
Blanchas	TC	TT	TC	GG	GG	GG	CC	AG	AG	GG	CC	TT	CC	AG
Brambana	TC	TT	TC	GG	GG	TG	AC	AG	AA	AA	TC	TC	CC	GG
Cividin	TT	TG	TT	AA	TT	TT	AA	AG	GG	AA	TC	TC	TT	AG
Canarie	CC	TT	TT	AG	TG	GG	AA	GG	GG	AG	CC	TC	TC	AG
Cavaglian	TC	TG	TC	AG	TG	TG	AC	AG	AG	AA	TT	CC	CC	AG
Codrelunghe	CC	TG	TT	AG	TT	TG	AA	AA	AA	AA	GG	TT	CC	GG
Corbina	TC	TG	TT	AG	GG	TG	AA	AG	AG	AA	TT	TC	CC	GG
Cordenossa	CC	TG	TC	AG	TG	TG	CC	AG	AG	GG	TC	TC	TC	GG
Cremin	TC	TT	TC	AA	TG	GG	AC	AG	AG	GG	TT	TT	TT	AG
Cuneete	TC	TG	TT	AA	TT	TG	AA	AG	AA	AA	TT	TT	TC	AG
Curvin	TC	TG	TC	AG	TG	TG	AC	GG	AG	AG	TC	TC	TC	GG
Durriese	CC	TG	TC	AG	TG	GG	AA	AG	GG	AG	TC	TT	TC	AG
Forgiarini	TC	TT	TC	AA	TT	TG	AC	AG	AA	GG	TC	TC	TC	AG
Fumat	TC	TT	TC	AA	TT	TG	AA	AG	AA	AG	TC	TC	TC	AG
Gran Rap Neri	TT	TT	TT	AG	GG	TG	AA	GG	AG	AA	TC	TT	TC	GG
Malvasia Istriana	TC	GG	CC	AG	TG	TT	CC	AA	AG	GG	CC	CC	TC	AG
Mocula	TT	TT	TC	AG	TG	GG	AC	AG	AG	AG	CC	TT	TC	AG
Negrat	TC	TT	TT	AA	TG	TT	AC	AA	AG	AA	TC	TC	CC	AG
Nerata	TT	GG	TT	AA	TT	TG	AC	AG	GG	GG	TT	TT	CC	AG
Nigrut	TT	TT	TC	AG	TG	TG	AC	AG	AG	AG	TC	TC	TC	GG
Palomba Nera	TT	TG	TC	GG	TG	TT	AC	AG	AG	AA	TT	TC	TC	AG
Peleni	TT	TG	TT	GG	TG	TG	AA	AG	AG	AG	TC	TT	CC	GG
Piccola Nera	CC	TG	TT	AG	TG	GG	AC	AG	AG	GG	CC	CC	CC	GG
Picule	CC	TT	TC	AA	TG	TG	AC	AG	AG	AG	TC	TC	CC	GG
Picolt	TT	GG	TT	AG	GG	GG	AA	AA	AA	AG	TC	CC	TC	AG
Picuit Neri	CC	TG	TT	AG	GG	TG	AA	AG	AA	AA	TC	TC	TC	GG
Pignolo	TT	TG	TT	AA	TT	GG	AA	AG	AG	AA	TT	TT	TC	GG
Pinella	TC	TG	TC	GG	GG	TG	CC	AA	AA	AG	CC	TC	CC	GG
Polposa	TC	TT	TT	AA	TT	TG	AA	AA	AA	AA	TT	TC	CC	AA
Refosco Bianco	TC	GG	TT	AA	TT	GG	AA	AG	AG	AA	TC	TC	TC	AA
Refosco dal Peduncolo Rosso	TC	TT	CC	AG	TG	TG	AC	AG	AG	AG	TC	TT	CC	GG
Refosco Nostrano	CC	TG	TT	AA	TT	GG	AA	AG	AA	AA	TC	TC	TC	AA
Refosco di Rauscedo	TC	TG	TT	AG	TT	TG	AA	AA	AA	AA	TT	TC	TC	AA
Ribolla Gialla	TC	GG	TC	AG	TG	GG	CC	AA	AA	AG	CC	CC	CC	AG
Ruacit	TC	GG	CC	GG	TG	GG	CC	AG	GG	GG	TC	CC	TC	GG
Sagrestana	TT	TG	TT	AA	TG	TG	AA	AG	AG	AG	TC	CC	TT	AA
Zimmetraube Blau (Sbzulina)	TT	TG	TC	GG	GG	TG	AA	AA	AG	GG	CC	TT	TT	AG
Schioppettino	TC	GG	TC	AG	GG	GG	AA	AG	AG	AA	CC	TC	TC	AG
Scialpin	TT	TG	TT	AG	TG	GG	AA	AG	AG	AG	TC	TC	CC	AG
Siora	TC	TG	TC	GG	TG	TT	AC	AG	AG	AG	TC	CC	TC	GG
Tazzelenghe	CC	TG	TT	AA	TG	TG	AC	AG	AG	AA	TC	TC	CC	AG
Terrano	TT	TG	CC	GG	TG	TG	AC	AG	AG	GG	TC	TT	TC	GG
Tintoria Lloyd	TT	TT	CC	AA	TT	GG	CC	AG	AG	AA	CC	TT	TC	GG
Tocai Friulano	TC	TT	TC	AG	GG	GG	AC	GG	GG	AA	TC	CC	TC	AA
Uclet	TC	TG	TC	GG	TG	TG	AC	AG	AG	GG	TC	TT	TC	GG
Venera	TT	TG	TC	AA	TG	GG	AC	AG	AG	AA	TT	TC	TT	AG
Venuzio Friulano	TC	TT	TC	AA	TT	TG	AC	AG	AG	AG	TC	TC	TC	AA
Vinoso Rosso	TC	TG	TT	AA	TT	GG	AA	AG	AG	AA	TC	CC	TC	AA
Vubola	TC	TG	TT	AA	TG	GG	AC	AG	GG	AA	TC	CC	TC	AG

Additional varieties														
Bianchetta Trevigiana	TC	TT	CC	AG	TG	GG	AC	AG	AA	AA	CC	CC	CC	GG
Garganega	TC	GG	TC	AG	TT	TT	AA	AG	AG	GG	TT	TC	TT	AG
Glera Lunga	TC	TT	TC	AG	TT	TG	AC	AG	AG	AG	TC	TC	TC	GG
Goustoldi (Robolla)	CC	GG	TC	AG	TG	TT	AA	AG	AG	GG	CC	TT	TC	AG
Heunisch Weiss	TC	GG	TC	AG	TG	TG	AC	AA	AG	GG	CC	TC	TC	AG
Hongler	CC	GG	TC	AA	TT	GG	AC	AG	AG	AG	TT	TC	TT	AG
Klarica	TC	TG	TT	AA	TG	TG	AC	AG	AA	CC	TC	CC	CC	AG
Marzemino	TT	TT	TC	AG	TG	TG	AA	AG	AG	GG	TC	TT	TC	GG
Sauvignon	CC	TT	CC	GG	TG	GG	AC	AG	AA	TC	TC	TC	TC	AG
Teroldego	TT	TG	CC	AA	TT	TG	AA	AG	GG	AG	TT	TC	TT	AG
Traminer	TC	TT	TC	AG	TG	TG	AC	AG	AA	AA	CC	TC	TC	AG
Vela pergola (Volovnik)	TT	TG	TC	AG	TG	TG	CC	GG	AG	GG	TT	TC	TC	AA
Vulpaea	CC	TG	TC	AG	TG	GG	AC	GG	AG	AG	TC	TC	CC	GG

Supporting trios														
Raboso Piave	TT	TG	TT	AA	TT	GG	AC	AG	GG	AG	CC	TC	TT	GG
Raboso Veronese	TC	TG	TT	AA	TT	TG	AA	AA	AG	AG	TC	TT	TT	GG
Marzemina Bianca	TC	TG	TC	AA	TT	TT	AA	AA	GG	TT	TC	TC	TC	AG
Glera	TC	TT	TT	GG	TG	GG	AA	GG	AG	AG	TT	TC	TC	GG
Vitoska	CC	TG	TT	GG	GG	TG	AA	AG	GG	AG	TC	TC	CC	GG
Malvasia Bianca Lunga	TC	GG	TT	GG	GG	TT	AA	AA	GG	GG	TC	CC	CC	AG
Pinot	TT	TG	CC	GG	GG	GG	AC	AG	AG	AA	TC	TC	TC	AG
Manzoni Bianco	TC	TT	CC	AG	TG	GG	AC	AA	AG	AG	CC	CC	CC	AG
Riesling Weiss	TC	TG	CC	AG	TG	TG	AA	AA	AA	AG	CC	TC	CC	AG

Table 5S - Presumed nSSR genotype of candidate parent 'P2' inferred by Colony. Given the very low number of putative full-sibs compared, hypothetical homozygous loci were integrated with a question mark.

Presumed parent	VVS2		VVMD5		VVMD7		VVMD25		VVMD27		VVMD28		VVMD32		VrZAG62		VrZAG79		ISV2		ISV4		VCMNG4b9	
P2	143	155	226	226?	247	247?	247	259	179	185	247	247?	263	273	193	203	242	258	151	167	169	177	150	166