**S10 Table.** SSR markers involved in the description of molecular variants (MV) in the two collections, their repetitive motifs and alleles showing variation compared to reference alleles.

|  |  |  |  |
| --- | --- | --- | --- |
| **Loci** | **Repeat motif** | **MV** | **Variant alleles (reference alleles-reference cultivar)** |
| DCA01 | (**GA**)22  | Yes | 204/**252**, 204/**261**, 204/**268**, 204/**270**, 204/**274** (204/272-Frantoio)204/**261** (204/258-Leccino) |
| DCA03 | (**GA**)19  | Yes | 243/**249** (243/247-Beladi)**249**/251 (247/251-Gordal Sevillana)237/**249** (237/247-Picual)229/**251** (229/253-Sant Agostino)243/**251** (243/253-Verdial de Badajoz) |
| DCA04 | (**GA**)16  | Yes | 129/**186** (129/184-Bolvino)**130**/161 (138-161-Buga)159/**186** (159/182-Dolce Agogia)**165**/**165** (161/161-Giarraffa)130/**163** (130/159-Maiatica di Ferrandina)190/**192** (182/190-Mastoidis)**186**/194 (184/194-Morrut)**148**/186 (146/186-Ogliarola del Vulture)161/**192** (161/188-Passulunara)129/**190** (129/186-Valanolia) |
| DCA05 | (**GA**)15  | Yes | 199/**203** (199/205-Bosana) |
| DCA08 | (**GA**)18  | Yes | 135/**141** (135/139-Itrana)**135**/139 (139/139-Manzanilla de Agua)139/**145** (139/139-Maurino)**135**/137 (134/137-Mollar de Cieza)129/**129** (129/135-Uovo di Piccione)135/**141** (135/139-Verdial de Huévar) |
| DCA09 | (**GA**)23  | Yes | 160/**196** (160/198-Carolea)**192**/202 (184/202-Cirujal)180/**204** (180/208-Frantoio) 192/**204** (192/202-Gemlik)**182**/192 (174/192-Gordal de Granada)160/**202** (160/206-Jlot)170/**202** (170/206-Kato Drys)160/**208** (160/204-Leccino)160/**198** (160/204-Lechín de Sevilla)160/**200** (160/204-Manzanilla de Sevilla)182/**202**, 182/**208**, 182/**210** (182/204-Moraiolo)160/**208** (160/204-Ocal)192/**202** (192/204-Picholine Marocaine) |
| DCA10 | (TA)14(**GA**)17 | Yes | **156**/**156** (154/154-Gordal Sevillana)**152**/**152** (154/154-Manzanilla Cacereña)**164**/**164** (162/162-Moraiolo)194/**221** (194/218-Ocal) |
| DCA11 | (**GA**)26(GGGA)4  | Yes | **158**/**178**; 160/**178** (160/180-Alameño de Montilla)160/**174** (160/178-Atounsi Setif)**148**/160 (146/160-Beladi)146/**176** (146/178-Carolea)**178**/178 (176/178-Confetto)160/**182**, **164**/**182** (160/178-Gordale Sevillana)140/**174** (140/178-Mollar de Cieza)140/**174** (140/178-Morchiaio)**140**/178 (178/178-Moresca)176/**176** (176/178-Pavo)140/**178** (140/182-Picudo) |
| DCA15 | (CA)3G(AC)14  | Yes | 243/**263** (243/243-Alfafara)**263**/263 (243/263-Gordal de Hellín)243/**254** (243/243-Grappolo)**263**/263 (261/263-Mastoidis)**243**/**243** (263/263-Verdial de Badajoz) |
| DCA16 | (GT)13(**GA**)29 | Yes | 152/**175** (152/173-Alfafara)122/**179** (122/173-Chetoui)148/**177** (148/173-Giarfara)124/**179** (124/177-Idleb)122/**218**, 122/**222**, 122/**230** (122/220-Jlot)124/**216**, 124/**218**, 124/**220**, 124/**228** (124/226-Kato Drys)122/**216** (122/224-Mawi)152/**175** (152/173-Morisca)122/**177** (122/175-Negrillo de Arjona)152/**177** (152/173-Ocal)124/**179** (124/177-Zaity) |
| DCA18 | (CA)4CT(CA)3(**GA**)19  | Yes | 172/**172** (172/174-Beladi)168/**168** (168/172-Callosina)172/**172** (172/174-Frantoio)172/**180** (172/176-Gordale Sevillana)172/**172** (172/174-Kato Drys)164/**170** (164/172-Lechín de Sevilla)168/**168** (168/172-Mollar de Cieza)**176**/180 (172/180-Chalchali) |
| EMO90 | (CA)10  | No |  |
| GAPU59 | (CT)9 | Yes | **206**/210 (210/210-Ocal)**206**/210 (210/210-Verdale) |
| GAPU71A | (AG)10  | No |  |
| GAPU71B | GA(AG)6(AAG)8  | Yes | **121**/**121** (124/124-Masabi)121/**130** (121/127-Morchiaio)**121**/141 (127/141-Pavo) |
| GAPU101 | (**GA**)8G3(AG)3 | Yes | **189**/**219** (191/217-Carrasqueño de Elvas) |
| GAPU103 | (TC)26 | Yes | 147/**174** (147/171-Bolvino)147/**184** (147/190-Cerezuela)147/**174**, 147/**178** (147/171-Cirujal)**171**/184, **171**/**186** (174/184-Confetto)171/**182** (171/184-Corbella-817)159/**176** (159/171-Frantoio)133/**188** (133/184-Giarraffa)171/**184** (171/186-Grappolo)147/**184** (147/186-Hojiblanca)137/**174** (137/171-Jlot)171/**188** (171/184-Leccino)147/**188** (147/184-Nocellara del Belice)157/**190** (157/184-Pequeña de Casas Ibañez)**147**/188 (149/188-Picholine)147/**184** (147/171-Ravece)147/**186** (147/184-Chalchali) |
| UDO011 | (CT)7(CA)10(CT)2(CA)2CT(CA)2CT(CA)9 | Yes | 127/**131** (127/134-Gordal de Hellín)119/**131** (119/134-Manzanilla de Sevilla) |
| UDO017 | (TG)11 | No |  |
| UDO043 | (GT)12 | Yes | 170/**216** (170/218-Adkam)172/**216** (172/214-Atounsi Setif)175/**218** (175/216-Blanqueta)175/**185** (175/187-Bosana)**170**/175 (172/175-Carolea)175/**214** (175/216-Cirujal)208/**218** (208/212-Cordovil de Serpa)175/**208**, 175/**212** (175/214-Frantoio)175/**212** (175/214-Gerboui)172/**218** (172/216-Gordal de Granada)172/**218** (172/216-Gordal de Hellín)208/**218** (208/216-Hojiblanca)172/**214** (172/216-Karamani)172/212 (172/216-Manzanilla Cacereña)172/218 (172/216-Manzanilla de Agua)**208**/**208**, 210/**210**, **208**/212, 210/**214** (210/212-Manzanilla de Sevilla)172/**216** (172/214-Mollar de Cieza)172/**210** (172/212-Picholine Marocaine)208/**214** (208/212-Picual)**162**/212 (172/212-Verdial de Badajoz)170/**216** (170/218-Chalchali) |