**Supplementary Table 5.** Association of top significant SNP (SNP46961, on chr 8) at *qMCR8.1* locus with the content of citrate, malate (MAL) and malate/citrate ratio (MCratio) using data from Gurrieri et al. [38] and genotypic data extracted from publicly available SRA datasets.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **name** | **accession code** | **origin** | **Malic** | **Citric** | **MCratio** | **SRA** | **SNP46961** |
| **meq/100 g FW** |
| Rouge du Roussillon | 157 | France | 7.3 | 18.7 | 0.39 | ERS5488925 | A/A |
| Rouge de Rivesaltes | 380 | France | 8.8 | 15.9 | 0.55 | ERS5488928 | A/A |
| Moniqui | 500 | Spain | 6.1 | 19.8 | 0.31 | ERS5488907 | A/A |
| Cafona | 544 | Italy | 7 | 19.7 | 0.36 | ERS5488906 | A/A |
| Screara | 804 | France | 9.7 | 22.5 | 0.43 | ERS5488927 | A/A |
| Canino | 1343 | Spain | 9.3 | 23.7 | 0.39 | ERS5488926 | A/A |
| Rouget de Sernhac | 1714 | France | 19.9 | 6.7 | 2.97 | ERS5488949 | A/T |
| Ferriana | 1727 | Tunisia | 7 | 33.3 | 0.21 | SRX1140227 | A/A |
| Priana | 1729 | Tunisia | 8.3 | 21.9 | 0.38 | ERS5488919 | A/A |
| Beliana | 1731 | France | 16.3 | 17.6 | 0.93 | ERS5488935 | A/T |
| Laycot | 1813 | Canada | 14.3 | 20.3 | 0.70 | ERS5488932 | A/A |
| Hargrand | 1814 | Canada | 11.5 | 14.3 | 0.80 | ERS5488933 | A/T |
| Fantasme | 1939 | France | 24.4 | 2.7 | 9.04 | ERS5488953 | A/T |
| Palsteyn | 1956 | South Africa | 20.3 | 15.3 | 1.33 | ERS5488969 | A/T |
| Rouge de Fournes | 2129 | France | 17.8 | 15.5 | 1.15 | ERS5488940 | A/T |
| Ivresse | 2243 | France | 24.9 | 8.1 | 3.07 | ERS5488951 | A/T |
| Modesto | 2310 | USA | 8 | 21.6 | 0.37 | ERS5488912 | A/A |
| Flamingold | 2312 | USA | 8.4 | 26 | 0.32 | SRX1140268 | A/A |
| Tomcot | 2669 | USA | 15.8 | 17.8 | 0.89 | ERS5488934 | A/T |
| *data from Gurrieri et al., 2001* |