**Supplementary Table 3.** Variance components and harvesting year-related coefficients estimated from the data fitting with the linear mixed model (LMMs) equation developed for each fruit quality trait. Phenotypic data of each trait was fitted separately in fruit pulp and skin in order to calculate the best linear unbiased predictors (BLUPs) of apricot accessions. *CIS*, cis-aconitate content; *CIT*, citrate content; *FUM*, fumarate content; *GAL*, galacturonate content; *MAL*, malate content; *OX*, oxalate content; *QUI*, quinate content; *SHIK*, shikimate content; *SUC*, succinate content; *TA*, titratable acidity.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Trait** | **Fruit tissue** | **Unit of measure** | **Accession component** | **Year component** | **Year\_2017 coefficient** | **Year\_2018 coefficient** | **Year\_2019 coefficient** |
| CIS | Flesh | ng µL-1 | 0.53 | 0.2 | -0.12 | 0.48 | -0.37 |
| CIS | Skin | ng µL-1 | 0.19 | 0.79 | 0.94 | -1.74E-01 | -7.67E-07 |
| CIT | Flesh | mg mL-1 | 9.24 | 1.45 | -0.77 | 1.37 | -0.6 |
| CIT | Skin | mg mL-1 | 15.12 | 0.26 | -0.38 | -0.45 | -7.10E-02 |
| FUM | Flesh | ng µL-1 | 33.88 | 68 | -8.9 | 7.33 | 1.57 |
| FUM | Skin | ng µL-1 | 7.43 | 14.06 | -4.31 | 2.15 | 2.16 |
| GAL | Flesh | ng µL-1 | 448.37 | 19.29 | -0.1 | -2.59 | 2.69 |
| GAL | Skin | ng µL-1 | 33137.22 | 8013.49 | -51.77 | -48.37 | 100.14 |
| MAL | Flesh | mg mL-1 | 8.66 | 0.63 | 0.6 | 0.26 | -0.87 |
| MAL | Skin | mg mL-1 | 9.79 | 0.01 | 8.99E-03 | 1.52E-02 | -2.42E-02 |
| OX | Flesh | ng µL-1 | 1.57 | 7.31E-05 | -1.50E-04 | 4.30E-04 | -2.81E-04 |
| OX | Skin | ng µL-1 | 1.51E-05 | 20.92 | 4.89 | -2.45 | -2.44 |
| QUI | Flesh | ng µL-1 | 28742.43 | 5506.98 | -51.31 | 82.36 | -31.05 |
| QUI | Skin | ng µL-1 | 13459.87 | 2981.13 | 39.16 | 19.75 | -58.91 |
| SHIK | Flesh | ng µL-1 | 5.65 | 6.39E-05 | -1.39E-04 | 3.81E-04 | -2.41E-04 |
| SHIK | Skin | ng µL-1 | 28.28 | 2.15E-05 | -2.30E-04 | 8.61E-05 | 1.44E-04 |
| SUC | Flesh | ng µL-1 | 29519.52 | 364.68 | -1.67 | 9.77 | -8.1 |
| SUC | Skin | ng µL-1 | 10058.61 | 6340.29 | 64.39 | -73.78 | 9.39 |
| TA | Flesh | g L-1 | 12.04 | 1.29 | 0.39 | 0.86 | -1.25 |
| TA | Skin | g L-1 | 14.69 | 3.17 | 1.74 | 1.66E-02 | -1.76 |
| TRT | Flesh | ng µL-1 | 10.31 | 8.48 | -2.69 | 2.86 | -0.17 |
| TRT | Skin | ng µL-1 | 274.00 | 623.24 | 27.91 | -14.34 | -13.57 |