**Table S1. Concentrations profiles of taste compounds of mature tomato fruits.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Taste compound** | **Calibration curve**a | **Regression coefficient (R**2) | **Concentration range** | **Average** | **Variation coefficient** |
| **Soluble solids (%)** | —b | — | 3.67—11.43 | 6.013 | 0.26 |
| **Fructose (mg 100 g**-1**)** | y=2.856x-0.320 | 0.994 | 910—2400 | 1462 | 0.25 |
| **Glucose (mg 100 g**-1**)** | y=2.734x-0.318 | 0.996 | 560—1600 | 911 | 0.25 |
| **Citric acid (mg 100 g**-1**)** | y=11.308x-0.152 | 0.991 | 120—540 | 281 | 0.31 |
| **Malic acid (mg 100 g**-1**)** | y=8.308x-0.125 | 0.990 | 60-390 | 159 | 0.36 |
| **Sugar and acid ratio** | — | — | 2.77—10.89 | 5.716 | 0.34 |

a In calibration curve (y = kx + b), “y” represents the theoretical concentration of the labeled standard, and “x” represents the peak area ratio of a compound in the internal standard (Wang and Seymour, 2017).

b ‘—’ indicates that a labeled standard does not exist and, thus, a calibration curve was could not be created.