**Table S1: Quantification of flavonoids in Pokan fruit peel (mg/g DW)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **vicenin 2** | **stellarin 2** | **narirutin** | **hesperidin** | **neohesperidin** | **didymin** | **isosinensetin** | **4'-hydroxy-5,6,7,8,3'-pentamethoxyflavone** |
| **HeYang No.2** | 1.44 ± 0.10 bc | 1.57 ± 0.10 ab | 0.30 ± 0.02 ij | 10.13 ± 0.72 defg | 0.84 ± 0.03 c | 0.51 ± 0.04 bc | 0.27 ± 0.02 def | 0.04 ± 0.00 h |
| **HuaGan No.4** | 1.11 ± 0.06 de | 1.35 ± 0.13 bcd | 0.78 ± 0.06 abc | 9.73 ± 1.07 efgh | 1.09 ± 0.04 abc | 0.53 ± 0.02 bc | 0.20 ± 0.01 ghi | 0.04 ± 0.00 h |
| **HuangPi** | 1.10 ± 0.12 de | 0.60 ± 0.05 ghi | 0.48 ± 0.03 gh | 7.43 ± 0.54 gh | 1.33 ± 0.06 a | 0.51 ± 0.03 bc | 0.30 ± 0.01 abcde | 0.15 ± 0.01 a |
| **HuaShan** | 0.94 ± 0.02 ef | 1.27 ± 0.08 cd | 0.66 ± 0.05 cdef | 6.35 ± 0.47 h | 1.04 ± 0.09 abc | 0.72 ± 0.09 a | 0.33 ± 0.01 abcd | 0.09 ± 0.01 defg |
| **HuTouGan** | 1.39 ± 0.08 cd | 0.57 ± 0.04 hi | 0.18 ± 0.02 j | 12.28 ± 0.62 bcdef | 1.23 ± 0.09 a | 0.62 ± 0.05 ab | 0.17 ± 0.02 hi | 0.10 ± 0.01 cdef |
| **JiangXi WuHe** | 0.84 ± 0.06 efg | 1.54 ± 0.09 abc | 0.24 ± 0.01 ij | 15.58 ± 1.03 ab | 1.11 ± 0.08 abc | 0.49 ± 0.03 bcd | 0.35 ± 0.02 abc | 0.15 ± 0.01 a |
| **JinShui** | 0.84 ± 0.11 efg | 1.20 ± 0.11 d | 0.75 ± 0.05 abcd | 15.82 ± 1.30 ab | 1.29 ± 0.08 a | 0.51 ± 0.02 bc | 0.37 ± 0.03 a | 0.15 ± 0.00 a |
| **LiPeng No.2** | 0.76 ± 0.05 fgh | 1.64 ± 0.13 ab | 0.36 ± 0.04 hi | 10.81 ± 0.58 cdefg | 1.22 ± 0.14 a | 0.54 ± 0.03 b | 0.15 ± 0.01 ij | 0.13 ± 0.01 ab |
| **PaiXiTou No.7** | 1.71 ± 0.07 ab | 1.55 ± 0.09 abc | 0.72 ± 0.06 abcd | 14.30 ± 1.04 abc | 1.08 ± 0.09 abc | 0.21 ± 0.02 fg | 0.09 ± 0.01 j | 0.11 ± 0.01 bcde |
| **Pumpkin** | 0.73 ± 0.07 fgh | 0.44 ± 0.03 i | 0.61 ± 0.06 defg | 16.50 ± 1.17 a | 1.16 ± 0.07 ab | 0.28 ± 0.04 efg | 0.18 ± 0.01 hi | 0.11 ± 0.00 bcd |
| **QianYang WuHe** | 1.38 ± 0.16 cd | 0.85 ± 0.05 efgh | 0.52 ± 0.03 fg | 9.56 ± 1.12 efgh | 0.89 ± 0.04 bc | 0.50 ± 0.03 bc | 0.14 ± 0.01 ij | 0.10 ± 0.01 cdef |
| **QuPeng No.1** | 1.95 ± 0.06 a | 1.12 ± 0.06 de | 0.85 ± 0.04 a | 13.42 ± 1.06 abcd | 1.27 ± 0.15 a | 0.40 ± 0.04 cde | 0.13 ± 0.01 ij | 0.10 ± 0.01 cdef |
| **QuPeng No.2** | 1.89 ± 0.09 a | 0.90 ± 0.05 ef | 0.55 ± 0.04 efg | 15.49 ± 1.59 ab | 1.10 ± 0.02 abc | 0.51 ± 0.03 bc | 0.14 ± 0.01 ij | 0.08 ± 0.00 efg |
| **QuPeng No.3** | 1.57 ± 0.10 bc | 0.85 ± 0.05 efgh | 0.16 ± 0.02 j | 10.81 ± 0.59 cdefg | 1.32 ± 0.11 a | 0.73 ± 0.04 a | 0.35 ± 0.02 ab | 0.11 ± 0.01 bcd |
| **QuZhou** | 0.48 ± 0.03 h | 1.13 ± 0.06 de | 0.82 ± 0.06 ab | 12.73 ± 0.74 bcde | 0.84 ± 0.07 c | 0.15 ± 0.01 g | 0.28 ± 0.02 cdef | 0.12 ± 0.01 abc |
| **WangCun No.1** | 1.47 ± 0.08 bc | 0.88 ± 0.03 efg | 0.24 ± 0.02 ij | 10.48 ± 0.51 defg | 1.18 ± 0.10 ab | 0.22 ± 0.01 fg | 0.19 ± 0.01 ghi | 0.06 ± 0.01 gh |
| **XiangXi WuHe** | 0.70 ± 0.05 fgh | 1.74 ± 0.08 a | 0.81 ± 0.03 abc | 14.81 ± 1.10 ab | 1.09 ± 0.08 abc | 0.16 ± 0.01 g | 0.36 ± 0.02 a | 0.12 ± 0.01 bcd |
| **YuanHong** | 0.55 ± 0.03 gh | 1.11 ± 0.04 de | 0.50 ± 0.03 gh | 8.84 ± 0.38 fgh | 1.06 ± 0.06 abc | 0.35 ± 0.03 de | 0.23 ± 0.02 fgh | 0.07 ± 0.00 fg |
| **ZaoMi** | 1.39 ± 0.10 cd | 0.71 ± 0.04 fghi | 0.49 ± 0.03 gh | 14.46 ± 1.41 ab | 0.87 ± 0.07 bc | 0.33 ± 0.02 ef | 0.25 ± 0.03 efg | 0.13 ± 0.01 ab |
| **ZaoShu** | 0.88 ± 0.09 ef | 1.69 ± 0.10 a | 0.69 ± 0.03 bcde | 10.63 ± 0.89 defg | 1.04 ± 0.04 abc | 0.75 ± 0.03 a | 0.29 ± 0.02 bcdef | 0.10 ± 0.01 cdef |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **sinensetin** | **citromitin** | **nobiletin** | **ternatin** | **3-methoxynobiletin** | **tangeretin** | **5-demethylnobiletin** | **5-hydroxy-7,8,3',4'-tetramethoxyflavone** |
| **HeYang No.2** | 2.26 ± 0.09 a | 0.07 ± 0.01 g | 12.12 ± 1.05 abc | 0.41 ± 0.03 de | 0.30 ± 0.03 a | 12.42 ± 0.77 cdefg | 0.87 ± 0.03 h | 0.41 ± 0.03 de |
| **HuaGan No.4** | 1.12 ± 0.07 fg | 0.19 ± 0.01 cd | 11.57 ± 0.76 abcde | 0.46 ± 0.03 cd | 0.20 ± 0.02 def | 11.74 ± 0.38 defgh | 1.08 ± 0.05 gh | 0.29 ± 0.02 fgh |
| **HuangPi** | 0.59 ± 0.03 h | 0.18 ± 0.01 cde | 10.33 ± 0.67 bcdefg | 0.73 ± 0.07 a | 0.16 ± 0.01 ef | 12.15 ± 0.88 defg | 1.03 ± 0.12 gh | 0.54 ± 0.02 abc |
| **HuaShan** | 0.85 ± 0.09 gh | 0.30 ± 0.03 a | 11.40 ± 0.85 abcde | 0.57 ± 0.07 bc | 0.19 ± 0.01 ef | 11.49 ± 0.35 efgh | 2.02 ± 0.18 abc | 0.20 ± 0.01 hij |
| **HuTouGan** | 1.83 ± 0.12 bc | 0.27 ± 0.02 ab | 9.29 ± 0.20 defg | 0.25 ± 0.02 fghi | 0.15 ± 0.01 fg | 5.25 ± 0.20 k | 0.90 ± 0.06 h | 0.35 ± 0.02 efg |
| **JiangXi WuHe** | 0.55 ± 0.05 h | 0.17 ± 0.01 def | 12.81 ± 0.72 ab | 0.21 ± 0.02 hi | 0.22 ± 0.02 bcde | 16.52 ± 1.03 ab | 0.85 ± 0.06 h | 0.59 ± 0.02 ab |
| **JinShui** | 1.27 ± 0.11 ef | 0.23 ± 0.01 bc | 9.10 ± 0.64 defg | 0.42 ± 0.03 de | 0.19 ± 0.01 ef | 5.27 ± 0.47 jk | 1.90 ± 0.11 bcd | 0.25 ± 0.02 ghi |
| **LiPeng No.2** | 2.43 ± 0.15 a | 0.11 ± 0.00 fg | 9.56 ± 0.69 cdefg | 0.43 ± 0.04 cde | 0.10 ± 0.00 gh | 12.90 ± 1.21 cdef | 1.44 ± 0.09 defg | 0.31 ± 0.02 efgh |
| **PaiXiTou No.7** | 1.60 ± 0.08 cde | 0.11 ± 0.00 fg | 11.42 ± 0.81 abcde | 0.40 ± 0.02 de | 0.19 ± 0.01 ef | 16.61 ± 0.73 a | 1.97 ± 0.08 abc | 0.61 ± 0.03 a |
| **Pumpkin** | 1.12 ± 0.14 fg | 0.12 ± 0.01 efg | 7.78 ± 0.43 g | 0.42 ± 0.02 de | 0.20 ± 0.01 def | 8.62 ± 0.69 i | 1.25 ± 0.08 fgh | 0.26 ± 0.01 gh |
| **QianYang WuHe** | 0.63 ± 0.03 h | 0.31 ± 0.02 a | 10.04 ± 0.78 cdefg | 0.24 ± 0.03 ghi | 0.21 ± 0.01 cde | 11.93 ± 0.85 defg | 1.76 ± 0.16 bcde | 0.29 ± 0.02 fgh |
| **QuPeng No.1** | 2.11 ± 0.24 ab | 0.12 ± 0.01 efg | 7.82 ± 0.19 g | 0.71 ± 0.06 a | 0.27 ± 0.01 abc | 10.11 ± 0.98 fghi | 1.42 ± 0.08 efg | 0.37 ± 0.02 ef |
| **QuPeng No.2** | 0.79 ± 0.03 gh | 0.28 ± 0.02 ab | 11.6 ± 0.34 abcde | 0.42 ± 0.02 de | 0.27 ± 0.03 ab | 15.96 ± 0.8 ab | 2.10 ± 0.20 ab | 0.15 ± 0.01 ij |
| **QuPeng No.3** | 1.69 ± 0.08 cd | 0.29 ± 0.02 ab | 10.73 ± 0.81 abcdef | 0.65 ± 0.05 ab | 0.17 ± 0.01 ef | 14.33 ± 0.67 abcd | 1.97 ± 0.05 abc | 0.40 ± 0.03 de |
| **QuZhou** | 0.81 ± 0.07 gh | 0.30 ± 0.03 a | 9.55 ± 0.56 cdefg | 0.39 ± 0.03 de | 0.29 ± 0.02 a | 15.08 ± 0.77 abc | 2.41 ± 0.13 a | 0.31 ± 0.01 efg |
| **WangCun No.1** | 1.55 ± 0.10 cde | 0.30 ± 0.03 a | 11.75 ± 1.14 abcd | 0.37 ± 0.02 defg | 0.06 ± 0.01 h | 8.10 ± 0.75 ij | 1.07 ± 0.06 gh | 0.56 ± 0.05 abc |
| **XiangXi WuHe** | 1.59 ± 0.08 cde | 0.27 ± 0.02 ab | 13.03 ± 0.43 a | 0.38 ± 0.04 def | 0.18 ± 0.01 ef | 13.76 ± 0.70 bcde | 1.67 ± 0.17 bcdef | 0.48 ± 0.05 cd |
| **YuanHong** | 0.85 ± 0.07 gh | 0.14 ± 0.01 def | 8.36 ± 0.55 fg | 0.17 ± 0.01 i | 0.09 ± 0.01 gh | 8.96 ± 0.63 hi | 1.57 ± 0.07 cdef | 0.50 ± 0.05 bcd |
| **ZaoMi** | 1.35 ± 0.06 def | 0.16 ± 0.01 def | 9.09 ± 0.93 efg | 0.62 ± 0.03 ab | 0.26 ± 0.02 abcd | 9.90 ± 0.65 ghi | 2.08 ± 0.17 ab | 0.59 ± 0.04 abc |
| **ZaoShu** | 0.80 ± 0.05 gh | 0.13 ± 0.01 defg | 8.62 ± 0.53 fg | 0.31 ± 0.02 efgh | 0.27 ± 0.02 abc | 12.28 ± 0.73 cdefg | 1.96 ± 0.25 abc | 0.15 ± 0.01 j |

Note: different letter after each column indicates a significant difference between the two groups.