Table S2. Sum of carotenoids (free and esterified) organized by carotenoid species and percentage of contribution of each species to total carotenoids in saponified extracts of astringent persimmon (*Diospyros Kaki, L.*) cv. Rojo Brillante submitted to pasteurization (85°C, 15 min) and high-pressure processing (HPP; 200 MPa, 25°C, 6 min).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Carotenoid content\* (µg/100 g fresh weight) | | | | | | | | |
|  | Whole Fruit | | | Pulp | | | Peel | | |
| Compound | Control | Pasteurization | HPP | Control | Pasteurization | HPP | Control | Pasteurization | HPP |
| (13Z)-violaxanthin | 96.2±4.8 | 79.7±3.2 | 69.2±3.0 | 54.0±2.7 | 62.9±3.1 | 62.4±3.1 | 205.8±8.1 | 211.3±14.8 | 203.9±16.3 |
| (all-*E*)-violaxanthin | 251.9±12.6 | 202.8±8.1 | 227.1±13.8 | 107.9±5.4 | 98.8±4.9 | 115.3±0.2 | 908.5±36.3 | 846.0±59.2 | 763.4±61.1 |
| (9Z)-violaxanthin | 54.2±2.7 | 33.4±1.3 | 55.7±2.8 | 28.4±1.4 | 39.3±2.0 | 36.0±2.3 | 193.5±4.0 | 192.7±13.5 | 184.9±14.8 |
| **Σ violaxanthin** | **402.3 (10.1%)** | **315.9 (9.5%)** | **352.0 (9.3%)** | **190.3 (8.8%)** | **201.0 (11.7%)** | **213.7 (10.5%)** | **1307.8 (10.4%)** | **1250.0 (10.5%)** | **1152.2 (9.5%)** |
|  |  |  |  |  |  |  |  |  |  |
| (all-*E*)-neoxanthin | 58.4±2.9 | 49.3±2.0 | 51.6±0.8 | 13.2±0.7 | 44.8±2.2 | 17.8±1.6 | 319.7±5.5 | 299.1±20.9 | 238.6±19.1 |
| (9Z)-neoxanthin | 20.5±1.0 | 19.8±0.8 | 24.5±6.8 | 17.6±0.9 | 41.7±2.1 | 37.9±4.7 | 123.0±2.3 | 128.9±9.0 | 122.6±9.8 |
| **Σ neoxanthin** | **78.9 (2.0%)** | **69.1 (2.1%)** | **76.1 (2.0%)** | **30.8 (1.4%)** | **86.5 (5.1%)** | **55.7 (2.7%)** | **442.7 (3.5%)** | **427.9 (3.6%)** | **361.2 (3.0%)** |
|  |  |  |  |  |  |  |  |  |  |
| (all-*E*)-antheraxanthin | 628.4±31.4 | 536.4±21.5 | 594.2±7.4 | 376.8±18.8 | 401.0±20.0 | 534.3±21.4 | 1098.6±74.6 | 974.8±68.2 | 1327.7±106.2 |
| **Σ antheraxanthin** | **628.4 (15.8%)** | **536.4 (16.2%)** | **594.2 (15.7%)** | **376.8 (17.5%)** | **401.0 (23.4%)** | **534.3 (26.2%)** | **1098.6 (8.7%)** | **974.8 (8.2%)** | **1327.7 (10.9%)** |
|  |  |  |  |  |  |  |  |  |  |
| (all-E)-lutein | 758.1±37.9 | 569.8±22.8 | 675.7±14.3 | 375.3±17.0 | 124.7±6.2 | 139.0±2.4 | 3544.3±177.2 | 3350.1±234.5 | 3586.4±286.9 |
| Lutein-5,6- epoxide | 268.2±13.4 | 219.8±8.8 | 252.0±0.1 | 168.9±8.4 | 114.0±5.7 | 173.2±8.3 | 589.4±6.4 | 558.3±39.1 | 553.7±44.3 |
| **Σ lutein** | **1026.3 (25.8%)** | **789.6 (23.8%)** | **927.7 (24.5%)** | **544.2 (25.2%)** | **238.7 (13.9%)** | **312.2 (15.3%)** | **4133.7 (32.8%)** | **3908.4 (32.9%)** | **4140.1 (34.0%)** |
|  |  |  |  |  |  |  |  |  |  |
| (all-*E*)-zeaxanthin | 776.8±38.8 | 604.6±24.2 | 783.7±26.1 | 375.9±19.1 | 300.9±15.0 | 300.0±18.0 | 2145.0±33.0 | 1912.3±134.0 | 1955.7±156.5 |
| **Σ zeaxanthin** | **776.8 (19.5%)** | **604.6 (18.2%)** | **783.7 (20.7%)** | **375.9 (17.4%)** | **300.9 (17.6%)** | **300.0 (14.7%)** | **2145.0 (17.0%)** | **1912.3 (16.1%)** | **1955.7 (16.1%)** |
|  |  |  |  |  |  |  |  |  |  |
| 5,6-epoxy-β-criptoxanthin | 18.4±0.9 | 14.1±0.6 | 15.3±3.1 | 7.4±0.4 | 5.9±0.3 | 10.0±0.8 | 92.0±4.1 | 83.2±5.8 | 94.8±7.6 |
| (all-*E*)-β-criptoxanthin | 557.4±27.9 | 534.2±21.2 | 606.3±33.6 | 402.5±20.1 | 299.8±15.0 | 386.9±11.6 | 1229.8±36.9 | 1345.5±94.2 | 1135.6±90.8 |
| **Σ ß-criptoxanthin** | **575.8 (14.4%)** | **548.3 (16.5%)** | **621.6 (16.4%)** | **409.9 (19.0%)** | **305.7 (17.9%)** | **396.9 (19.5%)** | **1321.8 (10.5%)** | **1428.7 (12.0%)** | **1230.4 (10.1%)** |
|  |  |  |  |  |  |  |  |  |  |
| (all-*E*)-α-criptoxanthin | 30.4±1.5 | 27.5±1.1 | 34.3±2.6 | 7.9±0.4 | 3.5±0.2 | 21.3±8.9 | 43.3±6.1 | 48.4±3.4 | 43.7±3.5 |
| **Σ α-criptoxanthin** | **30.4 (0.8%)** | **27.5 (0.8%)** | **34.3 (0.9%)** | **7.9 (0.4%)** | **3.5 (0.2%)** | **21.3 (1.0%)** | **43.3 (0.3%)** | **48.4 (0.4%)** | **43.7 (0.2%)** |
|  |  |  |  |  |  |  |  |  |  |
| 5,6-epoxy-α-carotene | 32.0±1.6 | 31.4±1.3 | 26.4±6.8 | 18.5±0.9 | 13.7±0.7 | 11.7±0.4 | 193.7±17.4 | 173.6±12.2 | 166.2±13.3 |
| (13Z)-α-carotene | 30.9±1.5 | 25.1±1.0 | 25.5±4.6 | 15.4±0.8 | 13.7±0.8 | 21.5±0.6 | 127.2±6.4 | 130.6±9.1 | 109.6±8.8 |
| (all-E)-α-carotene | 38.6±1.9 | 38.7±1.5 | 43.9±0.6 | 19.3±1.0 | 13.7±0.7 | 10.8±1.4 | 255.3±27.6 | 221.9±15.5 | 218.0±17.4 |
| (9Z)-α-carotene | 18.8±0.9 | 13.6±0.5 | 15.4±0.3 | 10.0±0.5 | 7.3±0.4 | 9.8±0.7 | 31.1±6.8 | 30.2±2.1 | 32.1±2.6 |
| **Σ α-carotene** | **120.3 (3.0%)** | **108.8 (3.3%)** | **111.2 (2.9%)** | **63.2 (2.9%)** | **48.4 (2.8%)** | **53.8 (2.6%)** | **607.3 (4.8%)** | **556.3 (4.7%)** | **525.9 (4.3%)** |
|  |  |  |  |  |  |  |  |  |  |
| (13Z)-β-carotene | 14.1±0.7 | 20.1±0.8 | 12.1±1.4 | 14.1±0.7 | 8.4±0.4 | 8.9±0.3 | 103.7±5.2 | 49.7±3.5 | 53.2±4.3 |
| (all-*E*)-β-carotene | 161.3±8.1 | 169.1±6.8 | 167.4±18.3 | 97.3±4.9 | 76.1±3.8 | 104.6±4.0 | 509.9±35.2 | 490.5±34.3 | 471.4±37.7 |
| (9Z)-β-carotene | 25.0±1.3 | 16.2±0.6 | 14.8±3.9 | 14.1±0.7 | 16.7±0.8 | 10.7±0.8 | 57.9±11.0 | 52.4±3.7 | 60.0±4.8 |
| **Σ ß-carotene** | **200.4 (5.0%)** | **205.4 (6.2%)** | **194.3 (5.1%)** | **125.8 (5.8%)** | **101.2 (5.9%)** | **124.2 (6.1%)** | **671.5 (5.3%)** | **592.6 (5.0%)** | **584.6 (4.8%)** |
|  |  |  |  |  |  |  |  |  |  |
| lycopene | 145.8±7.3 | 107.8±4.6 | 92.8±6.0 | 30.6±1.5 | 25.7±1.3 | 25.2±0.5 | 834.4±12.0 | 784.9±54.9 | 860.2±60.3 |
| **Σ lycopene** | **145.8 (3.7%)** | **107.8 (3.3%)** | **92.8 (2.4%)** | **30.6 (1.4%)** | **25.7 (1.5%)** | **25.2 (1.2%)** | **834.4 (6.6%)** | **784.9 (6.6%)** | **860.2 (7.1%)** |