**Fruit evaluation of 103 acerola (Malpighia emarginata D. C.) phenotypes from the subtropical region of Brazil**

**EUPHYTICA**

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Table S.2 Chemical characteristics of fruits (mean ± s.e.) of 103 acerola phenotypes.

| Phenotypes | Vitamin C Content  (mg/100 g pulp) | | | Soluble Solids Content  (° Brix) (SSC) | | | Titratable  Acidity (%) (TA) | | | pH | | | SSC/TA  ratio | | | Total Polyphenols  (mg/kg gallic acid) | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 1600 | ± | 100 | 7.10 | ± | 0.2 | 0.40 | ± | 0.10 | 3.47 | ± | 0.01 | 18.62 | ± | 1.97 | 1367 | ± | 14 |
| 2 | 550 | ± | 150 | 7.43 | ± | 0.2 | 1.30 | ± | 0.10 | 2.95 | ± | 0.05 | 5.76 | ± | 0.35 | 1236 | ± | 14 |
| 3 | 1000 | ± | 10 | 7.14 | ± | 0.2 | 1.90 | ± | 0.10 | 3.48 | ± | 0.01 | 3.77 | ± | 0.18 | 917 | ± | 3 |
| 4 | 2100 | ± | 100 | 11.86 | ± | 0.3 | 3.35 | ± | 0.15 | 3.34 | ± | 0.01 | 3.54 | ± | 0.08 | 1134 | ± | 36 |
| 5 | 1375 | ± | 25 | 9.22 | ± | 0.2 | 3.40 | ± | 0.10 | 3.28 | ± | 0.00 | 2.71 | ± | 0.08 | 1150 | ± | 34 |
| 6 | 1300 | ± | 100 | 7.10 | ± | 0.2 | 1.90 | ± | 0.10 | 3.23 | ± | 0.01 | 3.75 | ± | 0.16 | 1456 | ± | 24 |
| 7 | 650 | ± | 150 | 9.48 | ± | 0.4 | 3.20 | ± | 0.10 | 3.15 | ± | 0.00 | 2.97 | ± | 0.15 | 1088 | ± | 18 |
| 8 | 575 | ± | 25 | 7.94 | ± | 0.5 | 2.60 | ± | 0.10 | 2.82 | ± | 0.02 | 3.05 | ± | 0.17 | 1192 | ± | 28 |
| 9 | 790 | ± | 10 | 7.04 | ± | 0.1 | 2.90 | ± | 0.10 | 2.92 | ± | 0.02 | 2.43 | ± | 0.06 | 1582 | ± | 13 |
| 10 | 1100 | ± | 100 | 9.20 | ± | 0.3 | 1.95 | ± | 0.15 | 2.99 | ± | 0.01 | 4.73 | ± | 0.09 | 84 | ± | 2 |
| 11 | 1210 | ± | 10 | 12.12 | ± | 0.5 | 2.20 | ± | 0.10 | 3.16 | ± | 0.02 | 5.53 | ± | 0.30 | 1160 | ± | 17 |
| 12 | 950 | ± | 50 | 9.38 | ± | 0.2 | 2.30 | ± | 0.10 | 3.23 | ± | 0.03 | 4.08 | ± | 0.08 | 1438 | ± | 71 |
| 13 | 1400 | ± | 100 | 9.50 | ± | 0.2 | 2.90 | ± | 0.10 | 2.87 | ± | 0.01 | 3.28 | ± | 0.12 | 1202 | ± | 20 |
| 14 | 2025 | ± | 75 | 7.62 | ± | 0.4 | 3.40 | ± | 0.10 | 2.72 | ± | 0.02 | 2.19 | ± | 0.07 | 1853 | ± | 95 |
| 15 | 1750 | ± | 50 | 8.93 | ± | 0.4 | 3.70 | ± | 0.10 | 2.92 | ± | 0.02 | 2.43 | ± | 0.09 | 1312 | ± | 45 |
| 16 | 690 | ± | 10 | 6.38 | ± | 0.2 | 3.40 | ± | 0.10 | 3.05 | ± | 0.01 | 1.88 | ± | 0.08 | 1315 | ± | 34 |
| 17 | 700 | ± | 100 | 7.82 | ± | 0.3 | 2.90 | ± | 0.10 | 3.31 | ± | 0.01 | 2.70 | ± | 0.13 | 1166 | ± | 44 |
| 18 | 740 | ± | 40 | 9.00 | ± | 0.0 | 0.70 | ± | 0.10 | 3.45 | ± | 0.04 | 13.13 | ± | 1.08 | 1024 | ± | 15 |
| 19 | 1625 | ± | 75 | 7.00 | ± | 0.0 | 3.20 | ± | 0.10 | 3.01 | ± | 0.01 | 2.19 | ± | 0.04 | 1155 | ± | 5 |
| 20 | 750 | ± | 50 | 7.80 | ± | 0.0 | 3.40 | ± | 0.10 | 3.36 | ± | 0.02 | 2.30 | ± | 0.04 | 1019 | ± | 11 |
| 21 | 700 | ± | 30 | 8.00 | ± | 0.0 | 2.50 | ± | 0.10 | 3.11 | ± | 0.01 | 3.21 | ± | 0.07 | 975 | ± | 30 |
| 22 | 1350 | ± | 50 | 9.00 | ± | 0.0 | 2.70 | ± | 0.10 | 3.53 | ± | 0.02 | 3.34 | ± | 0.07 | 1231 | ± | 33 |
| 23 | 1350 | ± | 150 | 9.50 | ± | 0.0 | 2.90 | ± | 0.10 | 2.93 | ± | 0.03 | 3.28 | ± | 0.07 | 1492 | ± | 24 |
| 24 | 1410 | ± | 90 | 8.10 | ± | 0.5 | 3.20 | ± | 0.10 | 2.92 | ± | 0.02 | 2.53 | ± | 0.16 | 1393 | ± | 55 |
| 25 | 560 | ± | 60 | 7.50 | ± | 0.3 | 3.50 | ± | 0.10 | 3.06 | ± | 0.03 | 2.15 | ± | 0.11 | 1774 | ± | 40 |
| 26 | 1680 | ± | 20 | 10.64 | ± | 0.3 | 2.90 | ± | 0.10 | 3.30 | ± | 0.02 | 3.67 | ± | 0.13 | 1275 | ± | 7 |
| 27 | 685 | ± | 15 | 8.08 | ± | 0.3 | 3.40 | ± | 0.10 | 3.36 | ± | 0.01 | 2.38 | ± | 0.11 | 1268 | ± | 55 |
| 28 | 1465 | ± | 35 | 9.38 | ± | 0.5 | 2.90 | ± | 0.10 | 3.53 | ± | 0.02 | 3.23 | ± | 0.13 | 1511 | ± | 20 |
| 29 | 2040 | ± | 60 | 7.46 | ± | 0.2 | 3.30 | ± | 0.10 | 2.97 | ± | 0.02 | 2.26 | ± | 0.07 | 1531 | ± | 13 |
| 30 | 600 | ± | 100 | 7.62 | ± | 0.2 | 3.70 | ± | 0.10 | 3.35 | ± | 0.05 | 2.06 | ± | 0.07 | 1255 | ± | 39 |
| 31 | 1300 | ± | 100 | 7.78 | ± | 0.2 | 2.30 | ± | 0.10 | 3.43 | ± | 0.03 | 3.39 | ± | 0.14 | 1403 | ± | 54 |
| 32 | 1415 | ± | 15 | 8.26 | ± | 0.1 | 2.90 | ± | 0.10 | 2.94 | ± | 0.03 | 2.85 | ± | 0.04 | 1357 | ± | 58 |
| 33 | 1440 | ± | 40 | 8.54 | ± | 0.3 | 3.70 | ± | 0.10 | 3.12 | ± | 0.01 | 2.31 | ± | 0.10 | 1006 | ± | 3 |
| 34 | 800 | ± | 40 | 10.08 | ± | 0.4 | 3.20 | ± | 0.10 | 3.31 | ± | 0.01 | 3.15 | ± | 0.14 | 1979 | ± | 49 |
| 35 | 850 | ± | 50 | 7.64 | ± | 0.2 | 3.60 | ± | 0.10 | 3.12 | ± | 0.01 | 2.12 | ± | 0.08 | 1390 | ± | 95 |
| 36 | 1670 | ± | 30 | 7.70 | ± | 0.3 | 3.60 | ± | 0.10 | 3.27 | ± | 0.02 | 2.14 | ± | 0.08 | 1916 | ± | 63 |
| 37 | 2490 | ± | 110 | 7.69 | ± | 0.2 | 3.60 | ± | 0.10 | 3.41 | ± | 0.01 | 2.14 | ± | 0.05 | 1885 | ± | 11 |
| 38 | 1995 | ± | 5 | 10.24 | ± | 0.1 | 2.90 | ± | 0.10 | 3.62 | ± | 0.01 | 3.53 | ± | 0.05 | 2468 | ± | 61 |
| 39 | 1420 | ± | 80 | 8.63 | ± | 0.1 | 2.90 | ± | 0.10 | 3.42 | ± | 0.02 | 2.97 | ± | 0.04 | 2386 | ± | 107 |
| 40 | 1495 | ± | 5 | 7.87 | ± | 0.1 | 3.10 | ± | 0.10 | 3.52 | ± | 0.02 | 2.54 | ± | 0.05 | 3196 | ± | 100 |
| 41 | 1200 | ± | 20 | 7.49 | ± | 0.1 | 3.50 | ± | 0.10 | 3.42 | ± | 0.02 | 2.14 | ± | 0.04 | 1662 | ± | 36 |
| 42 | 1790 | ± | 10 | 8.39 | ± | 0.1 | 3.20 | ± | 0.10 | 3.37 | ± | 0.01 | 2.62 | ± | 0.03 | 1846 | ± | 48 |
| 43 | 1085 | ± | 85 | 7.67 | ± | 0.2 | 2.90 | ± | 0.10 | 3.45 | ± | 0.05 | 2.65 | ± | 0.06 | 1544 | ± | 3 |
| 44 | 1670 | ± | 30 | 8.81 | ± | 0.1 | 3.50 | ± | 0.10 | 3.53 | ± | 0.03 | 2.52 | ± | 0.04 | 2148 | ± | 27 |
| 45 | 1100 | ± | 100 | 9.01 | ± | 0.2 | 3.00 | ± | 0.10 | 3.74 | ± | 0.01 | 3.01 | ± | 0.07 | 2088 | ± | 94 |
| 46 | 1975 | ± | 25 | 9.46 | ± | 0.2 | 3.30 | ± | 0.10 | 3.43 | ± | 0.03 | 2.87 | ± | 0.05 | 2114 | ± | 16 |
| 47 | 1365 | ± | 35 | 7.49 | ± | 0.1 | 3.00 | ± | 0.10 | 3.66 | ± | 0.02 | 2.50 | ± | 0.02 | 1884 | ± | 55 |
| 48 | 1260 | ± | 40 | 10.81 | ± | 0.4 | 3.70 | ± | 0.10 | 3.37 | ± | 0.02 | 2.92 | ± | 0.11 | 2514 | ± | 47 |
| 49 | 800 | ± | 50 | 8.53 | ± | 0.3 | 2.30 | ± | 0.10 | 3.53 | ± | 0.03 | 3.71 | ± | 0.16 | 1367 | ± | 62 |
| 50 | 600 | ± | 5 | 12.01 | ± | 0.3 | 3.10 | ± | 0.10 | 3.73 | ± | 0.02 | 4.15 | ± | 0.06 | 1165 | ± | 24 |
| 51 | 1450 | ± | 50 | 6.90 | ± | 0.1 | 2.90 | ± | 0.10 | 3.63 | ± | 0.02 | 2.38 | ± | 0.04 | 1163 | ± | 18 |
| 52 | 625 | ± | 25 | 7.84 | ± | 0.1 | 3.10 | ± | 0.10 | 3.38 | ± | 0.02 | 2.53 | ± | 0.04 | 1445 | ± | 33 |
| 53 | 1280 | ± | 20 | 8.63 | ± | 0.3 | 3.35 | ± | 0.15 | 3.48 | ± | 0.03 | 2.57 | ± | 0.08 | 1521 | ± | 36 |
| 54 | 845 | ± | 45 | 9.31 | ± | 0.1 | 2.40 | ± | 0.10 | 3.61 | ± | 0.01 | 3.88 | ± | 0.07 | 816 | ± | 23 |
| 55 | 485 | ± | 15 | 7.90 | ± | 0.1 | 3.35 | ± | 0.15 | 3.57 | ± | 0.02 | 2.36 | ± | 0.02 | 1101 | ± | 124 |
| 56 | 700 | ± | 30 | 7.31 | ± | 0.1 | 3.40 | ± | 0.10 | 3.45 | ± | 0.01 | 2.16 | ± | 0.05 | 1124 | ± | 25 |
| 57 | 1690 | ± | 10 | 6.64 | ± | 0.2 | 2.90 | ± | 0.10 | 3.73 | ± | 0.02 | 2.29 | ± | 0.05 | 928 | ± | 18 |
| 58 | 1050 | ± | 50 | 8.58 | ± | 0.2 | 3.00 | ± | 0.10 | 3.81 | ± | 0.01 | 2.86 | ± | 0.06 | 1208 | ± | 24 |
| 59 | 1295 | ± | 5 | 7.97 | ± | 0.2 | 3.00 | ± | 0.10 | 3.38 | ± | 0.01 | 2.66 | ± | 0.07 | 1197 | ± | 37 |
| 60 | 2160 | ± | 40 | 7.97 | ± | 0.2 | 2.90 | ± | 0.10 | 3.71 | ± | 0.00 | 2.75 | ± | 0.06 | 1035 | ± | 35 |
| 61 | 550 | ± | 50 | 11.02 | ± | 0.4 | 1.80 | ± | 0.10 | 3.44 | ± | 0.01 | 6.14 | ± | 0.24 | 985 | ± | 28 |
| 62 | 425 | ± | 25 | 8.49 | ± | 0.4 | 1.90 | ± | 0.10 | 3.88 | ± | 0.02 | 4.55 | ± | 0.23 | 920 | ± | 38 |
| 63 | 535 | ± | 35 | 6.79 | ± | 0.2 | 3.20 | ± | 0.10 | 3.33 | ± | 0.00 | 2.12 | ± | 0.08 | 891 | ± | 15 |
| 64 | 1155 | ± | 45 | 8.42 | ± | 0.2 | 3.10 | ± | 0.10 | 3.55 | ± | 0.01 | 2.72 | ± | 0.06 | 1584 | ± | 69 |
| 65 | 1735 | ± | 35 | 7.23 | ± | 0.2 | 2.95 | ± | 0.05 | 3.30 | ± | 0.00 | 2.45 | ± | 0.06 | 1809 | ± | 16 |
| 66 | 2150 | ± | 50 | 8.33 | ± | 0.1 | 3.10 | ± | 0.10 | 3.39 | ± | 0.00 | 2.69 | ± | 0.04 | 1667 | ± | 54 |
| 67 | 840 | ± | 40 | 10.83 | ± | 0.2 | 2.45 | ± | 0.05 | 3.71 | ± | 0.01 | 4.42 | ± | 0.07 | 2145 | ± | 55 |
| 68 | 1650 | ± | 50 | 10.76 | ± | 0.2 | 2.95 | ± | 0.05 | 3.66 | ± | 0.00 | 3.65 | ± | 0.06 | 1876 | ± | 47 |
| 69 | 1450 | ± | 50 | 7.97 | ± | 0.2 | 3.10 | ± | 0.10 | 3.64 | ± | 0.01 | 2.57 | ± | 0.07 | 1440 | ± | 21 |
| 70 | 1475 | ± | 25 | 9.97 | ± | 0.3 | 3.10 | ± | 0.10 | 3.76 | ± | 0.01 | 3.22 | ± | 0.10 | 1066 | ± | 9 |
| 71 | 1630 | ± | 30 | 11.63 | ± | 0.4 | 3.10 | ± | 0.10 | 3.77 | ± | 0.01 | 3.75 | ± | 0.11 | 1199 | ± | 15 |
| 72 | 790 | ± | 90 | 8.60 | ± | 0.2 | 3.55 | ± | 0.05 | 3.54 | ± | 0.00 | 2.42 | ± | 0.06 | 1422 | ± | 8 |
| 73 | 1200 | ± | 20 | 10.39 | ± | 0.4 | 2.05 | ± | 0.05 | 4.01 | ± | 0.01 | 5.07 | ± | 0.20 | 951 | ± | 25 |
| 74 | 1170 | ± | 30 | 7.61 | ± | 0.2 | 3.55 | ± | 0.05 | 3.60 | ± | 0.00 | 2.14 | ± | 0.05 | 1427 | ± | 51 |
| 75 | 725 | ± | 25 | 7.54 | ± | 0.1 | 3.70 | ± | 0.10 | 3.91 | ± | 0.00 | 2.04 | ± | 0.03 | 1373 | ± | 48 |
| 76 | 1325 | ± | 25 | 9.90 | ± | 0.4 | 3.70 | ± | 0.10 | 3.28 | ± | 0.00 | 2.68 | ± | 0.10 | 1544 | ± | 20 |
| 77 | 1425 | ± | 25 | 8.60 | ± | 0.1 | 3.55 | ± | 0.05 | 3.55 | ± | 0.01 | 2.42 | ± | 0.04 | 1540 | ± | 55 |
| 78 | 1550 | ± | 50 | 8.80 | ± | 0.3 | 3.50 | ± | 0.00 | 3.22 | ± | 0.00 | 2.51 | ± | 0.08 | 1670 | ± | 40 |
| 79 | 1660 | ± | 40 | 8.54 | ± | 0.4 | 3.45 | ± | 0.45 | 3.72 | ± | 0.00 | 2.49 | ± | 0.12 | 1187 | ± | 21 |
| 80 | 1150 | ± | 50 | 8.17 | ± | 0.2 | 3.65 | ± | 0.05 | 3.71 | ± | 0.01 | 2.27 | ± | 0.06 | 732 | ± | 3 |
| 81 | 1100 | ± | 100 | 8.84 | ± | 0.2 | 3.55 | ± | 0.05 | 3.62 | ± | 0.02 | 2.49 | ± | 0.07 | 2041 | ± | 41 |
| 82 | 1300 | ± | 20 | 8.89 | ± | 0.3 | 3.65 | ± | 0.05 | 3.50 | ± | 0.00 | 2.44 | ± | 0.07 | 2023 | ± | 43 |
| 83 | 1500 | ± | 100 | 9.05 | ± | 0.3 | 3.70 | ± | 0.10 | 3.33 | ± | 0.02 | 2.45 | ± | 0.07 | 1646 | ± | 15 |
| 84 | 1565 | ± | 25 | 9.59 | ± | 0.3 | 3.30 | ± | 0.00 | 3.43 | ± | 0.03 | 2.91 | ± | 0.08 | 727 | ± | 74 |
| 85 | 1180 | ± | 20 | 9.51 | ± | 0.3 | 3.25 | ± | 0.05 | 3.52 | ± | 0.02 | 2.93 | ± | 0.09 | 1344 | ± | 46 |
| 86 | 1575 | ± | 25 | 9.31 | ± | 0.1 | 3.25 | ± | 0.05 | 3.40 | ± | 0.00 | 2.87 | ± | 0.03 | 664 | ± | 28 |
| 87 | 1100 | ± | 100 | 9.12 | ± | 0.2 | 3.35 | ± | 0.05 | 3.78 | ± | 0.01 | 2.72 | ± | 0.05 | 614 | ± | 6 |
| 88 | 1435 | ± | 15 | 9.59 | ± | 0.3 | 3.55 | ± | 0.05 | 3.76 | ± | 0.00 | 2.70 | ± | 0.08 | 1074 | ± | 13 |
| 89 | 1410 | ± | 40 | 7.74 | ± | 0.2 | 3.60 | ± | 0.10 | 3.74 | ± | 0.01 | 2.15 | ± | 0.06 | 1704 | ± | 6 |
| 90 | 1205 | ± | 15 | 8.31 | ± | 0.2 | 2.65 | ± | 0.15 | 4.36 | ± | 0.01 | 3.14 | ± | 0.08 | 518 | ± | 3 |
| 91 | 1095 | ± | 95 | 8.02 | ± | 0.3 | 3.60 | ± | 0.10 | 3.86 | ± | 0.02 | 2.23 | ± | 0.07 | 891 | ± | 34 |
| 92 | 1445 | ± | 255 | 10.08 | ± | 0.2 | 3.55 | ± | 0.05 | 3.66 | ± | 0.01 | 2.84 | ± | 0.06 | 1476 | ± | 125 |
| 93 | 1180 | ± | 20 | 8.35 | ± | 0.2 | 3.48 | ± | 0.08 | 3.54 | ± | 0.01 | 2.40 | ± | 0.07 | 1382 | ± | 15 |
| 94 | 1150 | ± | 150 | 9.13 | ± | 0.2 | 3.63 | ± | 0.02 | 3.48 | ± | 0.03 | 2.52 | ± | 0.05 | 2260 | ± | 48 |
| 95 | 1145 | ± | 5 | 10.14 | ± | 0.5 | 3.06 | ± | 0.06 | 3.85 | ± | 0.02 | 3.31 | ± | 0.17 | 1223 | ± | 31 |
| 96 | 1075 | ± | 25 | 7.12 | ± | 0.2 | 3.82 | ± | 0.02 | 3.37 | ± | 0.01 | 1.86 | ± | 0.06 | 1811 | ± | 50 |
| 97 | 800 | ± | 100 | 8.61 | ± | 0.3 | 3.11 | ± | 0.01 | 3.57 | ± | 0.02 | 2.77 | ± | 0.10 | 1558 | ± | 83 |
| 98 | 1350 | ± | 50 | 11.27 | ± | 0.5 | 3.63 | ± | 0.03 | 3.46 | ± | 0.02 | 3.10 | ± | 0.13 | 1403 | ± | 62 |
| 99 | 2625 | ± | 75 | 7.75 | ± | 0.2 | 3.10 | ± | 0.10 | 3.31 | ± | 0.01 | 2.50 | ± | 0.07 | 1197 | ± | 47 |
| 100 | 1295 | ± | 5 | 7.46 | ± | 0.1 | 3.63 | ± | 0.02 | 3.66 | ± | 0.01 | 2.06 | ± | 0.04 | 635 | ± | 0 |
| 101 | 1000 | ± | 50 | 6.50 | ± | 0.2 | 3.45 | ± | 0.05 | 3.37 | ± | 0.03 | 1.88 | ± | 0.05 | 1173 | ± | 20 |
| 102 | 675 | ± | 25 | 9.93 | ± | 0.2 | 3.12 | ± | 0.11 | 3.49 | ± | 0.01 | 3.19 | ± | 0.06 | 967 | ± | 41 |
| 103 | 870 | ± | 20 | 11.17 | ± | 0.3 | 3.81 | ± | 0.01 | 3.36 | ± | 0.00 | 2.93 | ± | 0.07 | 1681 | ± | 104 |
| *Minimum* | *425* | *±* | *25* | *6.38* | *±* | *0.2* | *0.40* | *±* | *0.10* | *2.72* | *±* | *0.02* | *1.86* | *±* | *0.06* | *84* | *±* | *2* |
| *Maximum* | *2625* | *±* | *75* | *12.12* | *±* | *0.5* | *3.82* | *±* | *0.02* | *4.36* | *±* | *0.01* | *18.62* | *±* | *1.97* | *3196* | *±* | *100* |
| *Mean* | *1240* | *±* | *32* | *8.7* | *±* | *0.1* | *3.07* | *±* | *0.04* | *3.43* | *±* | *0.02* | *2.95* | *±* | *0.04* | *1397* | *±* | *27* |