Table S5. Productivity trait variation based on the population type

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Accession** |  | **Fruit weight (g)** | |  | **Fruits per plant** | |  | **Productivity per plant (g)** | |
|  |  | **Mean ± SD** | **RSD %** |  | **Mean ± SD** | **RSD %** |  | **Mean ± SD** | **RSD %** |
| **Local Variety:** |  |  |  |  |  |  |  |  |  |
| LYC-1 |  | 172.6ef±39.2 | 22.7 |  | 18.5h-j±1.4 | 7.5 |  | 3062.8b-g±415.5 | 13.6 |
| LYC-2 |  | 501.2a±107.2 | 21.4 |  | 6.7jk±1.4 | 20.5 |  | 3122.7b-h±503.1 | 16.1 |
| LYC-3 |  | 355.7d±80.1 | 22.5 |  | 6.0k±1.1 | 18.3 |  | 2415.0g-j±365.3 | 15.1 |
| LYC-11 |  | 44.4kl±5.5 | 12.3 |  | 32.8e±2.0 | 6.2 |  | 1376.7lm±157.0 | 11.4 |
| LYC-12 |  | 33.3em±5.3 | 15.9 |  | 39.7d±7.4 | 18.7 |  | 1526.3k-m±179.4 | 11.7 |
| LYC-15 |  | 71.9jk±10.9 | 15.1 |  | 43.5cd±6.7 | 15.4 |  | 3109.3b-f±309.3 | 9.9 |
| LYC-16 |  | 75.3j±14.5 | 19.3 |  | 28.7ef±5.8 | 20.3 |  | 2129.0i-k±258.6 | 12.2 |
| LYC-19 |  | 71.3jk±8.5 | 11.9 |  | 27.7e-g±4.6 | 16.6 |  | 1946.0j-l±315.2 | 16.2 |
| LYC-20 |  | 446.2b±90.7 | 20.3 |  | 7.5k±1.05 | 13.9 |  | 3453.5bc±730.6 | 21.2 |
| LYC-21 |  | 394.4c±85.3 | 21.6 |  | 8.3k±1.4 | 16.4 |  | 3167.8b-e±594.8 | 18.8 |
| LYC-24 |  | 14.1m±2.1 | 15.2 |  | 48.2c±5.0 | 10.4 |  | 672.2n±77.9 | 11.6 |
| LYC-25 |  | 11.1m±1.7 | 15.7 |  | 98.2a±7.7 | 7.8 |  | 1099.7n±170.5 | 15.5 |
| LYC-35 |  | 108.9hi±20.9 | 19.3 |  | 18.3h-j±1.7 | 9.4 |  | 1902.5j-l±218.8 | 11.5 |
| LYC-36 |  | 110.2hi±17.7 | 16.1 |  | 30.8ef±2.2 | 7.2 |  | 3510.8b±397.9 | 11.3 |
| LYC-37 |  | 169.9ef±33.5 | 19.7 |  | 29.3ef±8.7 | 29.6 |  | 5146.5a±1013.1 | 19.7 |
| LYC-38 |  | 165.5ef±19.7 | 11.9 |  | 21.3g-i±2.2 | 10.4 |  | 3408.5bc±441.8 | 13.0 |
| LYC-39 |  | 166.8ef±31.4 | 18.8 |  | 24.0f-h±1.4 | 5.9 |  | 3342.5bcd±42.7 | 1.3 |
| LYC-40 |  | 135.6gh±19.9 | 14.7 |  | 17.3h-j±1.0 | 5.6 |  | 2346.3h-j±199.7 | 8.5 |
| LYC-41 |  | 184.8e±25.3 | 13.7 |  | 15.8ij±0.5 | 3.2 |  | 2503.3f-j±181.0 | 7.2 |
| LYC-42 |  | 177.9ef±61.4 | 34.5 |  | 17.0h-j±2.6 | 15.2 |  | 2647.0e-i±393.8 | 14.9 |
| LYC-43 |  | 159.1efg±34.1 | 21.4 |  | 24.0f-h±1.8 | 7.6 |  | 3368.3bcd±552.6 | 16.4 |
| LYC-44 |  | 150.2fg±24.3 | 16.2 |  | 17.3h-j±1.5 | 8.7 |  | 2423.5g-j±272.5 | 11.2 |
| LYC-45 |  | 134.0gh±28.1 | 20.9 |  | 19.8hi±1.7 | 8.6 |  | 2483.5f-j±476.3 | 19.2 |
| LYC-46 |  | 79.5j±9.0 | 11.3 |  | 45.5cd±1.3 | 2.8 |  | 3229.5b-e±193.8 | 6.0 |
| LYC-47 |  | 87.9ij±13.8 | 15.7 |  | 44.5cd±6.6 | 14.8 |  | 3383.3bcd±271.7 | 8.0 |
| LYC-48 |  | 72.7j±11.9 | 16.3 |  | 55.3b±4.8 | 8.7 |  | 3364.3bcd±267.6 | 8.0 |
| LYC-49 |  | 68.1jk±6.9 | 10.3 |  | 41.3d±8.0 | 19.4 |  | 2810.8c-h±512.3 | 18.2 |
| LYC-50 |  | 87.5ij±10.7 | 12.2 |  | 31.3ef±3.4 | 10.9 |  | 2728.0d-i±174.6 | 6.4 |
| **Average** |  | **151.8±125.6** | **82.8** |  | **29.4±18.9** | **64.3** |  | **2695.0±901.9** | **33.5** |
| **Local Landraces:** |  |  |  |  |  |  |  |  |  |
| LYC-4 |  | 496.8b±120.3 | 24.2 |  | 8.7b±1.6 | 18.8 |  | 3895.0a±361.9 | 9.3 |
| LYC-5 |  | 564.8a±106.5 | 18.9 |  | 6.3c±1.0 | 16.3 |  | 3295.2bc±510.5 | 15.5 |
| LYC-6 |  | 353.2d±74.5 | 21.1 |  | 8.5b±1.6 | 19.3 |  | 3180.8bc±505.0 | 15.9 |
| LYC-7 |  | 204.7e±41.5 | 20.3 |  | 14.7a±2.7 | 18.6 |  | 3266.8bc±417.1 | 12.8 |
| LYC-8 |  | 422.1c±115.9 | 27.5 |  | 7.8bc±1.8 | 23.4 |  | 2799.5c±426.0 | 15.2 |
| LYC-9 |  | 432.9c±121.4 | 28.0 |  | 9.2b±1.7 | 18.8 |  | 3609.0ab±231.7 | 6.4 |
| LYC-10 |  | 393.6cd±63.1 | 16.0 |  | 8.7b±1.4 | 15.8 |  | 3256.5bc±446.6 | 13.7 |
| LYC-17 |  | 376.2cd±86.7 | 23.1 |  | 8.0bc±1.1 | 13.7 |  | 2966.0c±303.4 | 10.2 |
| **Average** |  | **405.5±106.1** | **26.2** |  | **9.0±2.5** | **27.3** |  | **3283.6±343.6** | **10.5** |
| **Breeding Lines:** |  |  |  |  |  |  |  |  |  |
| LYC-13 |  | 72.5e±9.9 | 13.7 |  | 38.7fg±5.1 | 13.2 |  | 2603.7cd±328.1 | 12.6 |
| LYC-14 |  | 164.9b±25.9 | 15.8 |  | 18.2h±4.0 | 21.9 |  | 2855.7bc±667.4 | 23.4 |
| LYC-18 |  | 129.9c±18.7 | 14.4 |  | 30.8fgh±2.6 | 8.6 |  | 3697.8a±274.1 | 7.4 |
| LYC-22 |  | 12.9gh±2.3 | 18.0 |  | 93.7c±4.1 | 4.4 |  | 1264.2f±121.1 | 9.6 |
| LYC-23 |  | 18.7g±3.1 | 16.8 |  | 71.5d±13.9 | 19.4 |  | 1249.8f±212.7 | 17.0 |
| LYC-27 |  | 6.1h±0.7 | 12.1 |  | 62.0de±12.3 | 19.8 |  | 419.8h±128.7 | 30.7 |
| LYC-28 |  | 5.9h±0.9 | 14.4 |  | 172.3a±35.3 | 20.5 |  | 1055.0fg±165.3 | 15.7 |
| LYC-29 |  | 5.7h±0.8 | 14.5 |  | 174.7a±24.3 | 13.9 |  | 898.2g±72.1 | 8.0 |
| LYC-30 |  | 5.6h±2.9 | 50.9 |  | 147.2b±17.8 | 12.1 |  | 715.5gh±82.3 | 11.5 |
| LYC-31 |  | 19.6g±2.7 | 13.9 |  | 44.0efg±3.3 | 7.6 |  | 813.2g±85.0 | 10.5 |
| LYC-32 |  | 19.5g±2.0 | 10.4 |  | 48.5ef±6.4 | 13.2 |  | 752.3gh±125.1 | 16.6 |
| LYC-34 |  | 214.6a±26.3 | 12.3 |  | 16.3h±1.3 | 7.7 |  | 3008.5b±244.7 | 8.1 |
| LYC-51 |  | 87.3d±15.0 | 17.2 |  | 29.0gh±0.8 | 2.8 |  | 2476.8d±377.8 | 15.3 |
| LYC-52 |  | 49.5f±5.6 | 11.3 |  | 28.5gh±2.4 | 8.4 |  | 1629.3e±172.0 | 10.6 |
| **Average** |  | **57.7±68.0** | **117.8** |  | **69.7±55.9** | **80.3** |  | **1674.3±1045.1** | **62.4** |
| **Wild Species:** |  |  |  |  |  |  |  |  |  |
| LYC-26 |  | 1.6±0.4 | 25.8 |  | 83.8±2.2 | 2.7 |  | 130.5±12.9 | 9.9 |
| LYC-33 |  | 1.8±0.9 | 50.9 |  | 80.8±4.7 | 5.8 |  | 150.7±62.6 | 41.8 |
| **Average** |  | **1.7±0.7** | **38.4** |  | **82.3±3.5** | 4.2 |  | **140.6±37.9** | **25.8** |