Table S2. Size and shape characteristics of pili accessions

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Accession** | **Area (mm2)** | **Length (mm)** | **Width (mm)** | **Perimeter (mm)** | **Roundness** | **Compactness (Ellipse)** | **Pointness** | **Eccentricity** |
| 66274 | 289.32 | 34.28 | 11.82 | 95.69 | 2.84 | 0.92 | 0.07 | 0.89 |
| 66273 | 415.91 | 39.82 | 13.11 | 117.83 | 2.59 | 1.02 | 0.02 | 0.95 |
| 66272 | 320.97 | 28.83 | 14.69 | 92.88 | 2.14 | 0.97 | 0.12 | 0.86 |
| 66271 | 324.81 | 31.12 | 13.68 | 102.43 | 2.58 | 0.97 | 0.08 | 0.90 |
| R4 | 290.79 | 28.10 | 14.22 | 95.93 | 2.53 | 0.92 | 0.04 | 0.86 |
| R1 | 358.19 | 30.65 | 15.44 | 98.63 | 2.16 | 0.96 | 0.02 | 0.86 |
| L4 | 336.26 | 29.87 | 14.27 | 90.53 | 2.10 | 1.00 | 0.10 | 0.86 |
| L2A | 311.06 | 27.61 | 14.89 | 95.29 | 2.14 | 0.96 | 0.12 | 0.84 |
| L1 | 316.29 | 28.71 | 14.31 | 94.53 | 2.25 | 0.98 | 0.11 | 0.87 |
| KAT | 338.48 | 30.22 | 15.16 | 100.38 | 2.52 | 0.94 | 0.04 | 0.86 |
| 66269 | 363.37 | 31.87 | 14.98 | 101.14 | 2.30 | 0.97 | 0.03 | 0.88 |
| 66262 | 286.01 | 26.76 | 14.26 | 89.11 | 2.21 | 0.95 | 0.09 | 0.84 |
| 66256 | 289.74 | 32.35 | 11.52 | 94.70 | 2.48 | 0.99 | 0.06 | 0.93 |
| 66251 | 223.83 | 31.29 | 9.60 | 90.51 | 2.92 | 0.95 | 0.05 | 0.95 |
| 66250 | 299.71 | 35.03 | 11.01 | 100.58 | 2.70 | 0.99 | 0.06 | 0.95 |
| 66243 | 266.40 | 26.65 | 13.03 | 85.62 | 2.23 | 0.98 | 0.05 | 0.86 |
| 66240 | 361.40 | 33.84 | 13.77 | 99.70 | 2.20 | 0.99 | 0.09 | 0.91 |
| 66231 | 359.26 | 35.47 | 13.84 | 104.45 | 2.42 | 0.93 | 0.07 | 0.92 |
| 66217 | 273.95 | 30.22 | 11.92 | 94.49 | 2.61 | 0.97 | 0.02 | 0.92 |
| 66213 | 415.79 | 35.90 | 15.48 | 110.36 | 2.34 | 0.95 | 0.03 | 0.90 |
| 66212 | 391.93 | 37.26 | 13.91 | 109.30 | 2.43 | 0.96 | 0.04 | 0.93 |
| 66208 | 294.62 | 31.02 | 13.14 | 90.44 | 2.21 | 0.92 | 0.15 | 0.91 |
| 66204 | 441.31 | 38.15 | 15.44 | 120.31 | 2.57 | 0.96 | 0.05 | 0.92 |
| 66197 | 364.59 | 33.94 | 13.95 | 99.46 | 2.28 | 0.97 | 0.06 | 0.90 |
| 66194 | 269.40 | 29.96 | 12.36 | 93.83 | 2.61 | 0.93 | 0.11 | 0.91 |
| 66190 | 377.92 | 33.90 | 15.21 | 106.24 | 2.38 | 0.94 | 0.02 | 0.89 |
| 66186 | 304.68 | 29.54 | 14.01 | 92.12 | 2.22 | 0.94 | 0.05 | 0.88 |
| 66183 | 307.55 | 33.47 | 12.19 | 114.25 | 3.40 | 0.96 | 0.03 | 0.93 |
| 66180 | 423.96 | 36.15 | 15.96 | 120.92 | 2.77 | 0.94 | 0.07 | 0.90 |
| 66007 | 357.46 | 34.02 | 14.32 | 102.91 | 2.36 | 0.93 | 0.13 | 0.91 |
| 65871 | 320.64 | 33.06 | 12.84 | 101.12 | 2.44 | 0.97 | 0.05 | 0.93 |
| Table S2. Size and shape characteristics of pili accessions (continued) |
| **Accession** | **Area (mm2)** | **Length (mm)** | **Width (mm)** | **Perimeter (mm)** | **Roundness** | **Compactness (Ellipse)** | **Pointedness** | **Eccentricity** |
| 65386 | 262.07 | 29.47 | 11.90 | 91.47 | 2.56 | 0.95 | 0.05 | 0.91 |
| 65381 | 257.65 | 26.81 | 13.26 | 87.06 | 2.34 | 0.92 | 0.06 | 0.87 |
| 65380 | 279.93 | 26.40 | 13.85 | 86.38 | 2.13 | 0.97 | 0.07 | 0.85 |
| 65379 | 295.87 | 31.31 | 12.49 | 95.48 | 2.48 | 0.96 | 0.03 | 0.91 |
| 65371 | 239.65 | 24.94 | 12.46 | 81.09 | 2.19 | 0.98 | 0.09 | 0.86 |
| 65368 | 245.91 | 26.56 | 12.39 | 82.64 | 2.22 | 0.95 | 0.06 | 0.88 |
| 65351 | 393.87 | 38.81 | 12.66 | 108.92 | 2.41 | 1.02 | 0.03 | **0.94** |
| 65347 | 389.04 | 36.90 | 13.19 | 112.28 | 2.45 | 1.03 | 0.04 | **0.94** |
| 65338 | 290.30 | 29.85 | 12.71 | 90.49 | 2.37 | 0.96 | 0.13 | 0.89 |
| 65331 | 265.96 | 31.10 | 11.90 | 94.30 | 2.67 | 0.92 | 0.08 | 0.92 |
| 65326 | 302.90 | 27.76 | 14.23 | 91.26 | 2.20 | 0.98 | 0.12 | 0.86 |
| 65319 | 317.61 | 35.19 | 12.07 | 106.78 | 2.79 | 0.95 | 0.02 | 0.95 |
| 65316 | 345.63 | 31.19 | 14.23 | 99.99 | 2.31 | 0.99 | 0.05 | 0.89 |
| 65314 | 298.67 | 30.58 | 13.20 | 94.77 | 2.40 | 0.94 | 0.05 | 0.90 |
| 65308 | 306.93 | 33.93 | 11.94 | 108.38 | 3.10 | 0.97 | 0.03 | 0.94 |
| 65302 | 277.68 | 33.92 | 11.21 | 99.82 | 2.86 | 0.93 | 0.02 | 0.94 |
| 65300 | 310.09 | 28.20 | 14.11 | 93.72 | 2.26 | 0.99 | 0.10 | 0.86 |
| 65297 | 334.25 | 33.68 | 13.45 | 112.05 | 3.03 | 0.94 | 0.05 | 0.92 |
| 65296 | 329.62 | 33.65 | 13.31 | 109.02 | 2.90 | 0.94 | 0.05 | 0.92 |
| 65296 | 314.66 | 30.20 | 14.12 | 95.48 | 2.31 | 0.94 | 0.05 | 0.88 |
| 65265 | 390.27 | 33.77 | 15.31 | 107.30 | 2.37 | 0.96 | 0.06 | 0.89 |
| Mean | 322.00 | 31.79 | 13.43 | 99.12 | 2.47 | 0.96 | 0.06 | 0.90 |
| Minimum | 223.83 | 24.94 | 9.6 | 81.09 | 2.1 | 0.92 | 0.02 | 0.84 |
| Maximum | 441.31 | 39.82 | 15.96 | 120.92 | 3.4 | 1.03 | 0.15 | 0.95 |
| LSD | 26.06 | 1.71 | 0.66 | 6.23 | 0.26 | 0.019 | 0.024 | 0.015 |
| Pr > F | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 |
| H’ | - | - | - | - | 0.79 | 0.79 | 0.78 | 0.86 |