**Table S1** Morphological data of the samples

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| serialnumber | plant height/cm | stem | leaf |  |
| diameter /mm | color | length /cm | width /mm | tip | shape | leaf arrangement | sheath color |
| S1 | 37.25 ± 8.98 | 4.28 ± 0.99 | 1 | 15.90 ± 3.54 | 42.02 ± 4.38 | 1 | 1 | 1 | 1 |
| S2 | 55.40 ± 27.76 | 6.01 ± 2.90 | 1 | 10.68 ± 2.64 | 42.46 ± 11.59 | 1 | 1 | 1 | 1 |
| S3 | 57.08 ± 8.18 | 6.21 ± 0.79 | 1 | 15.98 ± 2.16 | 46.57 ± 7.23 | 1 | 1 | 1 | 1 |
| S4 | 63.78 ± 19.64 | 6.23 ± 1.89 | 1 | 14.58 ± 1.94 | 49.24 ± 11.28 | 1 | 1 | 1 | 1 |
| S5 | 56.95 ± 9.28 | 6.47 ± 1.14 | 1 | 16.40 ± 1.52 | 46.61 ± 6.62 | 1 | 1 | 1 | 1 |
| S6 | 76.27 ± 36.65 | 7.41 ± 1.30 | 1 | 17.67 ± 7.37 | 19.20 ± 4.89 | 0 | 0 | 1 | 1 |
| S7 | 44.30 ± 7.16 | 6.23 ± 1.26 | 1 | 18.25 ± 3.07 | 40.70 ± 2.59 | 0 | 0 | 1 | 1 |
| S8 | 55.36 ± 43.58 | 6.24 ± 5.17 | 1 | 11.98 ± 4.51 | 38.53 ± 17.27 | 1 | 1 | 1 | 1 |
| S9 | 22.40 ± 9.84 | 4.09 ± 2.00 | 1 | 15.83 ± 4.06 | 37.85 ± 5.93 | 1 | 1 | 1 | 1 |
| S10 | 36.60 ± 18.59 | 4.21 ± 1.52 | 1 | 16.73 ± 1.94 | 39.57 ± 4.94 | 1 | 1 | 1 | 1 |
| S11 | 22.16 ± 6.91 | 4.39 ± 0.66 | 1 | 15.96 ± 1.39 | 41.45 ± 6.08 | 1 | 1 | 1 | 1 |
| S12 | 42.20 ± 22.02 | 5.59 ± 2.52 | 1 | 13.70 ± 1.67 | 42.69 ± 17.27 | 1 | 1 | 1 | 1 |
| S13 | 40.90 ± 3.56 | 6.72 ± 0.35 | 1 | 18.37 ± 0.83 | 69.79 ± 1.60 | 1 | 1 | 1 | 1 |
| S14 | 47.50 ± 22.25 | 6.47 ± 2.38 | 1 | 14.00 ± 1.43 | 51.37 ± 3.49 | 1 | 1 | 1 | 1 |
| S15 | 23.62 ± 13.93 | 3.14 ± 0.79 | 1 | 12.70 ± 2.35 | 26.73 ± 18.98 | 0 | 0 | 1 | 1 |
| S16 | 20.93 ± 14.02 | 2.70 ± 1.21 | 1 | 11.08 ± 3.54 | 25.07 ± 11.56 | 1 | 1 | 1 | 1 |
| S17 | 33.80 ± 6.22 | 4.46 ± 0.46 | 1 | 17.97 ± 2.71 | 16.96 ± 4.71 | 0 | 1 | 1 | 1 |
| S18 | 35.06 ± 14.16 | 5.23 ± 2.02 | 1 | 17.04 ± 2.67 | 42.88 ± 8.28 | 1 | 1 | 1 | 1 |
| S19 | 32.50 ± 10.90 | 3.91 ± 0.41 | 1 | 12.45 ± 2.02 | 25.07 ± 5.48 | 0 | 0 | 0 | 1 |
| S20 | 50.40 ± 24.33 | 5.32 ± 2.22 | 1 | 9.63 ± 1.29 | 18.27 ± 5.89 | 0 | 1 | 0 | 1 |
| S21 | 23.78 ± 31.63 | 3.21 ± 1.92 | 1 | 8.04 ± 1.42 | 12.93 ± 3.16 | 0 | 0 | 0 | 1 |
| S22 | 23.95 ± 20.00 | 3.77 ± 1.47 | 1 | 8.38 ± 1.28 | 16.01 ± 3.12 | 0 | 1 | 0 | 1 |
| S23 | 23.10 ± 15.63 | 2.99 ± 1.15 | 1 | 9.43 ± 2.64 | 16.15 ± 3.03 | 0 | 0 | 0 | 1 |
| S24 | 17.58 ± 7.71 | 2.99 ± 0.62 | 1 | 14.55 ± 1.64 | 10.98 ± 2.16 | 0 | 0 | 0 | 1 |
| S25 | 32.73 ± 17.43 | 3.87 ± 1.47 | 1 | 8.73 ± 1.29 | 13.79 ± 1.51 | 0 | 0 | 0 | 1 |
| S26 | 25.33 ± 9.50 | 3.89 ± 0.81 | 1 | 10.05 ± 2.12 | 26.18 ± 7.52 | 1 | 1 | 1 | 1 |
| S27 | 14.22 ± 7.56 | 3.09 ± 0.40 | 1 | 11.14 ± 0.98 | 41.03 ± 3.63 | 1 | 1 | 1 | 1 |
| S28 | 20.30 ± 9.42 | 4.10 ± 1.07 | 1 | 15.16 ± 2.84 | 36.07 ± 9.89 | 1 | 1 | 1 | 1 |
| S29 | 22.55 ± 15.10 | 3.48 ± 1.71 | 1 | 11.55 ± 4.06 | 35.33 ± 13.62 | 1 | 1 | 1 | 1 |
| S30 | 21.77 ± 7.82 | 3.10 ± 0.58 | 1 | 11.10 ± 0.26 | 34.19 ± 2.56 | 1 | 1 | 1 | 1 |
| S31 | 24.68 ± 7.85 | 2.78 ± 0.73 | 1 | 12.35 ± 1.48 | 36.04 ± 4.13 | 1 | 1 | 1 | 1 |
| S32 | 77.96 ± 61.36 | 4.64 ± 2.03 | 1 | 11.54 ± 2.76 | 21.42 ± 9.61 | 0 | 0 | 0 | 1 |
| S33 | 21.55 ± 9.16 | 2.96 ± 0.68 | 1 | 9.95 ± 0.87 | 22.09 ± 8.81 | 0 | 0 | 0 | 1 |
| S34 | 22.08 ± 6.73 | 4.91 ± 0.92 | 1 | 15.50 ± 1.53 | 26.23 ± 5.99 | 0 | 0 | 1 | 1 |
| S35 | 20.80 ± 1.41 | 2.45 ± 0.37 | 1 | 6.15 ± 0.78 | 11.97 ± 4.71 | 0 | 0 | 1 | 1 |
| S36 | 15.70 ± 4.45 | 8.48 ± 0.27 | 1 | 13.90 ± 0.35 | 26.74 ± 3.48 | 0 | 0 | 0 | 0 |
| S37 | 30.20 ± 5.78 | 3.31 ± 0.44 | 1 | 17.30 ± 1.06 | 25.26 ± 4.32 | 0 | 0 | 0 | 0 |
| S38 | 16.50 ± 7.68 | 3.49 ± 0.59 | 1 | 12.70 ± 2.69 | 40.24 ± 6.49 | 1 | 1 | 1 | 1 |
| S39 | 78.2 ± 7.71 | 5.24 ± 0.55 | 1 | 18.80 ± 1.35 | 18.20 ± 3.38 | 0 | 0 | 0 | 0 |

**Continued Table S1** Morphological data of the samples

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| serialnumber | plant height/cm | stem | leaf |  |
| diameter /mm | color | length /cm | width /mm | tip | shape | leaf arrangement | sheath color |
| S40 | 66.30 ± 1.05 | 6.46 ± 0.24 | 1 | 10.90 ± 1.46 | 34.07 ± 3.42 | 1 | 1 | 1 | 1 |
| S41 | 13.40 ± 3.96 | 2.77 ± 0.11 | 1 | 12.50 ± 1.70 | 25.52 ± 1.07 | 0 | 0 | 0 | 0 |
| S42 | 33.50 ± 16.85 | 3.99 ± 1.78 | 1 | 13.70 ± 2.09 | 36.71 ± 5.08 | 1 | 1 | 1 | 1 |
| S43 | 22.12 ± 2.80 | 3.47 ± 0.76 | 1 | 12.46 ± 1.85 | 39.25 ± 6.22 | 1 | 1 | 1 | 1 |
| S44 | 16.30 ± 4.26 | 2.36 ± 0.47 | 1 | 7.63 ± 2.37 | 27.89 ± 9.64 | 1 | 1 | 1 | 1 |
| S45 | 18.65 ± 8.46 | 2.76 ± 0.65 | 1 | 7.13 ± 1.27 | 32.88 ± 3.87 | 1 | 1 | 1 | 1 |
| S46 | 26.57 ± 7.48 | 4.04 ± 0.78 | 1 | 16.53 ± 1.03 | 48.27 ± 12.38 | 1 | 1 | 1 | 1 |
| S47 | 23.35 ± 7.85 | 3.38 ± 0.68 | 1 | 11.88 ± 3.30 | 34.43 ± 9.32 | 1 | 1 | 1 | 1 |