|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Germination rate % | Root length (cm) | Shoot length (cm) | Fresh weight (g) | Dry weight (g) |
| Control | 79.17±8.78a | 15.98±1.77a | 65.39±4.93a | 29.33±4.37a | 2.83±0.83a |
| 1 min | 82.5±7.5a | 19.01±2.87ab | 70.67±6.22a | 29.37±2.25a | 2.94±0.56a |
| 3 min | 89.17±5.20b | 19.06±1.20ab | 76.06±5.1b | 31.08±3.30a | 3.63±0.42a |
| 6 min | 96.67±3.82c | 19.94±1.08b | 76.66±6.18b | 34.93±8.35a | 5.61±0.85b |
| 9 min | 90.83±5.20b | 20.16±2.98b | 80.07±4.97b | 30.79±7.13a | 5.01±0.60b |
| 12 min | 88.33±6.29b | 19.48±1.19ab | 74.51±5.72ab | 30.74±3.58a | 3.36±0.48a |

**Table S1:** Effects of plasma treatment on germination, root length, shoot length, fresh weight, and dry weight. Different alphabet indicates a significant difference among mean ± SD (n=3) at P < 0.05 level

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Treatmt | Chlorophyll (units) | No. of Tiller | Stem diameter (mm) | Plant height (cm) | Panicle length (cm) | Panicle diameter (mm) |
| Control | 37.64±3.28a | 3.78±.084a | 3.46±0.3a | 73.31±3.86a | 15.73±2.12a | 8.06±1.65a |
| 1 min | 37.8±4.73a | 4.56±1.26ab | 3.52±.43ab | 80.84±4.65ab | 17.59±0.89ab | 9.91±2.1ab |
| 3 min | 42.57±4.26ab | 4.88±1.26ab | 3.81±0.22ab | 86.1±7.22ab | 19.08±1.05bc | 11.89±1.15bc |
| 6 min | 87.84±6.09b | 7.78±.77c | 4.93±.35c | 94.88±8.32c | 20.72±2.18c | 14.98±2.06c |
| 9 min | 44.79±5.09ab | 6.56±1.07bc | 4.22±.61b | 90.44±7.04bc | 19.22±1.32bc | 13.62±1.66c |
| 12 min | 40.2±3.61ab | 4.67±0.67ab | 3.73±.27ab | 88.45±6.47bc | 18.63±0.75bc | 12.24±0.99bc |

**Table S2:** Effects of plasma treatment on Chlorophyll content, number of tiller, stem diameter, panicle length, and panicle diameter.Different alphabet indicates a significant difference among mean ± SD (n=3) at P < 0.05 level.

|  |  |  |
| --- | --- | --- |
| Gene Name | Accession number | Primer sequences |
| *TaActin* | AY212324 | Forward: GAATCCATGAGACCACCTAC Reverse: AATCCAGACACTGTACTTCC |
| *TaCAT* | S81897.1 | Forward: TTGGACCAGGCTTTATGGTC Reverse: CCCTGTCACCACTCCAAGAT |
| *TaSOD* | AF439787.2 | Forward: CGAAGATTCCATTTCCCAGA Reverse: TCGAGGATATCGGTGAAAGC |

**Table S3:** *TaActin*, *TaCAT* and *TaSOD* Primer Sequences.