***Plant Genetic Resources***

***Supplementary material***

**Developing short-season cotton genotypes with high harvest index might be an advantageous option under late duration plantings**

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**Supplementary Table S1** Description of climatic parameters during 2017 and 2018

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Month | Year | T-Mean (°C) | T-Max (°C) | T-Min (°C) | Humidity (%) | Rainfall (mm) |
| April | 2017 | 30.6 | 38.4 | 23 | 37 | 7.87 |
|   | 2018 | 29.7 | 37 | 22.4 | 40.9 | 3.05 |
| May | 2017 | 34.1 | 41.2 | 27.6 | 41.9 | 169.92 |
|   | 2018 | 32.6 | 39.3 | 26.1 | 40.3 | 8.13 |
| June | 2017 | 33.1 | 38.4 | 27.6 | 58.1 | 291.09 |
|   | 2018 | 34.3 | 39.8 | 29 | 52.4 | 18.8 |
| July | 2017 | 33.7 | 38.6 | 28.8 | 63.3 | 247.4 |
|   | 2018 | 33.5 | 38.3 | 28.9 | 61.6 | 56.9 |
| August | 2017 | 32.7 | 37.3 | 28.4 | 64.4 | 5.08 |
|   | 2018 | 32.5 | 37.2 | 28.4 | 64.9 | 10.93 |
| September | 2017 | 31 | 36.9 | 25.4 | 61.3 | 80.01 |
|   | 2018 | 30.8 | 36.2 | 25.8 | 61.1 | 0 |
| October | 2017 | 27.1 | 35.3 | 20 | 56.1 | 0 |
|   | 2018 | 26 | 33.6 | 19.6 | 55.3 | 0 |
| November | 2017 | 18.3 | 25.4 | 12.8 | 72.8 | 9.91 |
|   | 2018 | 20.1 | 27.5 | 14 | 63.4 | 0 |

**Supplementary Table S2** Mean square values for various traits evaluated for two years in cotton

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| SOV | Df | PH | NN | BP | SCY | AGFB | HI |
| Rep. | 2 | 1296.54 | 530.16 | 530.16 | 1776.08 | 14880.2 | 40.56 |
| Years | 1 | 11.22 | 1.42 | 10.22 | 9.22 | 19.22 | 1.09 |
| Geno. | 2 | 184.24\*\* | 655.76\*\* | 872.82\*\* | 7083.86\*\* | 33148.6\*\* | 157.24\*\* |
| SD | 3 | 15462.6\*\* | 1172.07\*\* | 4474.43\*\* | 22261.6\*\* | 238069\*\* | 26.003\*\* |
| Years\* Geno. | 2 | 201.42 | 37.62 | 205.42 | 205.42 | 205.42 | 21.62 |
| Year\*SD | 3 | 1.18E-28 | 7.20E-30 | 3.06E-29\* | 6.41E-29 | 2.39E-27\* | 1.48E-30 |
| Geno.\*SD | 6 | 608.626\*\* | 127.39\*\* | 38.40\*\* | 256.69\*\* | 3026.75\*\* | 1.303\*\* |
| Year\* Geno. \*SD | 6 | 7.61E-29 | 2.19E-29 | 1.06E-29 | 3.01E-28 | 7.63E-28 | 4.54E-30 |
| Error | 46 | 4.86E-29 | 3.74E-30 | 7.89E-30 | 4.21E-29 | 6.61E-28 | 2.14E-30 |

SOV, Source of variation; Df, Degrees of freedom; Rep, replication; Geno., genotype; SD, sowing date; PH, Plant height; NN, Total number of nodes; BP, Number of bolls per plant; SCY, Seed cotton yield; AGFB, Above ground fresh biomass; HI, Harvest index

\*= *P*<0.01, \*\*= *P*<0.05.