Table S1. Weather parameters of experimental site during 2012/13

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Month** | **Temperature (°C)** | **Rainfall (mm)** | **Relative humidity (%)** | **Bright sunshine hours** | **Evaporation (mm)** |
| **Max.** | **Min.** | **I** | **II** |
| Jul | 33.4 | 23.4 | 226.1 | 91.0 | 72.1 | 5.3 | 136.3 |
| Aug | 33.6 | 24.6 | 181.2 | 88.4 | 69.2 | 5.5 | 121.4 |
| Sep | 31.6 | 22.9 | 111.0 | 89.9 | 81.9 | 3.8 | 105.1 |
| Oct | 30.8 | 19.8 | 56.4 | 94.3 | 74.8 | 6.7 | 104.2 |
| Nov | 29.7 | 15.4 | 0.0 | 89.5 | 79.4 | 7.9 | 87.4 |
| Dec | 24.7 | 10.7 | 0.0 | 97.7 | 66.5 | 7.4 | 105.8 |
| Jan | 24.6 | 7.9 | 0.0 | 88.0 | 53.0 | 3.8 | 93.1 |
| Feb | 28.7 | 9.7 | 12.3 | 77.2 | 56.7 | 7.0 | 102.5 |
| Mar | 32.1 | 13.1 | 28.1 | 88.2 | 64.2 | 6.8 | 115.9 |
| Apr | 31.7 | 13.4 | 116.2 | 78.3 | 72.1 | 6.2 | 92.2 |
| May | 31.8 | 15.7 | 239.1 | 81.8 | 70.8 | 6.3 | 69.5 |
| Jun | 35.1 | 20.1 | 136.2 | 75.1 | 65.1 | 5.8 | 145.0 |

Table S2. Weather parameters of experimental site during 2013/14

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Month** | **Temperature (°C)** | **Rainfall (mm)** | **Relative humidity (%)** | **Bright sunshine hours** | **Evaporation (mm)** |
| **Max.** | **Min.** | **I** | **II** |
| Jul | 34.9 | 19 | 54.7 | 85.1 | 69.2 | 6.1 | 114.5 |
| Aug | 34.9 | 19.4 | 116.6 | 90.4 | 71 | 5.2 | 107.3 |
| Sep | 34.2 | 18.4 | 85.9 | 90.5 | 71 | 5.1 | 100.3 |
| Oct | 32.5 | 16.2 | 143.9 | 88.2 | 77.7 | 6.6 | 93.6 |
| Nov | 28.1 | 10.2 | 4.1 | 92.4 | 88.2 | 6.8 | 78.5 |
| Dec | 23.4 | 7.8 | 4.3 | 90.5 | 80.7 | 6.9 | 69.4 |
| Jan | 22.1 | 7.5 | 1.2 | 91.3 | 85.8 | - | 55.1 |
| Feb | 24.5 | 10.25 | 29.7 | 89.25 | 88.4 | 6.2 | 61.7 |
| Mar | 28.6 | 11.09 | 3.4 | 86.7 | 82.9 | 6.5 | 70.8 |
| Apr | 34.9 | 15.6 | 24.2 | 83.2 | 64 | 5.3 | 103.3 |
| May | 33.1 | 13.4 | 315.7 | 86.7 | 71.8 | 3.6 | 91.6 |
| Jun | 33 | 14.9 | 184.9 | 90.1 | 70.1 | 4.7 | 77.5 |

Table S3**.** Herbicide treatments used in the study

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Symbols** | **Herbicide/treatments** | **Common name** | **Rate****( a.i. kg ha-1 )** | **Manufacturer** |
| W1 | Butachlor 50% EC | Machete | 1.0 | Monsanto Pvt. Ltd. India |
| W2 | Butachlor 50% EC – 2, 4 D **Sodium Salt 80% WP** | - | 1.0  | - |
|  | 2, 4 D **Sodium Salt 80% WP** | Cut Off 80 | 0.75 | Jai Shree Rasayan Udyog Ltd., India |
| W3 | Bensulfuron methyl 0.06% + Pretilachlor 0.6 % | Londax Power | 0.06 + 0.60 | DuPont, India |
| W4 | Pyrazosulfuron ethyl 10 WP | Saathi | 0.2 | United Phosphorus Limited (UPL), India |
| W5 | Chlorimuron + Metsulfuron-methyl 10 WP | Almix | 0.004 | DuPont, India |
| W6 | Cono weeder  |  | - |  |
| W7 | Hand weeding  |  | - |  |
| W8 | Weedy check |  | - |  |