**Appendix A Supplementary data**

**Supplementary Figure**



**Fig. S1a**: Agro-meteorological parameters prevailing during crop season 2021



**Fig. S1b**: Agro-meteorological parameters prevailing during crop season 2022



**Fig. S2.** Frequency distribution of **(a)**. Maximum temperature (⁰C) and **(b)**. Bright sunshine hours (h) during six crop seasons and the peak represents the maximum duration of maximum temperature and sunshine distribution throughout the crop season

**Supplementary Table**

**Table S1:** Details of seventy-four chickpea variety/germplasm lines of different maturity groups and released for different agro-ecological zone used for drought tolerant early maturing photo-thermo-insensitivity main screening studies

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Rabi 2020-21** | **Kharif 2021** |
| **S.N** | Genotypes | **Yield (kg ha-1)** | **Physiological maturity (duration)** | **Yield (kg ha-1)** | **Physiological maturity (days)** |
| 1 | ICE 7550 | 1178±82 | Medium | 539±6 | 65±1 |
| 2 | ICE 15654-A | 947±89 | Early | 695±24 | 63±1 |
| 3 | ICE 15654-B | 742±62 | Early | 675±23 | 65±1 |
| 4 | ICE 15874-A | 989±49 | Early | 532±35 | 68±1 |
| 5 | ICE 6565 | 924±67 | Late | 0±0 | 79±2 |
| 6 | IPC 06-11 | 716±76 | Early | 700±19 | 63±1 |
| 7 | Digvijay | 871±62 | Late | 331±7 | 71±1 |
| 8 | SA 1 | 1058±97 | Late | 717±26 | 65±1 |
| 9 | GBM 2 | 1071±73 | Late | 372±24 | 73±2 |
| 10 | JG 11 | 1196±77 | Early | 804±18 | 65±1 |
| 11 | MNK 1 | 638±12 | Early | 467±12 | 73±2 |
| 12 | GNG 663 | 889±112 | Medium | 27±3 | 80±2 |
| 13 | SAKI 9516 | 1142±78 | Late | 520±60 | 71±2 |
| 14 | RSG 888 | 716±86 | Medium | 229±62 | 75±3 |
| 15 | Pusa 212 | 773±43 | Medium | 159±21 | 80±0 |
| 16 | JG 24 | 804±66 | Late | 186±22 | 80±1 |
| 17 | Pusa 244 | 809±89 | Late | 433±7 | 72±0 |
| 18 | BG 396 | 631±58 | Late | 33±4 | 80±0 |
| 19 | CSJ 515 | 1067±82 | Medium | 52±4 | 81±1 |
| 20 | BDG 75 | 836±82 | Medium | 290±16 | 79±1 |
| 21 | ICCV 96030 | 822±72 | Late | 458±10 | 70±1 |
| 22 | JG 12 | 944±125 | Medium | 358±31 | 73±1 |
| 23 | JG 315 | 951±95 | Medium | 250±29 | 71±0 |
| 24 | L 550 | 884±99 | Late | 156±16 | 79±1 |
| 25 | BG 276 | 986±35 | Medium | 148±16 | 79±1 |
| 26 | Pusa 240 | 756±56 | Late | 146±60 | 74±2 |
| 27 | RSG 896 | 836±125 | Medium | 488±17 | 76±5 |
| 28 | PG 5 | 927±31 | Medium | 692±61 | 70±2 |
| 29 | PG 186 | 1091±67 | Early | 29±3 | 80±0 |
| 30 | Pusa Green 112 | 813±113 | Late | 0±0 | 82±1 |
| 31 | JG 63 | 1089±105 | Medium | 310±62 | 72±2 |
| 32 | Vishal | 1347±104 | Early | 796±53 | 68±0 |
| 33 | ICC 4958 | 1178±107 | Medium | 443±10 | 69±1 |
| 34 | JG 16 | 1364±92 | Early | 820±13 | 69±1 |
| 35 | GNG 1581 | 844±80 | Late | 39±5 | 80±0 |
| 36 | GNG 1958 | 1254±35 | Late | 522±5 | 80±1 |
| 37 | PBG 5 | 1062±27 | Medium | 434±19 | 80±0 |
| 38 | ICCV 92944 | 1049±4 | Early | 942±30 | 66±1 |
| 39 | BGM 408 | 831±77 | Late | 0±0 | 81±1 |
| 40 | Pusa 1003 | 1129±93 | Medium | 408±22 | 79±1 |
| 41 | DCP 92-3 | 773±20 | Medium | 352±13 | 75±1 |
| 42 | Pusa 362 | 1138±100 | Late | 398±17 | 75±1 |
| 43 | Sadabhahar | 371±116 | Late | 0±0 | 82±1 |
| 44 | Annigeri | 622±69 | Medium | 206±6 | 78±0 |
| 45 | GG-2 | 618±75 | Medium | 247±33 | 76±2 |
| 46 | CSJD 8962 | 642±79 | Medium | 0±0 | 81±1 |
| 47 | Pusa 256 | 495±43 | Medium | 394±13 | 80±1 |
| 48 | Pusa 372 | 395±110 | Late | 117±17 | 79±1 |
| 49 | GNG 1488 | 662±113 | Early | 356±25 | 77±1 |
| 50 | Vaibhav | 593±4 | Medium | 14±14 | 81±1 |
| 51 | Vijay | 829±81 | Early | 702±27 | 68±2 |
| 52 | Pant G 114 | 600±118 | Early | 200±3 | 77±2 |
| 53 | JG 14 | 978±69 | Early | 811±13 | 72±1 |
| 54 | JG 74 | 649±46 | Medium | 573±35 | 71±1 |
| 55 | ICC 15614 | 651±104 | Medium | 622±22 | 68±2 |
| 56 | DCP 93-3 | 624±55 | Medium | 591±20 | 72±2 |
| 57 | ICC 8950 | 618±105 | Medium | 128±23 | 79±1 |
| 58 | PG 114 | 756±80 | Medium | 542±23 | 71±2 |
| 59 | KWR 108 | 489±33 | Medium | 404±21 | 70±2 |
| 60 | PG 96006 | 580±81 |  Medium | 578±23 | 69±3 |
| 61 | GNG 2144 | 445±53 | Medium | 284±15 | 76±1 |
| 62 | GNG 2171 | 887±23 | Medium | 705±72 | 73±2 |
| 63 | L4 16 | 289±69 | Medium | 0±0 | 80±1 |
| 64 | L4 25 | 665±39 | Medium | 424±22 | 73±2 |
| 65 | IPC2014-56 | 353±62 | Late | 0±0 | 77±1 |
| 66 | IPC2014-92 | 151±31 | Medium | 0±0 | 81±1 |
| 67 | IPC2014-88 | 489±39 | Medium | 410±17 | 77±1 |
| 68 | IPC2014-55 | 493±84 | Late | 0±0 | 72±1 |
| 69 | IPC2015-44 | 400±37 | Late | 11±11 | 81±1 |
| 70 | IPC2011-33 | 400±74 | Late | 0±0 | 81±1 |
| 71 | IPC2014-99 | 722±47 | Medium | 604±16 | 73±1 |
| 72 | IPC2015-22 | 464±94 | Late | 0±0 | 81±1 |
| 73 | IPC2011-78 | 331±107 | Late | 0±0 | 80±1 |
| 74 | IPC2011-61 | 753±68 | Medium | 0±0 | 77±1 |
|  | **C.D.** | **217.90** |  | **69.72** | **3.43** |
|  | **SE(m)** | **77.877** |  | **24.683** | **1.216** |
|  | **SE(d)** | **110.135** |  | **34.908** | **1.719** |
|  | **C.V.** | **17.49** |  | **10.40** | **2.31** |

**Table S2:** Details of selected chickpea variety/germplasm lines and released for different agro-ecological zone used for drought tolerant early maturing photo-thermo-insensitivity studies

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.N | **Variety/Germplasm** | **Desi/Kabuli** | **Maturity Duration (days)** | **Drought (tolerant/sensitive)** | **Heat (tolerant/sensitive)** | **Disease** | **Seed Shape** | **Duration** | **Released for** | **Released by** |
| 1 | MNK-1 | Kabuli | 100-105 | No earlier information, released for irrigated condition | Bold | Early | South Zone | Gulbarga, Karnataka |
| 2 | ICE 15654-A | Desi | 100 | - | Small | Early | Germplasm line | NA |
| 3 | IPC 06-11 | Desi | 100 | - | Bold | Early | Germplasm line | NA |
| 4 | JG-11 |  | 110-115 | Tolerant |  | Wilt resistant & moderately resistant to root rot | Bold | Medium |  |  |
| 5 | JG-14 | Desi | 100-105 | Tolerant | Tolerant | Wilt resistant | Bold | Early | Central India | JNKVV, Jabalpur |
| 6 | JG-16 | Desi | 110 | Tolerant |  | Wilt resistant | Bold | Medium | Central India | ICAR-IARI, New Delhi |
| 7 | Vishal | Desi | 110-115 | Tolerant |  |  | Bold | Medium | Western Maharashtra. | MPKV, Rahuri |
| 8 | Vijay | Desi | 105-110 | Tolerant |  |  | Small | Medium | Maharashtra, Madhya Pradesh and Gujarat | MPKV, Rahuri |

**Table S3.** Standard weekly agro-meteorological data during the crop seasons from June 2021-September 2022

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Season | Standard week | Temperature (⁰C) | Relative Humidity (RH, %) | Bright Sunshine Hours(h) | Rainfall(mm) | Photoperiod |
|  | Max | Min | Max | Min | (h) |
| I. *Kharif* 2021(Jun 19 to Aug 30) | 24 | 31.29 | 22.01 | 90.43 | 63.86 | 3.64 | 3.20 | 13.09 |
| 25 | 31.57 | 22.11 | 87.57 | 58.29 | 3.49 | 0.20 | 13.10 |
| 26 | 32.61 | 21.53 | 84.57 | 47.86 | 7.94 | 1.14 | 13.09 |
| 27 | 32.01 | 22.69 | 89.43 | 66.14 | 2.87 | 5.40 | 13.06 |
| 28 | 29.57 | 21.99 | 91.57 | 78.00 | 2.63 | 4.00 | 13.02 |
| 29 | 29.23 | 21.93 | 90.29 | 74.29 | 0.94 | 0.60 | 12.96 |
| 30 | 29.46 | 21.54 | 90.43 | 64.57 | 2.94 | 0.43 | 12.89 |
| 31 | 30.50 | 21.24 | 88.00 | 59.14 | 4.59 | 0.03 | 12.80 |
| 32 | 30.56 | 20.91 | 83.57 | 66.71 | 4.54 | 0.86 | 12.71 |
| 33 | 28.20 | 21.27 | 91.00 | 72.57 | 2.11 | 1.17 | 12.60 |
| 34 | 31.89 | 21.24 | 86.71 | 53.43 | 6.81 | 2.43 | 12.49 |
| 35 | 29.93 | 21.19 | 90.14 | 63.86 | 3.14 | 2.09 | 12.38 |
| II. Late *Kharif* 2021(Aug 30 19 to Nov 22) | 36 | 29.33 | 21.41 | 91.29 | 72.57 | 3.70 | 4.94 | 12.26 |
| 37 | 30.70 | 20.36 | 89.71 | 57.14 | 5.20 | 2.66 | 12.14 |
| 38 | 30.26 | 21.20 | 93.14 | 75.29 | 2.36 | 3.31 | 12.01 |
| 39 | 30.73 | 20.91 | 91.14 | 58.00 | 5.39 | 7.06 | 11.89 |
| 40 | 32.27 | 21.26 | 94.86 | 58.29 | 6.70 | 12.06 | 11.77 |
| 41 | 31.84 | 19.74 | 86.71 | 42.57 | 7.33 | 0.00 | 11.65 |
| 42 | 31.91 | 17.36 | 80.00 | 36.71 | 9.16 | 0.00 | 11.53 |
| 43 | 31.60 | 16.07 | 75.00 | 34.29 | 7.89 | 0.00 | 11.42 |
| 44 | 31.44 | 20.21 | 79.14 | 49.00 | 5.56 | 0.00 | 11.32 |
| 45 | 30.56 | 15.19 | 74.57 | 43.16 | 6.34 | 0.00 | 11.22 |
| 46 | 30.24 | 21.61 | 92.29 | 68.57 | 2.27 | 3.49 | 11.13 |
| III. Rabi 2021-22(Nov 17 19 to Feb 12) | 47 | 30.17 | 18.76 | 90.29 | 48.29 | 6.01 | 0.63 | 11.06 |
| 48 | 26.71 | 16.94 | 91.00 | 72.43 | 0.83 | 8.00 | 11.00 |
| 49 | 28.41 | 15.89 | 87.71 | 48.57 | 3.17 | 0.00 | 10.96 |
| 50 | 27.84 | 14.84 | 89.43 | 48.57 | 2.86 | 0.00 | 10.93 |
| 51 | 28.77 | 12.37 | 93.57 | 38.29 | 4.94 | 0.00 | 10.92 |
| 52 | 28.59 | 15.17 | 92.86 | 49.86 | 2.37 | 0.00 | 10.93 |
| 1 | 29.01 | 13.79 | 91.71 | 40.71 | 5.57 | 0.00 | 10.95 |
| 2 | 26.73 | 13.44 | 91.86 | 49.43 | 4.33 | 0.00 | 11.00 |
| 3 | 28.94 | 13.07 | 90.57 | 40.86 | 7.79 | 0.00 | 11.06 |
| 4 | 26.74 | 10.28 | 82.63 | 39.13 | 8.19 | 0.00 | 11.13 |
| 5 | 31.16 | 11.21 | 83.43 | 27.43 | 9.77 | 0.00 | 11.22 |
| 6 | 30.46 | 13.04 | 89.14 | 32.71 | 8.81 | 0.00 | 11.31 |
| 7 | 31.34 | 14.00 | 82.43 | 28.71 | 9.43 | 0.00 | 11.42 |
| IV. Summer 2022(Feb 19 to Apr 26) | 8 | 34.21 | 14.96 | 75.43 | 24.00 | 9.34 | 0.00 | 11.53 |
| 9 | 34.26 | 15.70 | 72.29 | 21.14 | 8.04 | 0.00 | 11.64 |
| 10 | 33.21 | 18.83 | 79.29 | 27.43 | 5.34 | 0.06 | 11.76 |
| 11 | 37.64 | 18.00 | 71.86 | 14.86 | 7.56 | 0.00 | 11.89 |
| 12 | 36.67 | 21.73 | 74.86 | 22.43 | 3.79 | 0.00 | 12.01 |
| 13 | 39.11 | 17.74 | 62.00 | 13.14 | 8.39 | 0.00 | 12.13 |
| 14 | 39.36 | 22.37 | 79.00 | 15.29 | 7.17 | 0.00 | 12.25 |
| 15 | 38.19 | 22.47 | 72.00 | 19.29 | 5.46 | 0.00 | 12.37 |
| 16 | 38.79 | 22.73 | 65.86 | 21.57 | 6.91 | 0.14 | 12.49 |
| 17 | 39.63 | 22.07 | 66.14 | 18.14 | 9.33 | 0.00 | 12.60 |
| V. Early *Kharif* 2022(Apr 26 to Jun 17) | 18 | 39.24 | 21.27 | 65.86 | 16.14 | 8.83 | 0.00 | 12.70 |
| 19 | 38.90 | 23.46 | 76.86 | 23.86 | 2.94 | 0.11 | 12.80 |
| 20 | 36.79 | 23.76 | 72.57 | 31.57 | 2.99 | 0.00 | 12.88 |
| 21 | 35.76 | 22.70 | 74.86 | 32.57 | 8.06 | 0.00 | 12.96 |
| 22 | 36.30 | 22.07 | 78.00 | 34.43 | 5.53 | 5.46 | 13.02 |
| 23 | 34.49 | 21.99 | 86.29 | 50.71 | 5.30 | 9.34 | 13.06 |
| 24 | 34.40 | 22.24 | 81.71 | 42.00 | 7.81 | 0.23 | 13.09 |
| VI. *Kharif* 2022(Jun 23 to Sep 07) | 25 | 31.39 | 22.21 | 87.57 | 65.43 | 2.33 | 0.34 | 13.10 |
| 26 | 32.06 | 21.87 | 85.29 | 54.71 | 4.43 | 0.23 | 13.09 |
| 27 | 29.81 | 22.03 | 90.14 | 71.43 | 0.39 | 3.06 | 13.06 |
| 28 | 26.53 | 21.30 | 92.00 | 80.00 | 1.50 | 3.03 | 13.02 |
| 29 | 30.04 | 21.70 | 88.57 | 69.71 | 2.27 | 0.34 | 12.96 |
| 30 | 29.63 | 21.43 | 94.71 | 69.29 | 2.94 | 5.09 | 12.89 |
| 31 | 30.57 | 21.07 | 92.57 | 67.43 | 2.66 | 5.17 | 12.80 |
| 32 | 28.10 | 20.91 | 91.71 | 74.86 | 1.57 | 6.17 | 12.71 |
| 33 | 29.33 | 20.97 | 90.14 | 63.00 | 4.13 | 0.80 | 12.60 |
| 34 | 30.54 | 20.66 | 87.86 | 56.00 | 5.20 | 0.06 | 12.49 |
| 35 | 32.09 | 21.84 | 91.71 | 61.14 | 5.39 | 4.06 | 12.38 |
| 36 | 30.41 | 22.07 | 95.86 | 75.57 | 2.54 | 7.51 | 12.26 |

**Table S4.** Days to first flower and 50% flower of chickpea genotypes in all six seasons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Season | I. *Kharif* 2021(Jun 19 to Aug 30) | II. Late *Kharif* 2021(Aug 30 19 to Nov 22) | III. Rabi 2021-22(Nov 17 19 to Feb 12) | IV. Summer 2022(Feb 19 to Apr 26) | V. Early *Kharif* 2022(Apr 26 to Jun 17) | VI. *Kharif* 2022(Jun 23 to Sep 07) |
| Temperature (⁰C) | 34.5/19.7 | 33.6/11.4 | 32.9/9.3 | 40.3/12.8 | 41.4/18.9 | 34.2/19.6 |
| Photoperiod (h) | 12.8 | 11.53 | 11.06 | 12.37 | 13.02 | 12.80 |
|  Parameter→↓Genotype | Days to 1st flower | Days to 50 % flower | Days to 1st flower | Days to 50 % flower | Days to 1st flower | Days to 50 % flower | Days to 1st flower | Days to 50 % flower | Days to 1st flower | Days to 50 % flower | Days to 1st flower | Days to 50 % flower |
| MNK-1MNK 1 | 40.5a | 43.0abc | 43.0b | 48.0b | 44.5b | 52.5ab | 33.5c | 37.5e | 34.0bc | 36.0e | 31.0c | 35.0d |
| ICE 15654-A | 39.0b | 41.5c | 39.0c | 42.3c | 41.0d | 50.5b | 34.0c | 38.0de | 33.0cd | 38.5d | 30.5cd | 37.5c |
| IPC 06-11 | 40.5a | 41.5c | 37.0e | 49.0ab | 40.5d | 50.5b | 34.0c | 40.0c | 32.0d | 38.5d | 26.5e | 34.0d |
| JG-11 | 39.0b | 42.0bc | 47.0a | 50.5a | 40.5d | 52.5ab | 33.0c | 39.0cd | 33.0cd | 40.5ab | 39.0a | 42.0b |
| JG-14 | 40.0ab | 44.0ab | 37.0d | 48.5ab | 40.0d | 52.0ab | 32.0d | 40.0c | 32.5d | 39.0cd | 28.5de | 36.0cd |
| JG-16 | 41.0a | 45.0a | 47.5a | 50.5a | 48.5a | 54.5a | 41.0ab | 45.0a | 34.5ab | 40.0bc | 33.5b | 43.5b |
| Vishal | 40.5a | 44.0abc | 44.5b | 49.5ab | 42.5c | 52.0ab | 42.0a | 44.0ab | 35.5a | 41.5a | 35.5b | 47.5a |
| Vijay | 40.5a | 45.0a | 47.5a | 49.5ab | 43.5bc | 53.5a | 40.0b | 43.0b | 35.5ab | 41.5a | 38.5a | 42.5b |
| C.D (0.05) | 1.2 | 2.0 | 2.4 | 2.4 | 1.3 | 2.6 | 1.3 | 1.4 | 1.0 | 1.2 | 2.4 | 2.4 |
| SE(m) | 0.3 | 0.0 | 0.7 | 0.7 | 0.4 | 0.8 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.7 |
| SE(d) | 0.5 | 1.0 | 1.0 | 1.0 | 0.5 | 1.1 | 0.5 | 0.6 | 0.5 | 0.5 | 1.0 | 1.0 |
| C.V. | 1.24 | 2.3 | 2.4 | 2.1 | 1.2 | 2.1 | 1.5 | 1.5 | 1.4 | 1.3 | 3.0 | 2.5 |

Note: Different letter in the same column indicate significant differences at p≤0.05

**Table S5.** Days to first pod and 50% pod of chickpea genotypes in all six seasons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Season | I. *Kharif* 2021(Jun 19 to Aug 30) | II. Late *Kharif* 2021(Aug 30 19 to Nov 22) | III. Rabi 2021-22(Nov 17 19 to Feb 12) | IV. Summer 2022(Feb 19 to Apr 26) | V. Early *Kharif* 2022(Apr 26 to Jun 17) | VI. *Kharif* 2022(Jun 23 to Sep 07) |
| Temperature (⁰C) | 34.5/19.7 | 33.6/11.4 | 32.9/9.3 | 40.3/12.8 | 41.4/18.9 | 34.2/19.6 |
| Photoperiod (h) | 12.8 | 11.53 | 11.06 | 12.37 | 13.02 | 12.80 |
|  Parameter→ ↓Genotype | Days to 1st pod | Days to 50 % pod | Days to 1st pod | Days to 50 % pod | Days to 1st pod | Days to 50 % pod | Days to 1st pod | Days to 50 % pod | Days to 1st pod | Days to 50 % pod | Days to 1st pod | Days to 50 % pod |
| MNK 1 | 47.0a | 49.0ab | 50.0d | 56.0b | 53.0b | 56.0bc | 40.5c | 45.5c | 37.0c | 41.5d | 38.5c | 43.0e |
| ICE 15654-A | 44.0d | 46.5c | 42.3e | 47.8c | 48.5c | 55.0c | 40.5c | 44.0c | 37.0c | 42.0d | 44.5b | 52.0b |
| IPC 06-11 | 45.0bcd | 47.5bc | 51.0cd | 56.0b | 47.0c | 55.5bc | 40.5c | 44.5c | 38.0c | 42.0d | 38.0c | 45.0de |
| JG-11 | 44.5cd | 46.5c | 53.5abc | 60.0a | 48.5c | 56.5bc | 44.5b | 49.0b | 41.0ab | 44.0c | 44.5b | 46.0cd |
| JG-14 | 46.0abc | 48.0bc | 49.5d | 55.5b | 46.5c | 57.0b | 37.0d | 43.5c | 40.0b | 45.0bc | 38.5c | 48.0c |
| JG-16 | 46.5ab | 50.5a | 55.5a | 60.5a | 55.5a | 60.0a | 49.5a | 54.0a | 42.0a | 46.5a | 47.5a | 55.0a |
| Vishal | 47.5a | 47.0bc | 52.0bcd | 59.0a | 48.5c | 57.0b | 50.5a | 54.0a | 41.0ab | 46.0ab | 45.0b | 53.0ab |
| Vijay | 47.5a | 48.0bc | 54.0ab | 59.0a | 51.0b | 59.0a | 50.5a | 55.5a | 41.0ab | 45.0bc | 44.5b | 51.0b |
| C.D (0.05) | 1.6 | 2.2 | 2.8 | 2.4 | 2.4 | 1.8 | 2.72 | 2.8 | 1.8 | 1.5 | 2.2 | 2.3 |
| SE(m) | 0.5 | 0.6 | 0.8 | 0.72 | 0.7 | 0.5 | 0.8 | 0.8 | 0.5 | 0.4 | 0.7 | 0.7 |
| SE(d) | 0.8 | 0.9 | 1.1 | 1.02 | 1.0 | 0.8 | 1.1 | 1.2 | 0.8 | 0.6 | 0.9 | 1.0 |
| C.V. | 1.4 | 1.9 | 2.3 | 1.80 | 2.0 | 1.3 | 2.6 | 2.4 | 1.9 | 1.4 | 2.2 | 2.0 |

Note: Different letter in the same column indicate significant differences at p≤0.05