Supplementary Table 1: List of 8 pairs of near isogenic horse gram determinate and indeterminate genotypes used for the study

|  |  |  |
| --- | --- | --- |
| Genotype identity | Source | Place of collection |
| IC 139518- Determinate  IC 139518- Indeterminate | NBPGR | Akola, Maharashtra, India |
| IC 355905- Determinate  IC 355905- Indeterminate | NBPGR | Bhowali, Uttarakhand, India |
| IC 355915- Determinate  IC 355915- Indeterminate | NBPGR | Bhowali, Uttarakhand, India |
| IC 355944- Determinate  IC 355944- Indeterminate | NBPGR | Bhowali, Uttarakhand, India |
| IC 391576- Determinate  IC 391576-Indeterminate | NBPGR | Bhowali, Uttarakhand, India |
| IC 383202-Determinate  IC 383202-Indeterminate | NBPGR | Bhowali, Uttarakhand, India |
| IC 393229- Determinate  IC 393229- Indeterminate | NBPGR | Bhowali, Uttarakhand, India |
| IC 393290- Determinate  IC 393290- Indeterminate | NBPGR | Bhowali, Uttarakhand, India |

Ashwini et al. (2021)

Supplementary Table 2: Analysis of variance of 8 pairs of near isogenic pairs of determinate and indeterminate horse gram genotypes for five quantitative traits

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Source of variation | Degrees of freedom | Days to 50% flowering | | | Primary branches plant-1 | | | Pod number plant-1 | | | Pod yield plant-1 (g) | | | Grain yield plant-1 (g) | | |
| GKVK, Bangalore | | ZARS, Mandya 2020 Rainy season | GKVK, Bangalore | | ZARS, Mandya 2020 Rainy season | GKVK, Bangalore | | ZARS, Mandya 2020 Rainy season | GKVK, Bangalore | | ZARS, Mandya 2020 Rainy season | GKVK, Bangalore | | ZARS, Mandya 2020 Rainy season |
| 2019 Rainy season | 2020 Rainy season | 2019 Rainy season | 2020 Rainy season | 2019 Rainy season | 2020 Rainy season | 2019 Rainy season | 2020 Rainy season | 2019 Rainy season | 2020 Rainy season |
| Replication | 01 | 0.78 | 0.01 | 0.03 | 1.04 | 1.90 | 2.59 | 88.87 | 114.77 | 239.15 | 2.79 | 6.73 | 41.86 | 0.45 | 3.74 | 9.79 |
| Genotypes  (Determinate + indeterminate genotypes) | 15 | 3.72\*\* | 4.67\*\* | 3.18\*\* | 3.23\*\* | 1.97\*\* | 2.11\*\* | 108.99\*\* | 230.34\*\* | 101.96\* | 8.25\*\* | 15.65\*\* | 3.55\* | 3.79\*\* | 5.55\* | 1.17\* |
| Determinate genotypes | 07 | 1.71\*\* | 0.63 | 1.54\* | 0.89\* | 0.39 | 0.46 | 23.88 | 15.05 | 7.29 | 1.10 | 2.33 | 1.16 | 0.79 | 0.51 | 0.63 |
| Indeterminate genotypes | 07 | 17.74\*\* | 2.91\*\* | 2.49\*\* | 0.44 | 1.26 | 0.39 | 55.69 | 173.17\* | 77.50 | 2.35 | 8.85 | 4.26 | 0.95 | 3.28\* | 0.83 |
| Determinate vs. Indeterminate genotypes | 01 | 26.28\*\* | 45.13\*\* | 19.53\*\* | 37.11\*\* | 16.53\*\* | 27.96\*\* | 1077.97\*\* | 2137.49\*\* | 935.03\*\* | 99.66\*\* | 156.43\*\* | 188.23\*\* | 44.59\*\* | 56.58\*\* | 7.36\* |
| Residual | 15 | 0.18 | 0.27 | 0.43 | 0.25 | 0.53 | 0.40 | 39.74 | 62.73 | 33.42 | 4.07 | 5.39 | 4.73 | 0.83 | 1.09 | 2.27 |

\* = Significance at P=0.05, \*\* = Significance at P= 0.01

Supplementary Table 3: Estimates of trait means of 8 pairs of near isogenic determinate (D) and indeterminate (ID) horse gram genotypes

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Genotype identity | Days to 50% flowering | | | Primary branches plant-1 | | | Pod number plant-1 | | | Pod yield plant-1 (g) | | | Grain yield plant-1 (g) | | |
| D | ID | Difference | D | ID | Difference | D | ID | Difference | D | ID | Difference | D | ID | Difference |
| IC 139518 | 27.00 | 29.00 | 2.00 | 3.28 | 5.93 | 2.65 | 26.75 | 39.92 | 13.17 | 4.98 | 09.58 | 4.60 | 2.39 | 4.86 | 2.47 |
| IC 355905 | 29.00 | 30.00 | 1.00 | 3.89 | 6.46 | 2.57 | 29.09 | 46.84 | 17.75 | 6.68 | 10.48 | 3.79 | 3.47 | 5.67 | 2.21 |
| IC 355915 | 28.00 | 30.00 | 2.00 | 4.10 | 6.22 | 2.12 | 26.37 | 45.43 | 19.07 | 6.33 | 10.35 | 4.02 | 2.92 | 5.62 | 2.70 |
| IC 355944 | 28.00 | 31.00 | 3.00 | 3.70 | 5.31 | 1.60 | 28.08 | 47.00 | 18.92 | 6.49 | 10.88 | 4.39 | 3.46 | 5.98 | 2.52 |
| IC 391576 | 29.00 | 30.00 | 1.00 | 3.30 | 5.43 | 2.13 | 24.87 | 38.50 | 13.63 | 7.15 | 09.40 | 2.25 | 3.48 | 4.73 | 1.25 |
| IC 383202 | 29.00 | 32.00 | 3.00 | 4.34 | 5.60 | 1.26 | 27.38 | 37.60 | 10.22 | 5.98 | 08.02 | 2.05 | 2.92 | 4.39 | 1.47 |
| IC 393210 | 28.00 | 30.00 | 2.00 | 3.61 | 4.80 | 1.19 | 26.89 | 28.32 | 01.43 | 7.09 | 08.22 | 1.13 | 3.35 | 4.52 | 1.17 |
| IC 393229 | 29.00 | 32.00 | 3.00 | 4.31 | 5.45 | 1.14 | 26.26 | 35.46 | 09.20 | 5.92 | 08.51 | 2.58 | 2.31 | 4.45 | 2.14 |
| CD @ P = 0.05 | 0.84 | 0.84 | 0.84 | 0.97 | 0.97 | 0.97 | 10.44 | 10.44 | 10.44 | 3.37 | 3.37 | 3.37 | 1.84 | 1.84 | 1.84 |

\* = Significance at P=0.05, \*\* = Significance at P= 0.01