**Multilocation evaluation of trait-specific germplasm accessions: seed yield (2015-16)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Entry** | **Seed yield at 120 DAP (g/net plot)** | | **Seed yield at 150 DAP (g/net plot)** | | | | **Seed yield at 180 DAP (g/net plot)** | | | | **Seed yield at 210 DAP (g/net plot)** | | | | **Total seed yield (g/net plot)** | | | | **Over all mean (g/net plot)** |
| I | RF | I | | | RF | I | | | RF | I | | | RF | I | | | RF |
| Man | IIOR | SKN | Man | **Mean** | IIOR | SKN | Man | **Mean** | IIOR | SKN | Man | **Mean** | IIOR | SKN | Man | **Mean** | IIOR |
| RG-3880 | 130 | 273 | 1093 | 620 | **857** | 107 | 490 | 305 | **398** | 62 | 1753 | 340 | **1047** | 47 | 3335 | 1395 | **2365** | 444 | 1725 |
| RG-3938 | 240 | 232 | 1145 | 570 | **858** | 129 | 743 | 305 | **524** | 66 | 156 | 305 | **231** | 59 | 3448 | 1420 | **2434** | 485 | 1784 |
| RG-2740 | 180 | 175 | 270 | 155 | **213** | 144 | 150 | 150 | **150** | 95 | 392 | 190 | **291** | 79 | 813 | 675 | **744** | 493 | 660 |
| RG-3798 | 240 | 82 | 398 | 290 | **344** | 127 | 548 | 210 | **379** | 101 | 2228 | 245 | **1237** | 100 | 3173 | 985 | **2079** | 410 | 1523 |
| RG-3790 | 180 | 75 | 298 | 165 | **232** | 73 | 185 | 110 | **148** | 70 | 592 | 185 | **389** | 77 | 1075 | 640 | **858** | 295 | 670 |
| RG-3477 | 230 | 217 | 508 | 330 | **419** | 168 | 308 | 220 | **264** | 85 | 1783 | 225 | **1004** | 61 | 2598 | 1005 | **1802** | 531 | 1378 |
| RG-18 | 305 | 246 | 530 | 285 | **408** | 165 | 265 | 235 | **250** | 70 | 510 | 195 | **353** | 54 | 1305 | 1020 | **1163** | 536 | 954 |
| RG-2661 | 388 | 206 | 718 | 405 | **562** | 139 | 570 | 290 | **430** | 72 | 1933 | 270 | **1102** | 74 | 3220 | 1352 | **2286** | 490 | 1687 |
| RG-3060 | 515 | 302 | 1288 | 520 | **904** | 168 | 290 | 310 | **300** | 67 | 968 | 225 | **597** | 56 | 2545 | 1570 | **2058** | 593 | 1569 |
| RG-707 | 440 | - | 945 | 520 | **733** | - | 783 | 265 | **524** | - | 1650 | 245 | **948** | - | 3378 | 1470 | **2424** | - | 2424 |
| RG-27 | 200 | 276 | 908 | 390 | **649** | 122 | 750 | 245 | **498** | 88 | 1640 | 305 | **973** | 44 | 3298 | 1140 | **2219** | 530 | 1656 |
| RG-1117 | 270 | 212 | 1138 | 388 | **763** | 112 | 535 | 200 | **368** | 78 | 1693 | 255 | **974** | 42 | 3365 | 1112 | **2239** | 444 | 1640 |
| RG-297 | 465 | 204 | 1205 | 465 | **835** | 102 | 200 | 245 | **223** | 47 | 1068 | 237 | **653** | 40 | 2473 | 1413 | **1943** | 393 | 1426 |
| RG-3100 | 330 | 122 | 1128 | 630 | **879** | 101 | 1148 | 350 | **749** | 62 | 2010 | 390 | **1200** | 40 | 4285 | 1700 | **2993** | 327 | 2104 |
| RG-3031 | - | 133 | 305 | - | **305** | 93 | 133 | - | **133** | 53 | 323 | - | **323** | 36 | 760 | - | **760** | 315 | 538 |
| RG-2685 | 330 | 257 | 1168 | 505 | **837** | 172 | 1425 | 445 | **935** | 67 | 1420 | 360 | **890** | 39 | 4013 | 1640 | **2827** | 534 | 2062 |
| RG-3055 | 143 | 39 | 400 | 495 | **448** | 84 | 380 | 205 | **293** | 76 | 2045 | 300 | **1173** | 46 | 2625 | 1143 | **1884** | 246 | 1338 |
| RG-3087 | 258 | 127 | 905 | 285 | **595** | 159 | 578 | 180 | **379** | 70 | 1210 | 195 | **703** | 43 | 2693 | 918 | **1806** | 399 | 1337 |
| RG-3445 | 130 | 79 | 4338 | 185 | **2262** | 70 | 305 | 190 | **248** | 41 | 1218 | 205 | **712** | 42 | 5860 | 710 | **3285** | 232 | 2267 |
| GC3(C) | 585 | 113 | 1845 | 530 | **1188** | 114 | 618 | 345 | **482** | 53 | 1658 | 305 | **982** | 34 | 4120 | 1765 | **2943** | 315 | 2067 |
| GCH7 (HC) | 643 | 148 | 1550 | 900 | **1225** | 84 | 920 | 305 | **613** | 47 | 1593 | 300 |  | 33 | 4063 | 2147 | **3105** | 312 | 2174 |
| DCS107(C) |  | 117 | - | - | - | 157 | - | - | - | 56 | - | - | - | 37 | - | - | - | 345 | 345 |
| CV (%) | 14 | 12 | 26 | 12 |  |  | 26 | 15 |  | 16 | 25 | 15 |  | 19 | 14 | 7 |  | 13 |  |
| CD0.05 | 96 | 85 | 588 | 113 |  |  | 524 | 83 |  | 104 | 742 | 84 |  | 12 | 859 | 203 |  | 118 |  |

I: Irrigated; RF: rainfed; C: variety check; HC: hybrid check; SKN: S.K. Nagar; Man: Mandor; Pal: Palem; IIOR: Indian Institute of Oilseeds Research, Hyderabad

**Multilocation evaluation of trait-specific germplasm accessions: no. of nodes, days to 50% flowering, days to maturity (2015-16)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Entry** | **No. of main stem nodes** | | | | | | **Days to 50% flowering** | | | | | | **Days to maturity** | | | |
| **I** | | | **RF** | | | **I** | | | **RF** | | | I | **RF** | | |
| SKN | Man | **Mean** | Pal | IIOR | **Mean** | SKN | Man | **Mean** | Pal | IIOR | **Mean** | SKN | Pal | IIOR | **Mean** |
| RG-3880 | 20 | 23 | 22 | 16 | 19 | 18 | 59 | 68 | 64 | 57 | 70 | 64 | 139 | 116 | 115 | 116 |
| RG-3938 | 18 | 16 | 17 | 11 | 13 | 12 | 55 | 59 | 57 | 61 | 85 | 73 | 139 | 115 | 113 | 114 |
| RG-2740 | 18 | 18 | 18 | 13 | 28 | 21 | 57 | 63 | 60 | 59 | 65 | 62 | 133 | 118 | 112 | 115 |
| RG-3798 | 25 | 23 | 24 | 20 | 23 | 22 | 73 | 79 | 76 | 62 | 79 | 71 | 172 | 110 | 103 | 107 |
| RG-3790 | 22 | 21 | 22 | 19 | 21 | 20 | 72 | 68 | 70 | 64 | 79 | 72 | 168 | 131 | 125 | 128 |
| RG-3477 | 20 | 21 | 21 | 18 | 19 | 19 | 57 | 77 | 67 | 70 | 79 | 75 | 133 | 118 | 115 | 117 |
| RG-18 | 16 | 15 | 16 | 12 | 16 | 14 | 56 | 58 | 57 | 53 | 52 | 53 | 130 | 105 | 105 | 105 |
| RG-2661 | 19 | 18 | 19 | 15 | 18 | 17 | 60 | 57 | 59 | 68 | 67 | 68 | 141 | 135 | 123 | 129 |
| RG-3060 | 15 | 15 | 15 | 13 | 14 | 14 | 56 | 55 | 56 | 70 | 75 | 73 | 130 | 114 | 113 | 114 |
| RG-707 | 17 | 15 | 16 | 14 | - | 14 | 56 | 57 | 57 | 74 | - | 74 | 131 | 109 | - | 109 |
| RG-27 | 21 | 20 | 21 | 16 | 21 | 19 | 69 | 63 | 66 | 69 | 70 | 70 | 161 | 113 | 112 | 113 |
| RG-1117 | 18 | 15 | 17 | 13 | 15 | 14 | 58 | 64 | 61 | 68 | 70 | 69 | 135 | 119 | 115 | 117 |
| RG-297 | 16 | 17 | 17 | 11 | 15 | 13 | 52 | 60 | 56 | 68 | 69 | 69 | 123 | 114 | 113 | 114 |
| RG-3100 | 19 | 17 | 18 | 14 | 20 | 17 | 60 | 61 | 61 | 73 | 70 | 72 | 140 | 115 | 110 | 113 |
| RG-3031 | 10 |  | 10 | 18 | 18 | 18 | 60 |  | 60 | 64 | 65 | 65 | 141 | 108 | 101 | 105 |
| RG-2685 | 16 | 15 | 16 | 11 | 14 | 13 | 53 | 57 | 55 | 54 | 55 | 55 | 124 | 106 | 112 | 109 |
| RG-3055 | 21 | 18 | 20 | 19 | 19 | 19 | 81 | 58 | 70 | 59 | 58 | 59 | 190 | 105 | 102 | 104 |
| RG-3087 | 18 | 15 | 17 | 15 | 18 | 17 | 58 | 58 | 58 | 54 | 58 | 56 | 135 | 111 | 113 | 112 |
| RG-3445 | 19 | 18 | 19 | 14 | 20 | 17 | 61 | 61 | 61 | 61 | 64 | 63 | 144 | 109 | 112 | 111 |
| GC3 (C) | 17 | 15 | 16 | 13 | 16 | 15 | 47 | 57 | 52 | 62 | 62 | 62 | 111 | 101 | 111 | 106 |
| GCH7 (HC) |  | 17 | 17 | 17 | 18 | 18 | 58 | 60 | 59 | 66 | 65 | 66 | 135 | 105 | 112 | 109 |
| DCS107 (C) | - | - | - | 14 | 19 | - | - | - | - | 77 | 70 | - | - | 102 | 104 | - |
| CV (%) |  | 8 |  | 14 | 14 |  | 2 | 9 |  |  | 9 |  | 2 | 4 | 9 |  |
| CD0.05 |  | 3 |  | 4 | 4 |  | 3 | 12 |  |  | 5 |  | 6 | 10 | 5 |  |

I: Irrigated; RF: rainfed; C: Variety check; HC: hybrid check; SKN: S.K. Nagar; Man: Mandor; Pal: Palem; IIOR: Indian Institute of Oilseeds Research,

Hyderabad

**Multilocation evaluation of trait-specific germplasm accessions: yield traits (2015-16)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Entry** | **Effective length of primary spike (cm)** | | | | | | **No. of capsules on primary spike** | | | | **100-seed weight (g)** | | | | | |
| **I** | | | **RF** | | | **I** | | | **RF** | **I** | | | **RF** | | |
| SKN | Man | **Mean** | Pal | IIOR | **Mean** | SKN | Man | **Mean** | Pal | SKN | Man | **Mean** | Pal | IIOR | **Mean** |
| RG-3880 | 58 | 57 | 58 | 38 | 50 | 44 | 56 | 60 | 58 | 33 | 38.3 | 42.2 | 40.3 | 31.5 | 39 | 35.3 |
| RG-3938 | 47 | 23 | 35 | 30 | 21 | 26 | 42 | 28 | 35 | 38 | 26.9 | 31.6 | 29.3 | 27.5 | 27 | 27.3 |
| RG-2740 | 37 | 26 | 31 | 21 | 17 | 19 | 33 | 38 | 36 | 20 | 15.1 | 16.7 | 15.9 | 27 | 14.8 | 20.9 |
| RG-3798 | 64 | 63 | 64 | 47 | 56 | 52 | 62 | 68 | 65 | 60 | 37.5 | 45.3 | 41.4 | 29.5 | 38.7 | 34.1 |
| RG-3790 | 51 | 44 | 48 | 42 | 35 | 39 | 44 | 50 | 47 | 44 | 20.5 | 21.5 | 21.0 | 24.6 | 23.8 | 24.2 |
| RG-3477 | 47 | 34 | 41 | 31 | 34 | 33 | 40 | 32 | 36 | 30 | 31.2 | 36.3 | 33.8 | 20 | 36 | 28.0 |
| RG-18 | 45 | 41 | 43 | 30 | 41 | 36 | 33 | 31 | 32 | 46 | 26.2 | 25.7 | 26.0 | 29 | 26.2 | 27.6 |
| RG-2661 | 54 | 37 | 46 | 47 | 35 | 41 | 49 | 44 | 47 | 60 | 32.1 | 37 | 34.6 | 22.5 | 33 | 27.8 |
| RG-3060 | 55 | 47 | 51 | 38 | 46 | 42 | 44 | 46 | 45 | 46 | 25.5 | 25.5 | 25.5 | 23.5 | 24.9 | 24.2 |
| RG-707 | 52 | 24 | 38 | 30 | - | 30 | 47 | 31 | 39 | 47 | 28.2 | 34.4 | 31.3 | 28.5 | - | 28.5 |
| RG-27 | 56 | 44 | 50 | 33 | 36 | 35 | 46 | 50 | 48 | 48 | 32.2 | 35.5 | 33.9 | 30.5 | 41 | 35.8 |
| RG-1117 | 51 | 31 | 41 | 31 | 29 | 30 | 46 | 29 | 38 | 45 | 27.7 | 27.3 | 27.5 | 32 | 25.5 | 28.8 |
| RG-297 | 43 | 34 | 39 | 35 | 38 | 37 | 32 | 53 | 43 | 48 | 28.4 | 27.8 | 28.1 | 26 | 26.5 | 26.3 |
| RG-3100 | 62 | 31 | 47 | 45 | 43 | 44 | 55 | 38 | 47 | 50 | 30.5 | 32.6 | 31.6 | 29 | 32.2 | 30.6 |
| RG-3031 | 31 |  | 31 | 23 | 35 | 29 | 26 |  | 26 | 22 | 25 |  | 25.0 | 29 | 25.2 | 27.1 |
| RG-2685 | 50 | 36 | 43 | 33 | 24 | 29 | 54 | 45 | 50 | 50 | 35.8 | 37.5 | 36.7 | 25 | 32.2 | 28.6 |
| RG-3055 | 39 | 31 | 35 | 31 | 25 | 28 | 40 | 39 | 40 | 37 | 36.9 | 47.9 | 42.4 | 29.5 | 30.8 | 30.2 |
| RG-3087 | 62 | 27 | 45 | 47 | 35 | 41 | 48 | 23 | 36 | 44 | 32.7 | 34.9 | 33.8 | 22 | 32.1 | 27.1 |
| RG-3445 | 35 | 29 | 32 | 39 | 39 | 39 | 43 | 39 | 41 | 42 | 15.6 | 15.4 | 15.5 | 11.5 | 15.4 | 13.5 |
| GC3 © | 52 | 53 | 53 | 44 | 45 | 45 | 50 | 43 | 47 | 55 | 26.7 | 26.9 | 26.8 |  | 27.2 | 27.2 |
| GCH7 (HC) | 62 | 57 | 60 | 47 | 45 | 46 | 60 | 64 | 62 | 58 | 31.6 | 35 | 33.3 |  | 30.8 | 30.8 |
| DCS107 (C) | - | - | - | 37 | 43 | 40 | - | - | - | 47 | - | - | - | - | 30.6 | 30.6 |
| CV (%) | 13 | 11 | - | 18 | 19 | - | 9 | 16 | - | 18 | 8 | 4 | - | - | 10 | - |
| CD0.05 | 4 | 9 | - | 14 | 15 | - | 3 | 14 | - | 17 | 5 | 3 | - | - | 6 | - |

I: Irrigated; RF: rainfed; C: Variety check; HC: hybrid check; SKN: S.K. Nagar; Man: Mandor; Pal: Palem; IIOR: Indian Institute of Oilseeds Research, Hyderabad

**Multilocation evaluation of trait-specific germplasm accessions: plant height, oil content and final plant stand(2015-16)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Entry** | **Plant height (cm)** | | | | | | **Oil content (%)** | | | | | | **Final plant stand** | | | |
| **I** | | | **RF** | | | **I** | | | **RF** | | | **I** | **RF** | |  |
| SKN | Man | **Mean** | Pal | IIOR | **Mean** | SKN | Man | **Mean** | Palem | IIOR | **Mean** | SKN | Pal | IIOR | **Mean** |
| RG-3880 | 157 | 236 | 197 | 90 | 174 | 132 | 49.1 | 52.1 | 50.6 | 43.1 | 45.2 | 44.2 | 15 | 12 | 15 | 14 |
| RG-3938 | 98 | 97 | 98 | 77 | 97 | 87 | 48.5 | 47 | 47.7 | 46.3 | 47.8 | 47.1 | 16 | 13 | 14 | 14 |
| RG-2740 | 66 | 76 | 71 | 55 | 91 | 73 | 48.4 | 46.8 | 47.6 | 44.2 | 47.6 | 45.9 | 13 | 9 | 15 | 12 |
| RG-3798 | 200 | 219 | 210 | 131 | 254 | 193 | 50.7 | 49.5 | 50.1 | 47.2 | 50.9 | 49.1 | 16 | 19 | 18 | 19 |
| RG-3790 | 183 | 191 | 187 | 175 | 197 | 186 | 47.3 | 47.1 | 47.2 | - | 47.8 | 47.8 | 14 | 14 | 17 | 16 |
| RG-3477 | 96 | 118 | 107 | 67 | 150 | 109 | 49.5 | 51.4 | 50.4 | 49 | 50.1 | 49.6 | 10 | 15 | 17 | 16 |
| RG-18 | 65 | 74 | 70 | 80 | 111 | 96 | 47 | 46.4 | 46.7 | 46.1 | 46.1 | 46.1 | 13 | 12 | 18 | 15 |
| RG-2661 | 104 | 103 | 104 | 84 | 134 | 109 | 49.6 | 50.4 | 50 | 48.6 | 50.2 | 49.4 | 16 | 18 | 16 | 17 |
| RG-3060 | 72 | 69 | 71 | 70 | 96 | 83 | 50.5 | 50.9 | 50.7 | 45.4 | 50.9 | 48.2 | 15 | 18 | 17 | 18 |
| RG-707 | 83 | 66 | 75 | 76 | - | 76 | 53.4 | 50.7 | 52.0 | 47.5 | 50.0 | 48.8 | 16 | 19 | - | 19 |
| RG-27 | 128 | 152 | 140 | 96 | 181 | 139 | 50 | 49.6 | 49.8 | 47.4 | 48.7 | 48.1 | 16 | 17 | 16 | 17 |
| RG-1117 | 83 | 70 | 77 | 104 | 117 | 111 | 47.5 | 48.9 | 48.2 | 47.3 | 47.5 | 47.4 | 14 | 16 | 17 | 17 |
| RG-297 | 71 | 91 | 81 | 76 | 111 | 94 | 49.3 | 49.1 | 49.2 | 49.1 | 49.2 | 49.2 | 15 | 12 | 18 | 15 |
| RG-3100 | 121 | 82 | 102 | 85 | 159 | 122 | 50.6 | 50.7 | 50.6 | 47.9 | 50.8 | 49.4 | 15 | 18 | 18 | 18 |
| RG-3031 | 46 | - | 46 | 70 | 109 | 90 | 50.1 | - | 50.1 | - | 50.2 | 50.2 | 4 | 3 | 15 | 9 |
| RG-2685 | 90 | 96 | 93 | 90 | 95 | 93 | 46.3 | 49.7 | 48 | 50.1 | 50.2 | 50.2 | 14 | 16 | 14 | 15 |
| RG-3055 | 122 | 125 | 124 | 135 | 131 | 133 | 49.7 | 50.4 | 50.0 | 48.5 | 49.8 | 49.2 | 7 | 7 | 16 | 12 |
| RG-3087 | 107 | 72 | 90 | 172 | 123 | 148 | 51.6 | 50.8 | 51.2 | 48.6 | 51.2 | 49.9 | 12 | 10 | 17 | 14 |
| RG-3445 | 88 | 99 | 94 | 184 | 133 | 159 | 47.9 | 46.4 | 47.1 | - | 47.2 | 47.2 | 10 | 16 | 17 | 17 |
| GC3 (C) | 76 | 75 | 76 | 143 | 104 | 124 | 51.1 | 49.6 | 50.3 | 44.7 | 44.5 | 44.6 | 13 | 19 | 17 | 18 |
| GCH7 (HC) | 82 | 81 | 82 | 135 | 136 | 136 | 51.3 | 50.9 | 51.1 | 46.8 | 45.8 | 46.3 | 16 | 19 | 17 | 18 |
| DCS107 (C) | - | - | - | 147 | 135 | 141 | - | - | - | 46.7 | 46.2 | 46.5 | - | - | - | - |
| CV (%) | 17 | 15 |  | 40 | 9 |  | 2 | 1.8 |  | 1.7 | 1.4 |  | 8 | 14 | 5 | - |
| CD0.05 | 12 | 35 |  |  | 27 |  | - | 1.8 |  | 1.4 | 1.1 |  | 0.8 | 4 | 1.5 | - |

I: Irrigated; RF: rainfed; C: Variety check; HC: hybrid check; SKN: S.K. Nagar; Man: Mandor; Pal: Palem; IIOR: Indian Institute of Oilseeds Research, Hyderabad