|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Varieties | | Milled rice yield (ton/ha) | | | Plant height (cm) | | | Tiller number | | | Thousand grain weight (g) | | | Spikelet number per panicle | | |
| 0% | 50% | 100% | 0% | 50% | 100% | 0% | 50% | 100% | 0% | 50% | 100% | 0% | 50% | 100% |
| *Indica* | Hanareum4 | 277 | 508 | 641 | 63.8 | 77.4 | 81.4 | 6.7 | 13.4 | 15.7 | 21.5 | 21.0 | 21.3 | 112 | 162 | 170 |
| Geumgang1 | 348 | 594 | 704 | 61.8 | 73.7 | 75.8 | 8.3 | 11.0 | 15.4 | 21.9 | 21.8 | 22.8 | 133 | 169 | 164 |
| Milyang392 | 294 | 479 | 655 | 65.2 | 77.6 | 79.2 | 5.1 | 8.3 | 10.4 | 23.7 | 23.1 | 23.8 | 141 | 155 | 176 |
| IR72 | 317 | 452 | 607 | 58.4 | 69.0 | 70.7 | 8.2 | 16.1 | 20.3 | 20.5 | 21.0 | 21.6 | 113 | 117 | 120 |
| 93-11 | 331 | 438 | 580 | 64.2 | 74.2 | 78.2 | 8.5 | 12.2 | 16.0 | 19.5 | 19.0 | 19.5 | 115 | 172 | 176 |
| IR64 | 287 | 465 | 625 | 60.2 | 71.5 | 71.8 | 8.8 | 13.5 | 19.5 | 20.1 | 20.5 | 20.7 | 110 | 162 | 169 |
| *Japonica* | Saeilmi | 356 | 525 | 559 | 57.1 | 79.3 | 78.0 | 5.0 | 14.0 | 14.4 | 22.1 | 22.3 | 21.9 | 112 | 140 | 153 |
| Sobi | 302 | 503 | 526 | 65.0 | 87.0 | 87.2 | 4.1 | 12.3 | 11.1 | 26.5 | 27.4 | 28.5 | 115 | 132 | 152 |
| Nampyeong | 343 | 521 | 541 | 55.2 | 78.2 | 77.5 | 5.2 | 12.2 | 13.5 | 21.4 | 21.2 | 21.5 | 105 | 128 | 147 |
| Misojinmi | 313 | 511 | 549 | 58.7 | 80.8 | 80.0 | 6.6 | 13.5 | 13.8 | 20.5 | 21.2 | 21.5 | 116 | 155 | 164 |

Table S1. Agronomic traits of 10 rice varieties grown under different nitrogen levels.

Table S2. Chemical characteristics of soil of experimental soil.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Fertilization  Level (%) | pH  (1:5) | T-N  (mg/kg) | EC  (ds/m) | Organic matters  (%) | P2O5  (mg/kg) | K  (cmolc/kg) | Ca  (cmolc/kg) | Mg  (cmolc/kg) | Na  (cmolc/kg) |
| 0 | 5.87 | 0.07 | 0.41 | 2.03 | 42.32 | 0.15 | 5.51 | 1.32 | 0.21 |
| 50 | 5.81 | 0.20 | 0.68 | 2.91 | 458.21 | 0.39 | 6.36 | 1.16 | 0.21 |
| 100 | 5.56 | 0.33 | 1.26 | 3.68 | 913.13 | 1.21 | 7.56 | 1.25 | 0.23 |