Supplementary Table 1. Combined analysis of variance of the studied traits in normal and salinity stress conditions during two cropping years

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Source of variation | df | Mean squares | | | | | | | | | |
| GY | DT | DS | DH | GFP | DPM | PH | TGW | BY | HI |
| Environment (E) | 1 | 28.94\*\* | 5551.7\*\* | 15032.6\*\* | 2801.2\*\* | 15233.7\*\* | 6068\*\* | 32179.8\*\* | 12880.5\*\* | 78.8\*\* | 17082.7\*\* |
| Year (Y) | 1 | 11.93\*\* | 20599.7\*\* | 74812.6\*\* | 14657.6\*\* | 5400.6\*\* | 35025.7\*\* | 73738\*\* | 21159.4\*\* | 255.8\*\* | 6303.6\*\* |
| E×Y | 1 | 0.29\* | 3158.3\*\* | 19903.2\*\* | 2177.2\*\* | 1406.9\*\* | 5891.6\*\* | 1223.9\*\* | 0.52n.s | 4.3\* | 919.2n.s |
| Rep (E×Y) | 4 | 2.7\*\* | 52.7\*\* | 3466.2\*\* | 65.5\*\* | 162.4n.s | 400.7\*\* | 498.2\*\* | 51.01\*\* | 33.4\*\* | 572.4n.s |
| Genotype (G) | 149 | 0.12\*\* | 19.12\*\* | 334.3\*\* | 188.4\*\* | 210.8\* | 174.1\*\* | 196.4\*\* | 55.03\*\* | 1.7\*\* | 367.3 n.s |
| E×G | 149 | 0.06\* | 14.5\*\* | 144.01\*\* | 28.6\*\* | 180.3n.s | 113.4n.s | 57.2\*\* | 14.94n.s | 1.4n.s | 292.9n.s |
| Y×G | 149 | 0.056n.s | 18.09\*\* | 199.9\*\* | 20.3\* | 151.8n.s | 101.5n.s | 38.17n.s | 13.4n.s | 1.07n.s | 328.8n.s |
| E×Y×G | 149 | 0.07\* | 15.5\*\* | 111.9\*\* | 22.2\*\* | 160.4 n.s | 94.8n.s | 45.5\*\* | 12.5n.s | 1.39n.s | 284.8n.s |
| Block (Rep×E×Y) | 32 | 0.13\*\* | 10.24n.s | 1535.6\*\* | 15.16n.s | 177.04 n.s | 101.3n.s | 154.8\*\* | 20.2\* | 1.9\* | 360.4n.s |
| Error | 563 | 0.049 | 8.18 | 57.9 | 15.34 | 160.6 | 94.3 | 33.2 | 12.35 | 1.19 | 305.8 |
| R-Square (%) | - | 78.5 | 89.6 | 89.9 | 87.2 | 59.6 | 70 | 89.8 | 87.6 | 67 | 57 |
| CV (%) | - | 29.3 | 9.5 | 8.2 | 3.02 | 34.04 | 5.8 | 10.2 | 10.07 | 43.01 | 57.5 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Source of variations | df | Mean squares | | | | | | | | | |
| FLL | FLW | FLA | NFT | SL | GWS | NGS | RWC | Chl | LPC |
| Environment (E) | 1 | 19.4\*\* | 4.6\*\* | 371.3\*\* | 171456.6\*\* | 232744.8\*\* | 31\*\* | 9432.1\*\* | 19041.1\*\* | 1833.6\*\* | 1332.2\*\* |
| Year (Y) | 1 | 8564.4\*\* | 69.18\*\* | 10181.2\*\* | 426520.6\*\* | 258174.5\*\* | 0.01n.s | 45.8n.s | 162650\*\* | 521283.6\*\* | 339.1\*\* |
| E×Y | 1 | 1.54n.s | 3.25\*\* | 275.5\*\* | 296695.4\*\* | 265268\*\* | 0.22n.s | 0.57n.s | 18358.1\*\* | 7717\*\* | 29.5\*\* |
| Rep (E×Y) | 4 | 63.8\*\* | 0.91\*\* | 150.8\*\* | 14770.3\*\* | 37.14n.s | 0.46n.s | 45.4\* | 182.4\* | 97.2n.s | 393.02\*\* |
| Genotype (G) | 149 | 11.3\*\* | 0.12\*\* | 29.3\*\* | 2081.9\*\* | 49.33\*\* | 0.61\*\* | 178.8\*\* | 81.6n.s | 101.2\*\* | 11.5\*\* |
| E×G | 149 | 3.7\*\* | 0.034\*\* | 10.4\*\* | 1397.5\*\* | 37.3\*\* | 0.42n.s | 49.4\*\* | 74.4n.s | 77n.s | 5.5\*\* |
| Y×G | 149 | 4.24\*\* | 0.038\*\* | 9.6\* | 1954.02\*\* | 39.14\*\* | 0.34n.s | 21.9\* | 82.9n.s | 90.7\*\* | 0.19n.s |
| E×Y×G | 149 | 2.99n.s | 0.024n.s | 6.8n.s | 1391.7\*\* | 38.9\*\* | 0.35n.s | 21.89\* | 60n.s | 71.6n.s | 0.19n.s |
| Block (Rep×E×Y) | 32 | 18.36\*\* | 0.16\*\* | 38.8\*\* | 753.7\*\* | 39.2\* | 0.36n.s | 64.4\*\* | 143.2\*\* | 203.3\*\* | 0.2n.s |
| Error | 563 | 2.5 | 0.026 | 7.5 | 413.2 | 26.2 | 0.35 | 17.8 | 70 | 64.7 | 0.31 |
| R-Square (%) | - | 90 | 89.1 | 83.3 | 89.6 | 98.1 | 60.3 | 84 | 86.4 | 94.2 | 97.1 |
| CV (%) | - | 18.1 | 24.4 | 53.2 | 18 | 23.5 | 67.4 | 19.3 | 13.8 | 12.9 | 6.4 |

ns, \* and \*\*: significant at 5% and 1% probability levels, respectively; GY: grain yield, DT: days to tillering, DS: days to stem elongation, DH: days to heading, GFP: grain-filling period, DPM: days to physiological maturity, PH: plant height, TGW: thousand-grain weight, BY: biological yield, HI: harvest index, FLL: flag leaf length, FLW: flag leaf width, FLA: flag leaf area, NFT: number of fertile tillers, SL: spike length, GWS: grain weight per spike, NGS: number of grains per spike, RWC: relative water content, Chl: leaf chlorophyll index, LPC: leaf proline content, CV: Coefficient of Variation.