Supplementary Table S1**.** Analysis of variance of Fusarium head blight normalized area under the disease progress curve values.

|  |  |  |  |
| --- | --- | --- | --- |
| Source of variation | Degrees of Freedom | Mean Square | P-value |
| *Fhb1* marker (M) | 1 | 51641 | 2 e-16\*\* |
| BC3F3 population (P) | 9 | 8321 | 2 e-16\*\* |
| Trial (T) | 1 | 286 | 0.33837 NS |
| Repetition (Trial) (R) | 18 | 215 | 0.82392 NS |
| Family (Population) (F) | 16 | 417 | 0.16738 NS |
| *Fhb1* marker\*Trial (MT) | 1 | 184 | 0.44321 NS |
| *Fhb1* marker\*Pop (MP) | 3 | 672 | 0.09203 NS |
| Error | 803 | 312 |  |

\*\*Significant (P < 0.05) NS: non significant (P ≥ 0.05). The letters in parentheses refer to the effect defined in the model of the statistical analysis in Material and Methods.

Supplementary Table S2**.** Analysis of variance of stem rust area under the disease progress curve.

|  |  |  |  |
| --- | --- | --- | --- |
| Source of variation | Degrees of Freedom | Mean Square | P-value |
| *Sr2* marker (M) | 1 | 1609.0 | 2.2e-3\*\* |
| Population (P) | 8 | 1948.2 | 3.7e-10\*\* |
| Repetition (R) | 2 | 168.6 | 0.3461 NS |
| Family (Population) (F) | 15 | 592.7 | 1.2e-4\*\* |
| Sr2 marker\*Population (MP) | 2 | 818.1 | 8.1e-3\*\* |
| Error | 55 | 156.0 |  |

\*\*Significant (P < 0.05) NS: non significant (P ≥ 0.05).