Table S1. Genotyping summary of Vrn, Ppd, R, Lr, Yr, Sr and Fhb genes in KAWLR

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Character** | **Gene** | **Total accession** | **Genotyping results** | | **Unknown** |
| I. Vernalization |  |  | Spring/Facultative | Winter |  |
| *Vrn-A1* | 394 | 16 | 372 | 6 |
| *Vrn-B1* | 394 | 70 | 322 | 2 |
| *Vrn-D1* | 394 | 111 | 271 | 9 |
| **Summary** | 394 | 174 | 207 | 13 |
| II. Photoperiod |  |  | Sensitive | In-sensitive |  |
| *Ppd-D1* | 394 | 346 | 19 | 27 |
| III. Grain colour |  |  | Red | White |  |
| *R-A* | 394 | 89 | 268 | 23 |
| *R-B* | 394 | 117 | 268 | 2 |
| *R-C* | 394 | 72 | 321 | 1 |
| **Summary** | 394 | 232 | 150 | 12 |
| IV. Disease |  |  | Resistant | Susceptible |  |
| a. Leaf rust & Stripe rust | *Lr 34/Yr18* | 471 | 5 | 465 | 1 |
| b. Leaf rust & Stripe rust | *Lr46/Yr29* | 50 | 4 | 46 | 0 |
| c. Stem rust | *SrCad* | 50 | 3 | 39 | 8 |
| d. Fusarium head blight | *Fhb1* | 84 | 5 | 67 | 12 |