

Table 4 Association (R<sup>2</sup>) of the SSR markers with the six agronomical traits

| Trait | Marker | Map position (cM) | R <sup>2</sup> (%) |       |       |
|-------|--------|-------------------|--------------------|-------|-------|
|       |        |                   | HD                 | SY    | FY    |
| PH    | wmc491 | 7.6               | 7.9                | 11.8  | ns    |
| SL    | wmc446 | 9.1               | 4.85               | –     | ns    |
| SL    | wmc707 | 39.5              | 15.55              | –     | 13.42 |
| SL    | wmc283 | 59.0              | ns                 | –     | 9.27  |
| SL    | wmc262 | 60.9              | 15.28              | –     | 12.92 |
| SPS   | wmc707 | 39.5              | 11.15              | ns    | ns    |
| SD    | wmc446 | 9.1               | 9.36               | –     | 7.66  |
| SD    | wmc707 | 39.5              | 12.34              | –     | 14.18 |
| SD    | wmc283 | 59.0              | 8.66               | –     | 13.33 |
| SD    | wmc262 | 60.9              | 18.38              | –     | 20.59 |
| GPS   | wmc491 | 7.6               | 14.68              | 13.17 | ns    |
| GPS   | wmc48  | 7.8               | 9.97               | ns    | 7.45  |
| GPS   | wmc757 | 10.3              | ns                 | ns    | 10.56 |
| GPS   | wmc283 | 59.0              | ns                 | 8.17  | ns    |
| GPS   | barc70 | 70.6              | ns                 | ns    | 15.01 |
| GPS   | barc78 | 70.9              | 10.33              | 8.98  | ns    |
| TKW   | gwm44  | 9.9               | 9.02               | 7.99  | –     |
| TKW   | barc70 | 70.6              | 6.29               | 8.41  | –     |

Note: Map position (cM) were based on the consensus map Ta-SSR-2004 (Somers et al. 2004); R<sup>2</sup> indicates the percentage of the total variation explained at the loci significant at P < 0.01 level; ns indicates no significance at P < 0.01 level; “–” indicates that the data was missed; See the footnote of Table 2 for the full names of the traits and locations