

**Supplementary table 5.** Test for fitness of genetic models on pigment content in F<sub>1</sub>

| Traits    | An (mg·g <sup>-1</sup> ) | Ca (g·ml <sup>-1</sup> ) | An/Ca           |
|-----------|--------------------------|--------------------------|-----------------|
| Model     | B-2                      | B-2                      | B-2             |
| $U_1^2$   | 0.0677 (0.7947)          | 0.0378 (0.8459)          | 0.5095 (0.4754) |
| $U_2^2$   | 0.1224 (0.7264)          | 0.2078 (0.6485)          | 0.7588 (0.3837) |
| $U_3^2$   | 0.1533 (0.6954)          | 1.1463 (0.2843)          | 0.5184 (0.4715) |
| ${}_nW_2$ | 0.0600 (0.1834)          | 0.1233 (0.5125)          | 1.9830 (1.0000) |
| $D_n$     | 0.0031 (1.0000)          | 0.0031 (1.0000)          | 0.0031 (1.0000) |

Note:  $U_1^2$ ,  $U_2^2$ ,  $U_3^2$  refer to uniformity tests;  ${}_nW_2$ , the Smirnov test statistic;  $D_n$ , the Kolmogorov test statistic. The numbers in parentheses refer to probabilities.