



## CORRECTION<sup>[OPEN]</sup>

**Zhang, Q., Ma, C., Zhang, Y., Gu, Z., Li, W., Duan, X., Wang, S., Hao, L., Wang, Y., Wang, S., and Li, T.** (2018). A Single-Nucleotide Polymorphism in the Promoter of a Hairpin RNA Contributes to *Alternaria alternata* Leaf Spot Resistance in Apple (*Malus × domestica*). *Plant Cell* 30: 1924–1942; DOI: <https://doi.org/10.1105/tpc.18.00042>.

In this article, we identified a single-nucleotide polymorphism (SNP) in the promoter region of the hairpin RNA *MdhpRNA277* that confers resistance to *Alternaria alternata* leaf spot disease in apple. Specifically, we found that the SNP genotype TT is associated with resistance to leaf spot disease, whereas the genotype GG is associated with susceptibility (and the heterozygous genotype GT with intermediate levels of susceptibility/resistance). In the original publication, three apple varieties provided by the National Germplasm Repository of Apple (NGR), having the accession numbers NGR196, NGR156, and NGR133, were incorrectly labeled as “Golden Delicious (GD),” “Starkspur Golden Delicious,” and “Nagafu 2,” respectively. This was discovered when we were alerted to apparent inconsistencies in the SNP genotypes reported in the article—namely, the SNP genotype of NGR196 is GG (and this variety is highly susceptible), whereas the GD genotype is GT (and this variety is of moderate susceptibility), and conversely, the genotype NGR133 is GT (and this variety exhibits moderate susceptibility), whereas of Nagafu 2 is GG (and this variety is susceptible). The genotype of NGR156 is TT (and this variety is resistant), whereas “Starkspur Golden Delicious,” being a sport of “Golden Delicious,” is genotype GT and of moderate susceptibility.

For the data reported in Supplemental Tables 2, 4, and 5, the hybrid populations were provided by the Liaoning Institute of Pomology. The parents of the hybrid Golden Delicious × Nagafu 2 were correctly labeled, but the SNP genotypes were listed incorrectly in Supplemental Table 4. For the hybrid population “Yue Guan × Nagafu 2” (Supplemental Tables 2 and 5), the parental “Nagafu 2” line was incorrectly labeled, and instead corresponds to the accession LIP1.

The specific corrections to the manuscript are as follows:

1. Throughout the article, the original notation for “Golden Delicious” (GD) applied to tissue culture plants has been replaced with “NGR196.” Similarly, the promoter name “pMdhpRNA277-GD” has been replaced with “pMdhpRNA277-NGR196”. These changes include instances throughout the main text and in Figures 1 to 8.
2. In Supplemental Figure 2, “Golden Delicious,” “Starkspur Golden Delicious,” and “Nagafu 2” were renamed “NGR196,” “NGR156,” and “NGR133,” respectively.
3. In Supplemental Table 2, “Yue Guan × Nagafu 2” was corrected to “Yue Guan × LIP1”.
4. In Supplemental Table 4, the SNP genotypes for the hybrid population Golden Delicious × Nagafu 2 were incorrectly listed as “Golden Delicious (GG) × Nagafu 2 (GT),” and were corrected to Golden Delicious (GT) × Nagafu 2 (GG).
5. In Supplemental Table 5, “Nagafu 2” was corrected to LIP1 (Liaoning Institute of Pomology No.1) for the hybrid population “Yue Guan (GT) × LIP1 (GT)”.
6. We have added details of the SNP genotype detection method to the Methods section. Briefly, there were three steps: first, the DNA was extracted from apple leaves; next, the SNP-specific primer was used to amplify the DNA template; and finally, the PCR products were sequenced to identify the SNP site.
7. Finally, letters acknowledging the labeling errors from the National Germplasm Repository for Apple and the Liaoning Institute of Pomology have been included in the Supplemental Data file associated with the manuscript.

This correction does not otherwise affect the results nor alter any of the original conclusions. We apologize for any inconvenience to readers. All authors have approved this correction.

Note: This correction was reviewed and approved by members of *The Plant Cell* editorial board. The pdf and xml versions of the article and the supplemental data files have been resupplied with the corrections described above.