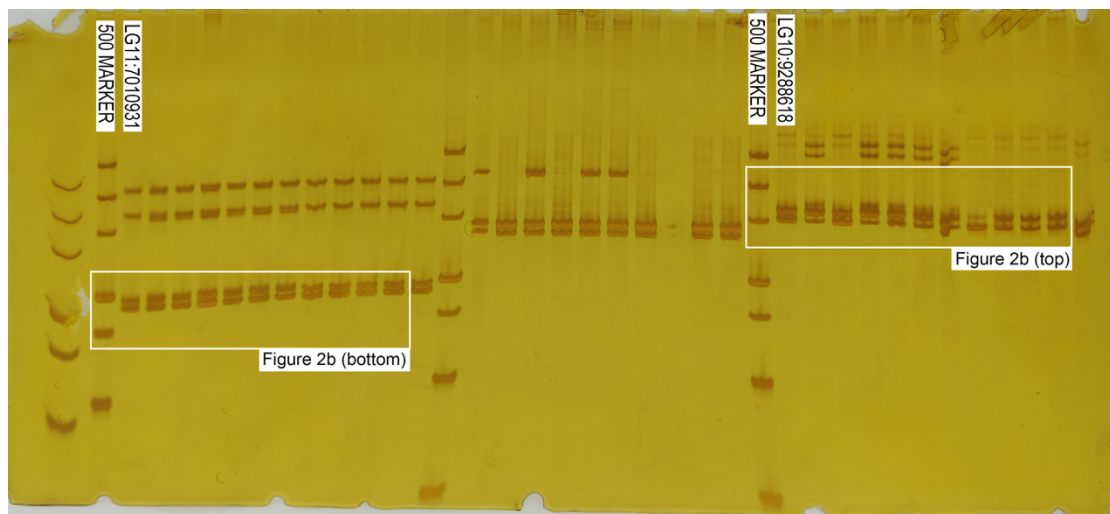


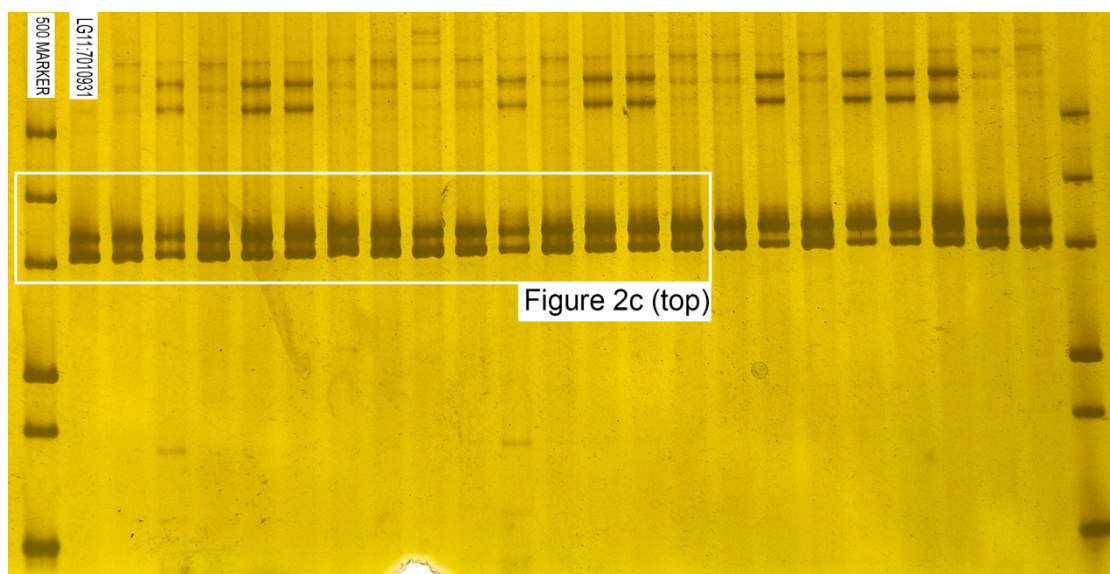
Supplementary

Genomic variation analysis and discovery of stable heterozygous loci in Loquat (*Eriobotrya japonica* Lindl.)

Supplementary Information:

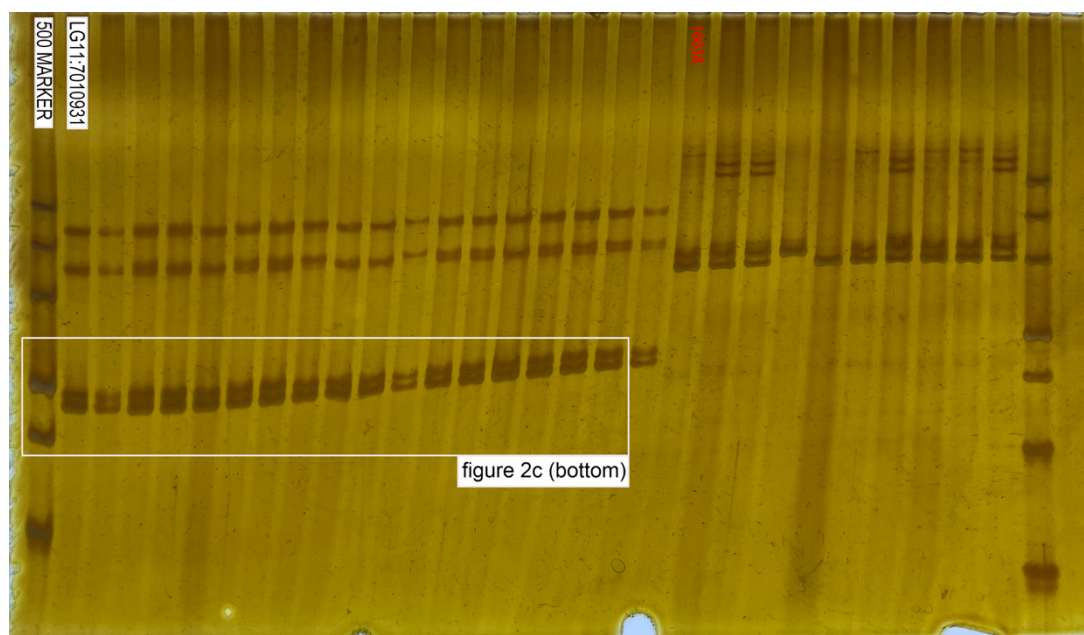


Supplementary Figure S1. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gels shown in Figure 2b (top and bottom) in the main text. White boxes indicate the regions selected for presentation in the main figure, and the corresponding InDel loci (LG11: 7010931 and LG10: 9288618) are labeled directly in the gel image.



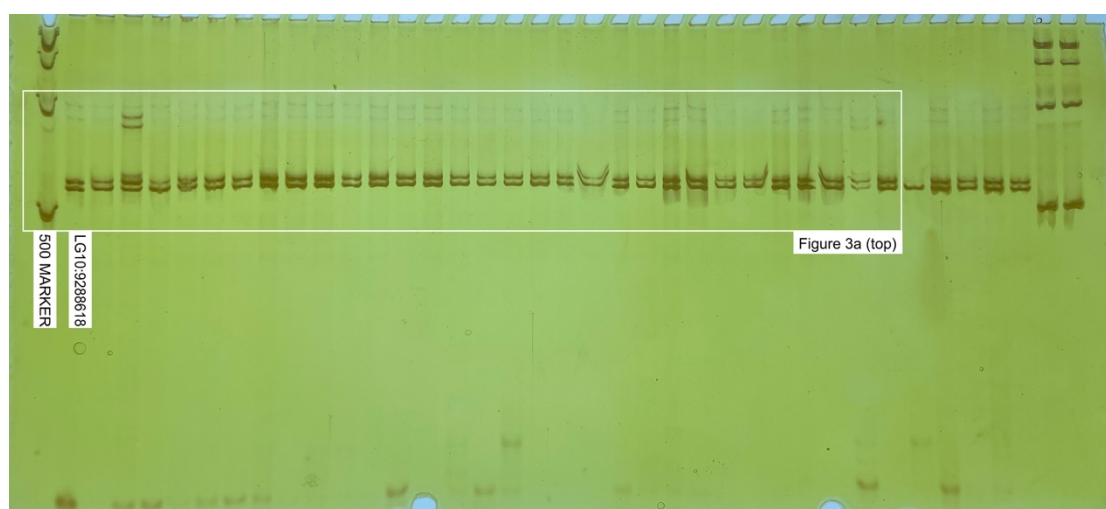
Supplementary Figure S2. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 2c (top) in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.



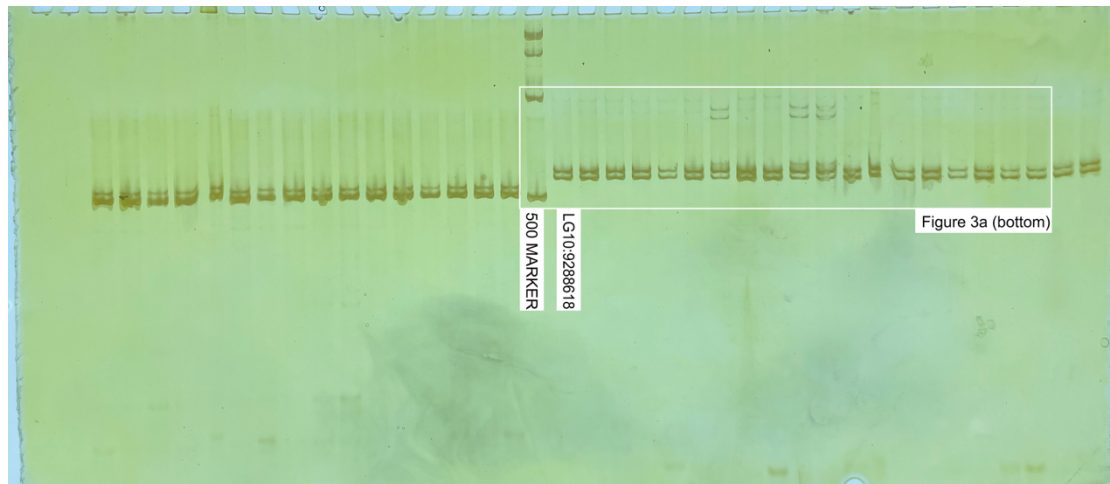
Supplementary Figure S3. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 2c (bottom) in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.

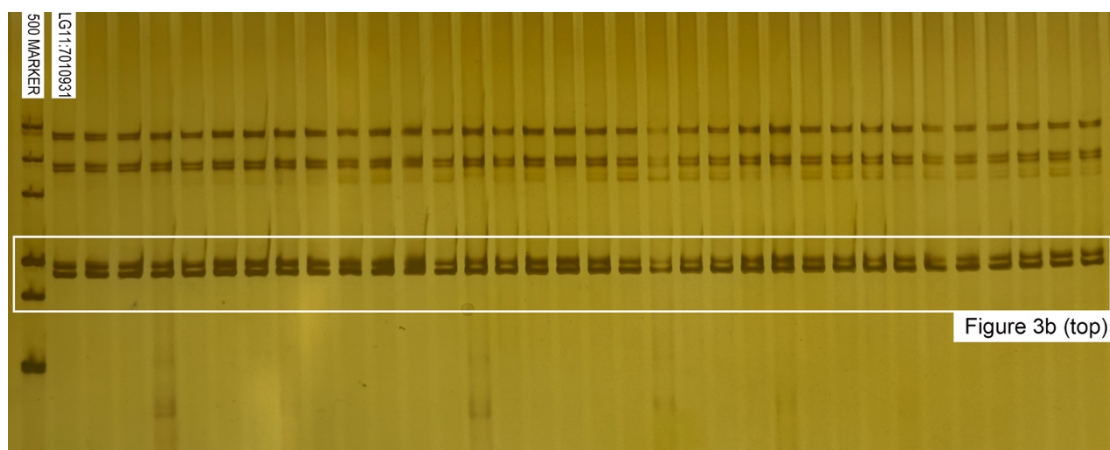


Supplementary Figure S4. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3a (top) in the main text.

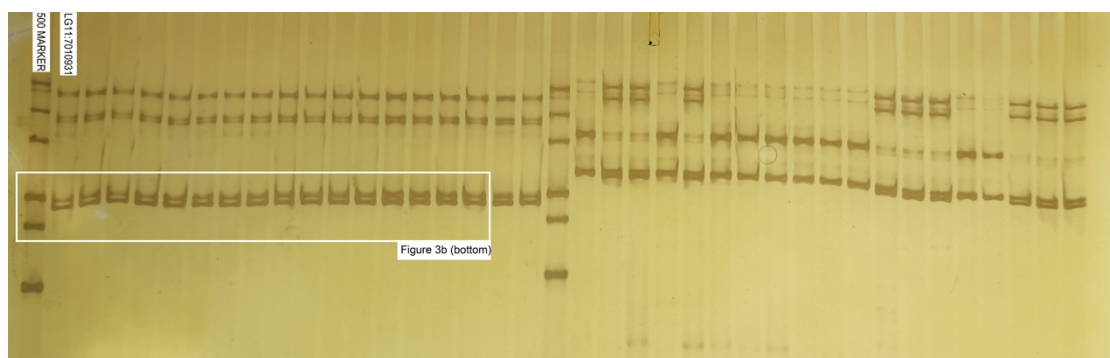
The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG10:9288618) is labeled directly in the gel image.



Supplementary Figure S5. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3a (bottom) in the main text. The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG10:9288618) is labeled directly in the gel image.

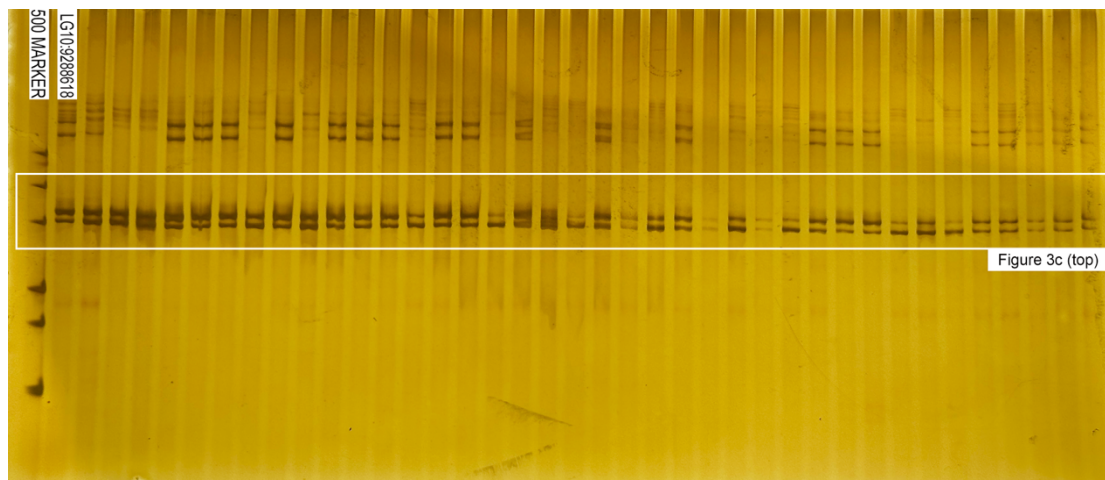


Supplementary Figure S6. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3b (top) in the main text. The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.

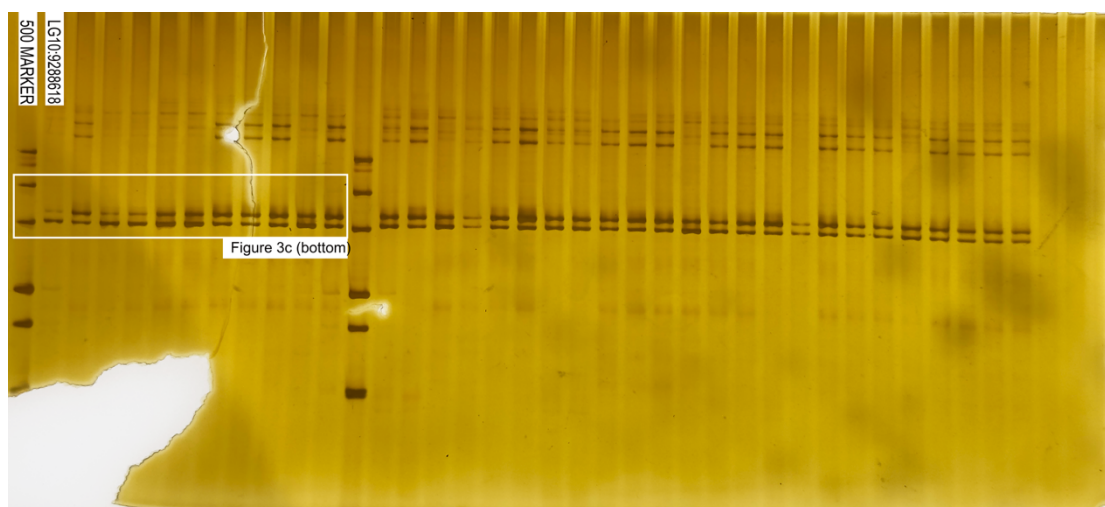


Supplementary Figure S7. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3b (bottom) in the main text.

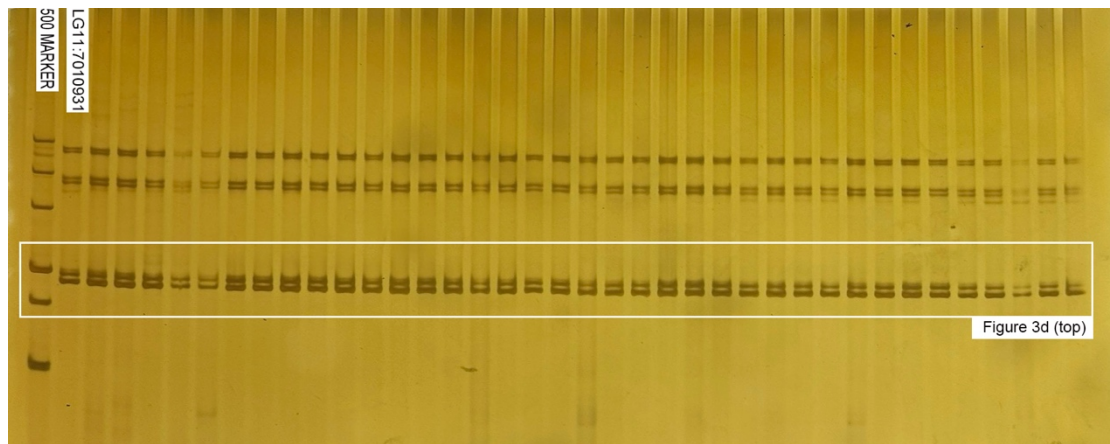
The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.



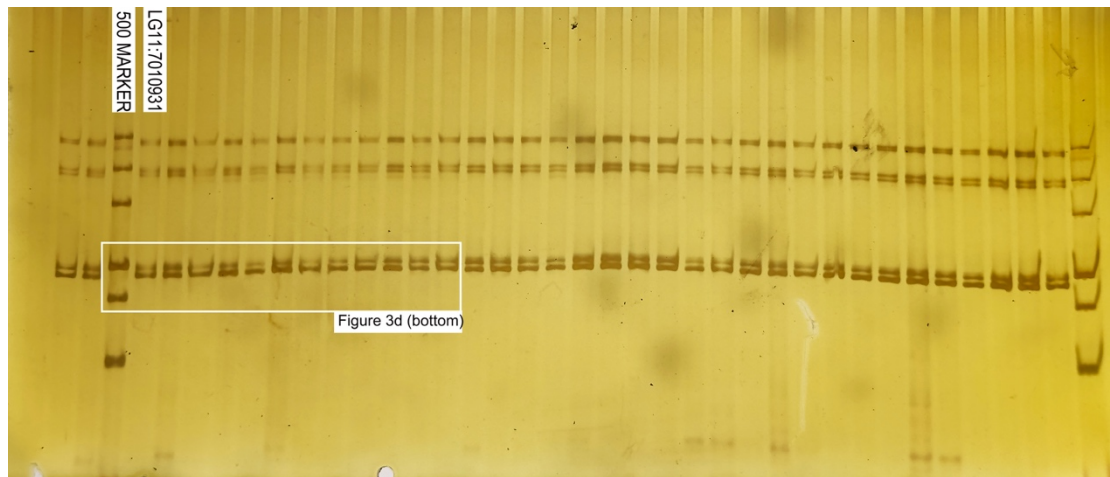
Supplementary Figure S8. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3c (top) in the main text. The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG10:9288618) is labeled directly in the gel image.



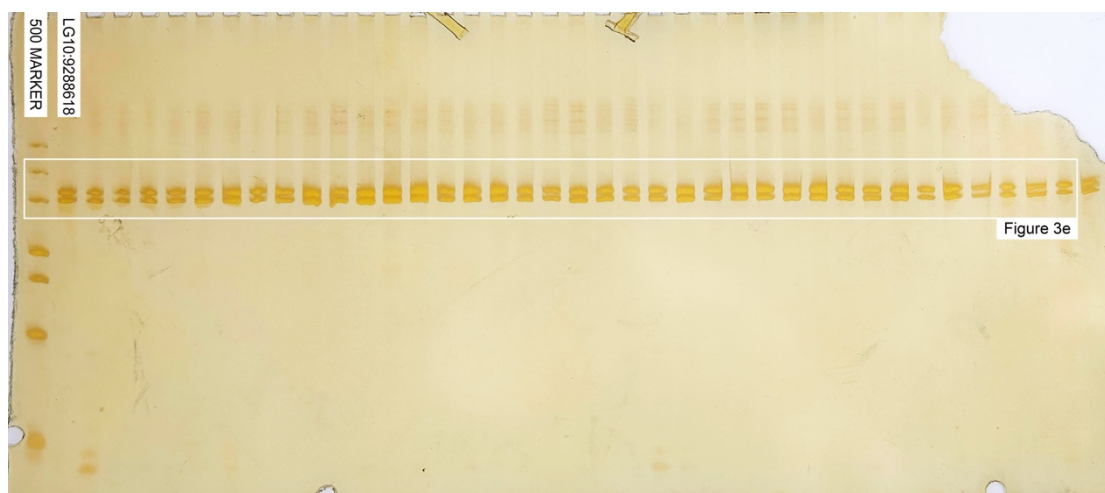
Supplementary Figure S9. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3c (bottom) in the main text. The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG10:9288618) is labeled directly in the gel image.



Supplementary Figure S10. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3d (top) in the main text. The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.

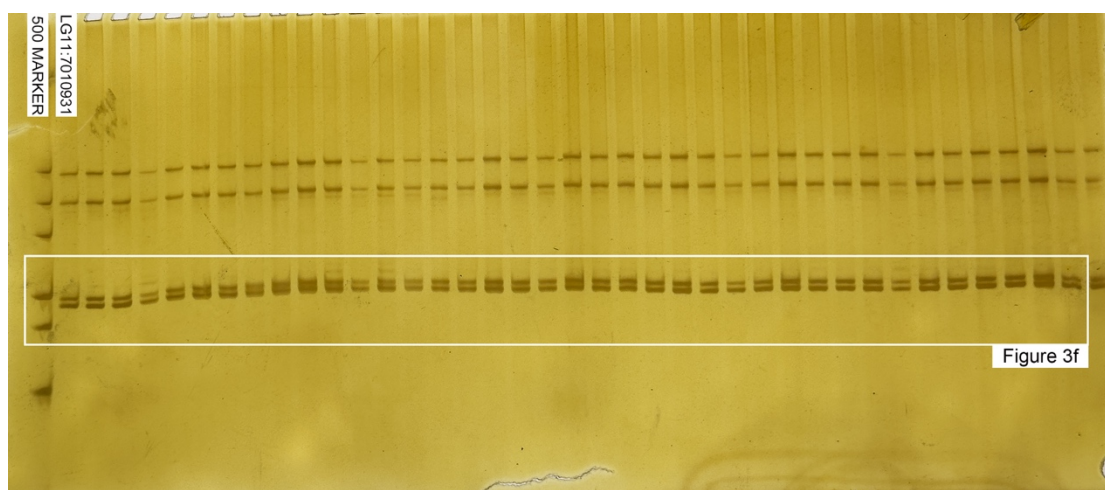


Supplementary Figure S11. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3d (bottom) in the main text. The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.



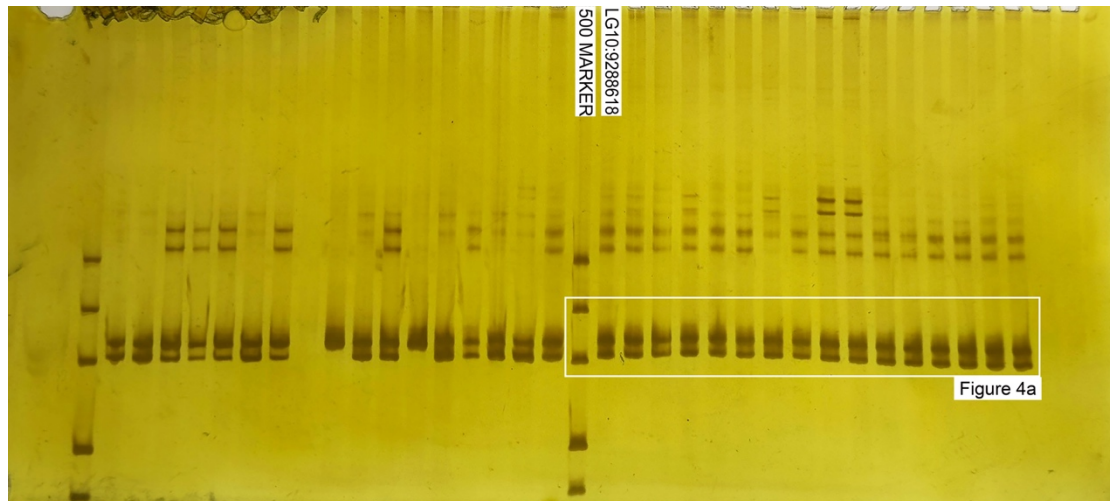
Supplementary Figure S12. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3e in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG10:9288618) is labeled directly in the gel image.



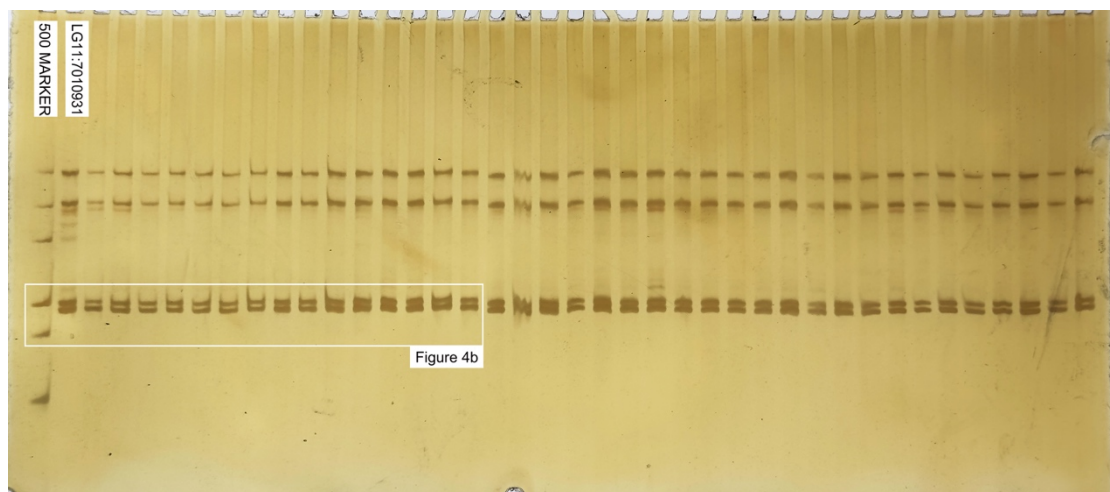
Supplementary Figure S13. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 3f in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.



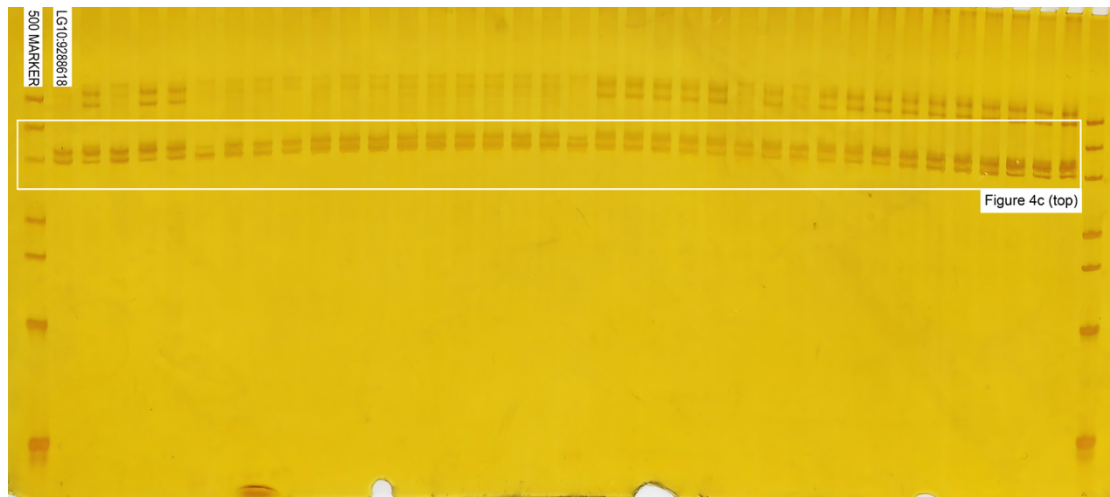
Supplementary Figure S13. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 4a in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG10:9288618) is labeled directly in the gel image.



Supplementary Figure S14. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 4b in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.



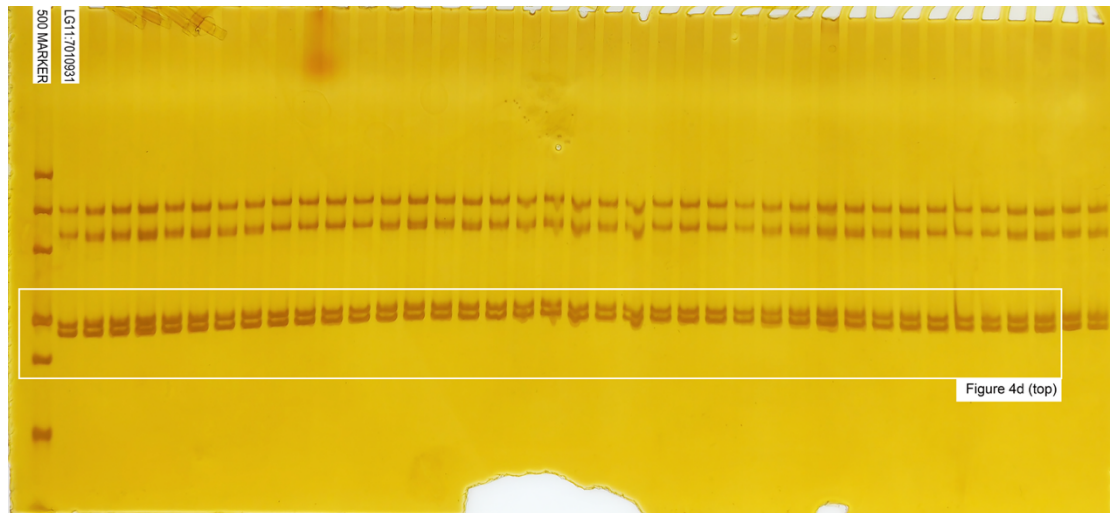
Supplementary Figure S15. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 4c (top) in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG10:9288618) is labeled directly in the gel image.



Supplementary Figure S15. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 4c (bottom) in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG10:9288618) is labeled directly in the gel image.



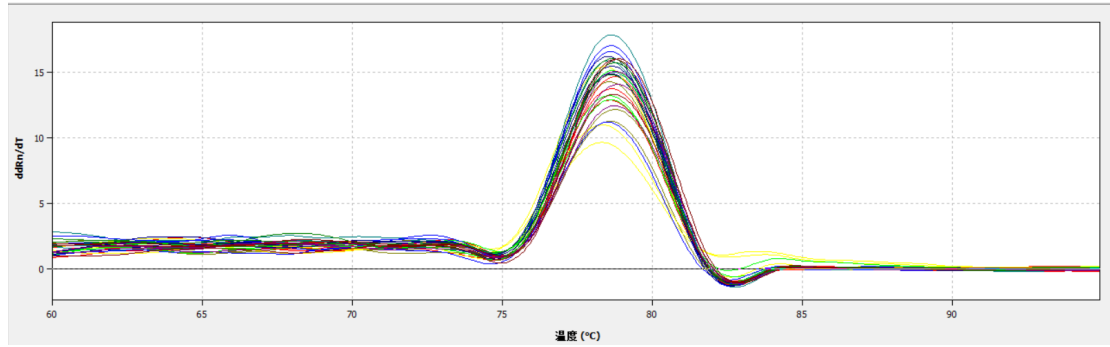
Supplementary Figure S16. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 4d (top) in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.



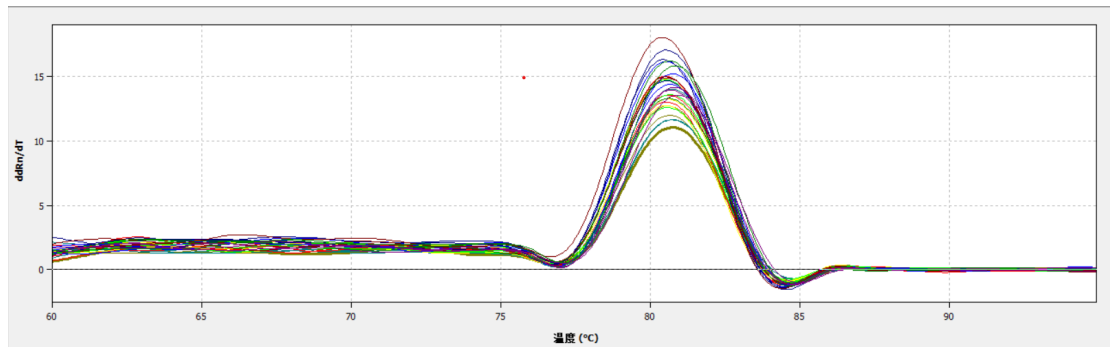
Supplementary Figure S17. Uncropped original polyacrylamide gel electrophoresis (PAGE) image corresponding to the cropped gel shown in Figure 4d (bottom) in the main text.

The region selected for presentation in the main figure is indicated by a white box, and the corresponding InDel locus (LG11:7010931) is labeled directly in the gel image.



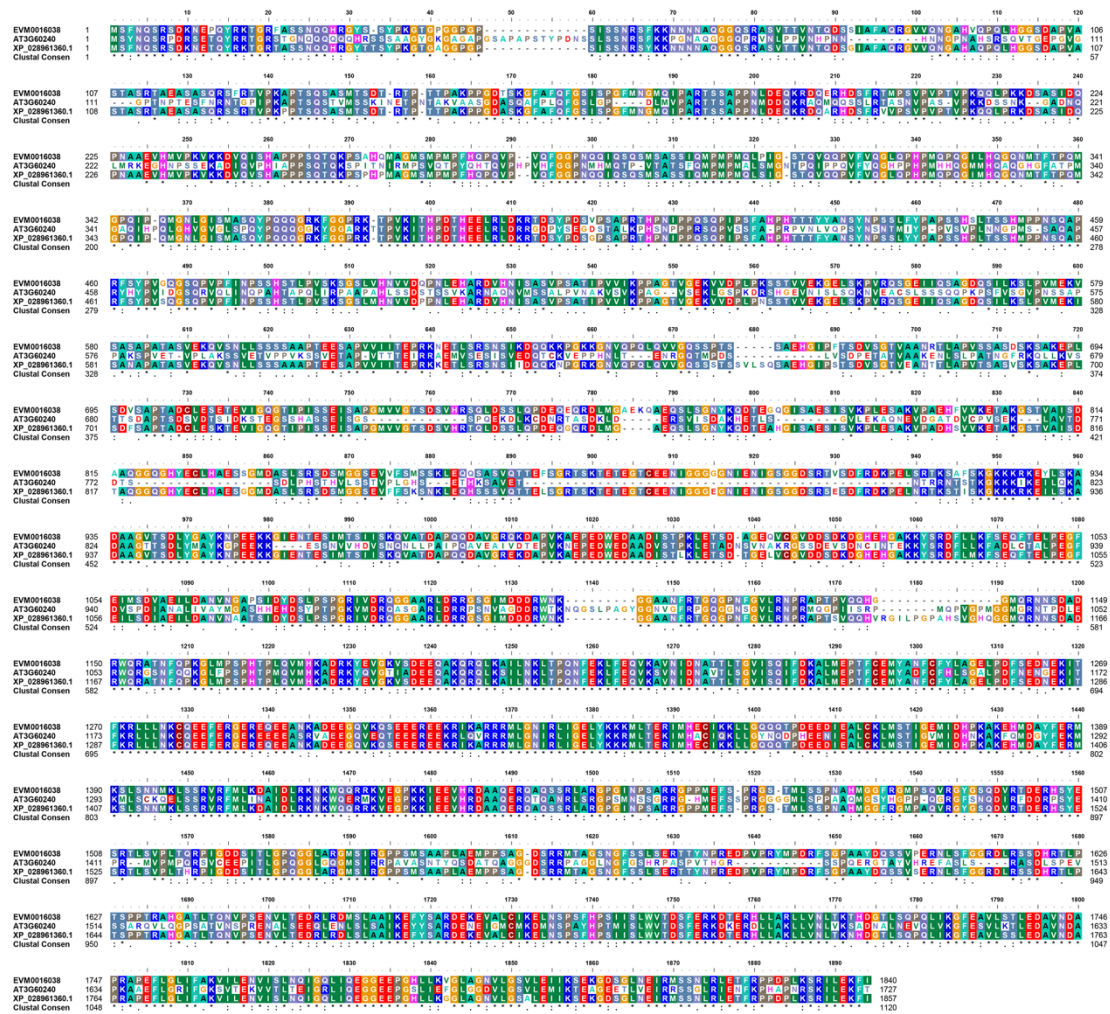
Supplementary Figure S18. qPCR melting curve analysis of the homozygous genotype (a) at locus LG10:9288618.

All samples exhibited a single sharp melting peak, indicating specific amplification and the absence of nonspecific products or primer-dimer formation.



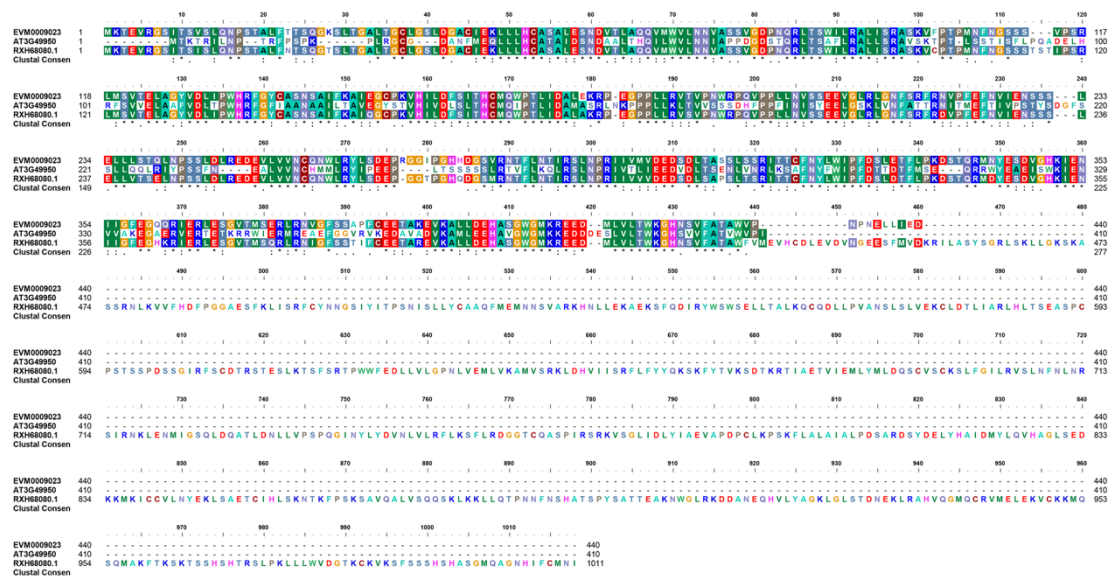
Supplementary Figure S19. Supplementary Figure S19. qPCR melting curve analysis of the heterozygous genotype (Aa) at locus LG10:9288618.

All samples exhibited a single sharp melting peak, confirming the specificity of the primers used for qPCR-based genotyping.



Supplementary Figure S20. Protein sequence alignment of the loquat gene *EVM0016038* with *Arabidopsis* *AT3G60240* and *Malus domestica* XP_028961360.1

Protein sequence alignment of the loquat gene *EVM0016038* with *AT3G60240* from *Arabidopsis thaliana* and with the *Malus domestica* protein XP_028961360.1. The *Arabidopsis* protein sequence was retrieved from the TAIR database, and the *Malus domestica* protein sequence was obtained from the NCBI database. Sequence alignment and visualization were performed using BioEdit software. Conserved amino acid residues and regions of sequence similarity among the three proteins are indicated in the alignment.



Supplementary Figure S21. Protein sequence alignment of the loquat gene *EVM0009023* with *Arabidopsis* *AT3G49950* and *Malus domestica* *RXH68080.1*

Protein sequence alignment of the loquat gene *EVM0009023* with *AT3G49950* from *Arabidopsis thaliana* and with the *Malus domestica* protein *RXH68080.1*, annotated as a hypothetical protein. The Arabidopsis protein sequence was retrieved from the TAIR database, and the *Malus domestica* protein sequence was obtained from the NCBI database. Sequence alignment and visualization were performed using BioEdit software. Conserved regions shared among the three proteins are highlighted in the alignment.