



**Figure S1.** Least-squares regression analysis and 2<sup>nd</sup> order polynomial curve fit for each phenotypic trait. (A) Weight, (B) Colour Index and (C) Firmness. AG: Agakaki, AM: Amahyakume, IS: Isahaya, JI: Jiro, RB: Rojo Brillante, TA: Takura, TW: Tone Wase. Standard deviations (SD) are represented in vertical error bars.

**Table S1.** Results of non-parametric statistical test Kruskal-Wallis analysis of relative gene expression level and morphological traits in studied accessions. Significant values are highlighted in yellow ( $p < 0.05$ ). Comp.=Comparisons, Sig.=Significance.

[illegible]





Name	Forward primer (5' to 3')	Reverse primer (5' to 3')	Source
<i>DkACO1</i>	TGGCAATGATGCTGTTATCTATC	CGAACATATTACAAATAACATGTGTC	Ortiz et al., 2006. doi: <a href="https://doi.org/10.2503/jshs.75.178">https://doi.org/10.2503/jshs.75.178</a>
<i>DkACO2</i>	CAGCGACGACGATGATTATCCAGC	CAGAGGGCTTGGCTTAGACTGTGGC	Ortiz et al., 2006. doi: <a href="https://doi.org/10.2503/jshs.75.178">https://doi.org/10.2503/jshs.75.178</a>
<i>DkACS2</i>	TCCAACATCAGAGTAAAGGGCT	GTCATAGGTCGACGTCACATTTCC	Ortiz et al., 2006. doi: <a href="https://doi.org/10.2503/jshs.75.178">https://doi.org/10.2503/jshs.75.178</a>
<i>DkEIL1</i>	CGATGGAGAGGGTTAAAGATAGG	GACACTGCAGGAACATCACATGTAT	This study
<i>DkEIL3</i>	TCAGGAGAAGTACCCCTTAGAGAA	TATAAGGAGGACTCGACCTTTGG	This study
<i>DkERF8</i>	ATTCGTGAAGGGGGACAATTC	ATAAGTACGCGCGCAAAATTA	Park et al., 2017. J Am Pom Soc. (APS) 71:103-111
<i>DkERF16</i>	TACGGCTATGTGATCTACCTCTC	CCTACTACACAGAGGGGTAAAAAT	Min et al., 2014. doi: <a href="https://doi.org/10.1371/journal.pone.0097043">https://doi.org/10.1371/journal.pone.0097043</a>
<i>DkERF18</i>	GACGTCGCTCTCCCTCGTCTTA	GACTATTTTAAACATCCACATCG	Min et al., 2014. doi: <a href="https://doi.org/10.1371/journal.pone.0097043">https://doi.org/10.1371/journal.pone.0097043</a>
<i>DkERS1</i>	CAGAACAGAGGGTCATGATAGAGA	CTTCTCATCCAAACAGCATAGAC	This study
<i>DkETR2</i>	GTCTCTTACTCTGTTAGTGTGCTC	CTTTTCATCTAATGTGAGCCCTC	This study
<i>DkETR3</i>	ATCAGAGCTTCTACTTCGGTAGC	GTTTCAGTTAATGGTAGCCCTCAC	This study
<i>DkPSY</i>	AACTATGGCTCTTTCTATGCG	AACTTTCTGCTCCGATGA	Zhao et al., 2011. doi: <a href="https://doi.org/10.1007/s11105-010-0272-3">https://doi.org/10.1007/s11105-010-0272-3</a>
<i>DkTUA</i>	AGCCCTCAAGTATGATGGG	GCCTACAGCAGCATTAAC	Wang et al., 2016. doi: <a href="https://doi.org/10.1371/journal.pone.0160885">https://doi.org/10.1371/journal.pone.0160885</a>
<i>DkXTH9</i>	AGGGCATGAGGGTATATGCAAG	AAATCCGACCTCTTTTGCAAGCC	This study

**Table S2.** List of gene-specific primers used for real-time quantitative PCR expression analysis.