

Table S2. Homology search for sweet pitaya (*Stenocereus thurberi*) transcripts in commercial fruits and other cactus. Homologous sequences were predicted by an alignment through BLAST <sup>21</sup> to the protein databases listed in the table with an E value threshold of  $< 1 \times 10^{-5}$ .

<b>Species</b>	<b>Database website</b>	<b>Homologous transcripts (%)</b>
<i>Fragaria vesca</i>	<a href="https://phytozome-next.jgi.doe.gov/info/Fvesca_v4_0_a2">https://phytozome-next.jgi.doe.gov/info/Fvesca_v4_0_a2</a>	78870 (45.21)
<i>Persea americana</i>	<a href="https://genomeevolution.org/CoGe/GenomeInfo.pl?gid=29305">https://genomeevolution.org/CoGe/GenomeInfo.pl?gid=29305</a>	77285 (44.30)
<i>Prunus persica</i>	<a href="https://www.ncbi.nlm.nih.gov/bioproject/PRJNA31227/">https://www.ncbi.nlm.nih.gov/bioproject/PRJNA31227/</a>	84693 (48.55)
<i>Vitis vinifera</i>	<a href="https://phytozome-next.jgi.doe.gov/info/Vvinifera_v2_1">https://phytozome-next.jgi.doe.gov/info/Vvinifera_v2_1</a>	85421 (48.97)
<i>Citrus sinensis</i>	<a href="https://www.ncbi.nlm.nih.gov/bioproject/PRJNA225968/">https://www.ncbi.nlm.nih.gov/bioproject/PRJNA225968/</a>	80132 (45.93)
<i>Opuntia streptacantha</i>	<a href="https://www.ncbi.nlm.nih.gov/Traces/wgs/?val=GISG02">https://www.ncbi.nlm.nih.gov/Traces/wgs/?val=GISG02</a>	99870 (57.25)
<i>Selenicereus undatus</i>	<a href="https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE125083">https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE125083</a>	114933 (65.88)
<i>Hylocereus polyrhizus</i>	<a href="https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE119976">https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE119976</a>	76238 (43.70)
<i>Pachycereus pringlei</i>	<a href="https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE104832">https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE104832</a>	108010 (61.91)