

Table S2. Sugar metabolism of ‘Shenandoah®’ at harvest from peel and flesh for fruit harvested in three harvests as weekly intervals in 2024.

Category	Compounds	Flesh (H1–H3)	Peel (H1–H3)	Biological Role
Monosaccharides	Glucose, Fructose	Very high → decreasing	Moderate	Energy supply
Disaccharides	Sucrose	Very high (H1)	Moderate	Transport sugar
Oligosaccharides	Raffinose, Stachyose	Moderate	Higher	Stress protection
Sugar phosphates	F6P, G1P, F1,6BP	Present	Present	Glycolysis flux
Polyols	Sorbitol, Mannitol	Moderate	Moderate/high	Osmoprotection