

Table S1. Ethylene- related metabolism of ‘Shenandoah®’ at harvest from peel and flesh for fruit harvested in three harvests as weekly intervalles in 2024.

Compound	Classification	Tissue part	Harvest time
S-Adenosyl-L-methionine	Ethylene precursor	Flesh	H1–H3
S-Adenosyl-L-homocysteine	Ethylene precursor	Flesh	H1–H3
Methionine	Ethylene precursor	Flesh	H1–H3
(–)-Jasmonic acid	Ethylene–JA signaling	Flesh	H2–H3
(–)-Jasmonoyl-L-isoleucine	Ethylene–JA signaling	Flesh	H2–H3
12-Oxo-phytodienoic acid	JA precursor	Flesh	H2
12-Hydroxyjasmonic acid glucoside	JA derivative	Flesh	H2–H3
5'-Glucosyloxyjasmonic acid	JA derivative	Flesh	H2–H3
Tuberonic acid glucoside	JA derivative	Flesh	H2–H3
Abscisate	ABA crosstalk	Flesh	H2–H3
Tryptophan	Auxin/ethylene precursor	Flesh	H1–H3
Indole derivatives	Auxin interaction	Flesh	H1–H3
S-Adenosyl-L-methionine	Ethylene precursor	Peel	H1–H3
S-Adenosyl-L-homocysteine	Ethylene precursor	Peel	H1–H3
Methionine	Ethylene precursor	Peel	H1–H3
(–)-Jasmonic acid	Ethylene–JA signaling	Peel	H2–H3
(–)-Jasmonoyl-L-isoleucine	Ethylene–JA signaling	Peel	H2–H3
12-Oxo-phytodienoic acid	JA precursor	Peel	H2
12-Hydroxyjasmonic acid glucoside	JA derivative	Peel	H2–H3
5'-Glucosyloxyjasmonic acid	JA derivative	Peel	H2–H3
Tuberonic acid glucoside	JA derivative	Peel	H2–H3
Abscisate	ABA crosstalk	Peel	H2–H3