

Supplementary Table S1 Identification of anthocyanins and other phenolic compounds in strawberry cultivars ‘Clery’, ‘Sandra’, ‘Frederica’ and ‘Asia’ and the standards they are expressed as

Anthocyanin	λ [nm]	M ⁺ (<i>m/z</i>)	MS ² (<i>m/z</i>)	Expressed as		Group	Clery	Sandra	Frederica	Asia
cyanidin 3- <i>O</i> - β -glucoside	530	449	287	cyanidin-3- <i>O</i> -glucoside		Anthocyanins	x	x	x	x
pelargonidin 3- <i>O</i> - β -glucoside	530	433	271	pelargonidin-3- <i>O</i> -glucoside		Anthocyanins	x	x	x	x
pelargonidin 3- <i>O</i> - β -rutinoside	530	579	271, 433	pelargonidin-3- <i>O</i> -glucoside		Anthocyanins	x	x		x
cyanidin-3- <i>O</i> -(6" malonyl) glucoside	530	535	287	cyanidin-3- <i>O</i> -glucoside		Anthocyanins	x	x		
pelargonidin-3-(6" malonyl) glucoside	530	519	271, 475, 433	pelargonidin-3- <i>O</i> -glucoside		Anthocyanins	x	x	x	x
pelargonidin-3- <i>O</i> -acetylglucoside	530	475	271	pelargonidin-3- <i>O</i> -glucoside		Anthocyanins	x	x	x	x

Phenolic compound	λ [nm]	[M- H] ⁻ (<i>m/z</i>)	MS ² (<i>m/z</i>)	MS ³ (<i>m/z</i>)	MS ⁴ (<i>m/z</i>)	Expressed as	Group	Clery	Sandra	Frederica	Asia
procyanidin dimer	350	577	425, 407, 451, 289			procyanidin B1	Flavanol	x	x	x	x
procyanidin trimer	280	865	577, 407, 405, 287			procyanidin B1	Flavanol	x	x		x
HHDP-galloylglucose	280	633	301, 494, 463, 226			ellagic acid	Hydroxybenzoic acid der.			x	
<i>p</i> -coumaric hexoside	280, 350	325	163, 145, 119			<i>p</i> -coumaric acid	Hydroxycinnamic acid der.	x	x	x	x
<i>p</i> -coumaric hexoside der.	280, 350	361	325	163, 145, 119		<i>p</i> -coumaric acid	Hydroxycinnamic acid der.	x	x	x	x
ferulic acid hexoside	350	355	193, 217, 175			ferulic acid	Hydroxycinnamic acid der.	x		x	
apigenin- <i>O</i> -rhamnoside	350	461	415	269, 161		apigenin-7-glucoside	Flavonols	x	x		x
apigenin- <i>O</i> -glucoside der.	280, 350	555	519, 431	269		apigenin-7-glucoside	Flavonols		x		x
apigenin der.	280, 350	473	269			apigenin-7-glucoside	Flavonols			x	
brevifolin carboxylic acid	280, 350	291	247	219, 191, 203, 175	191	ellagic acid	Hydroxybenzoic acid der.	x	x		
caffeic acid der.	280	581	563, 383, 401	223, 179, 365, 159	179, 135	caffeic acid	Hydroxycinnamic acid der.	x			
caffeic acid der.	280	438	306, 288	254, 272, 287, 179	179, 135	caffeic acid	Hydroxycinnamic acid der.	x			
apigenin- <i>O</i> -glucoside	280, 350	431	269			apigenin-7-glucoside	Flavonols	x		x	
ellagic acid der.	280	463	301, 300, 257			ellagic acid	Hydroxybenzoic acid der.		x	x	
ferulic acid hexoside der.	280, 350	449	355, 269, 193			ferulic acid	Hydroxycinnamic acid der.	x	x	x	x
ellagic acid der.	280	479	301, 300, 433	257, 229, 185		ellagic acid	Hydroxybenzoic acid der.	x		x	x
ellagic acid- <i>O</i> -deoxyhexoside	280, 350	447	301, 300	257, 229		ellagic acid	Hydroxybenzoic acid der.		x	x	
morin	280	303	271, 163, 227	163, 203, 227	135, 134	apigenin-7-glucoside	Flavonols		x		
apigenin der.	280	501	269			apigenin-7-glucoside	Flavonols				x
tormentic acid	280	487	441, 339, 293	293, 149, 147	191, 101		not phenolic compound	x	x	x	x
caffeic acid der.	350	475	267, 429	197, 135, 111, 179		caffeic acid	Hydroxycinnamic acid der.	x			
cinnamic acid-3- <i>O</i> -hexoside	280, 350	355	309, 147, 207, 248			caffeic acid	Hydroxycinnamic acid der.			x	x
kaempferol-3-coumaroylhexoside	350	593	447, 285, 257, 229			kaempferol-3-glucoside	Flavonols	x			x
caffeic acid der.	280	403	358, 305, 385			caffeic acid	Hydroxycinnamic acid der.		x	x	x
quercetin-3- <i>O</i> - β -glucuronide	280, 350	477	301	179, 151		quercetin-3-glucoside	Flavonols	x	x	x	x
ellagic acid der.	280, 350	505	301, 300, 343, 445			ellagic acid	Hydroxybenzoic acid der.			x	
kaempferol- <i>O</i> -hexoside	350	447	284, 285			kaempferol-3-glucoside	Flavonols	x	x	x	x
kaempferol-3- <i>O</i> - β -glucuronide	280, 350	461	285	257, 267, 241		kaempferol-3-glucoside	Flavonols	x	x	x	x
isorhamnetin-3- <i>O</i> - β -glucuronide	350	491	315	300		isorhamnetin-3-glucoside	Flavonols	x	x		x
isorhamnetin- <i>O</i> -hexoside der.	350	477	315, 379			isorhamnetin-3-glucoside	Flavonols			x	
caffeoylglucaric isomer der.	280	417	223, 179, 383	179, 135		caffeic acid	Hydroxycinnamic acid der.	x	x	x	
ellagic acid der.	280, 350	533	300, 301	283, 239, 229		ellagic acid	Hydroxybenzoic acid der.	x	x		
kaempferol-malonylglucoside	350	489	284, 285	255, 257		kaempferol-3-glucoside	Flavonols			x	x

der., derivative; [M-H]⁻, pseudo-molecular ion identified in negative ion mode; M⁺, pseudo-molecular ion identified in positive ion mode ion.