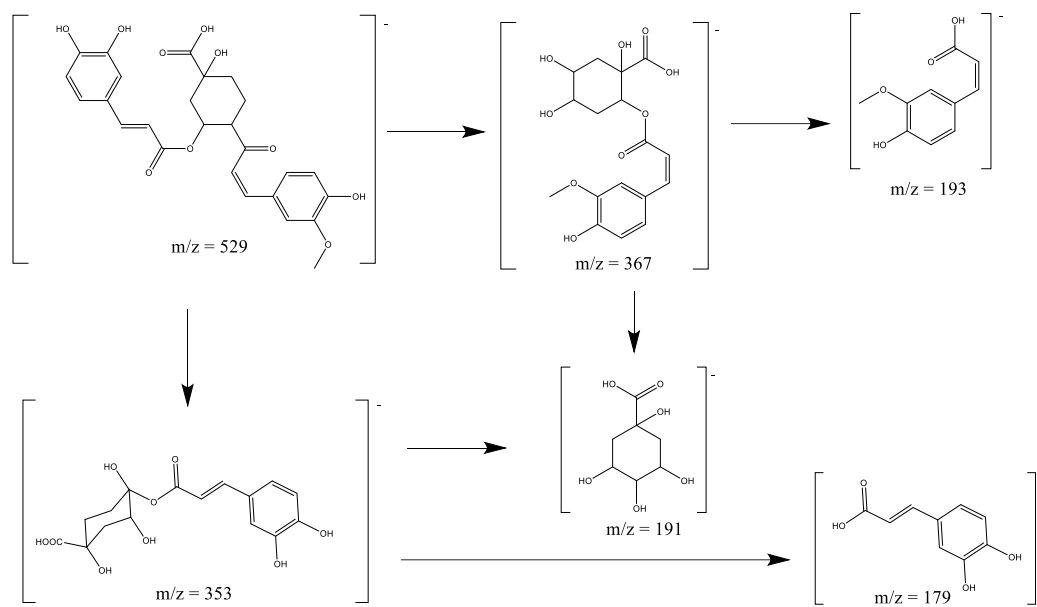


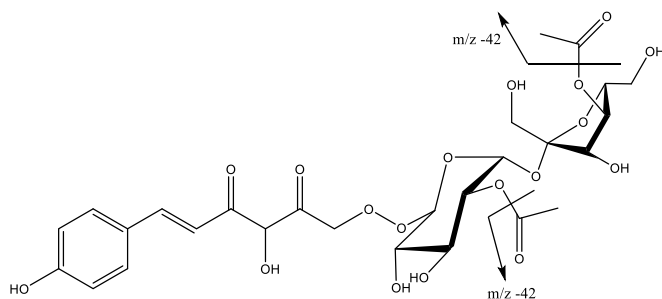
**Table S1.** Profile of phenolic compounds identified by UPLC-ESI-QTOF MS analysis for plum skin (S) and flesh (F) samples under PLE neutral and acidic conditions.

#	[M-H]-	tR (min)	MS2 fragments	Formula	Satsuma (neutral)		Methley (neutral)		Pisardii (neutral)		Satsuma (acid)		Methley (acid)		Pisardii (acid)	
					S	F	S	S	F	S	S	F	S	S	F	S
Hydroxycinnamic acids and derivatives																
1	529.1365	2.89	[529]: 353, 367, 191, 179	C26H25O12		x	x			x						
3	325.0917	4.42	[325]: 145, 163, 187	C15H17O8							x		x			
5	341.0884	7.13	[341]: 161, 179	C15H17O9	x		x		x	x	x	x	x	x	x	x
6	353.0869	7.56	[353]: 191, 145	C16H17O9	x		x	x	x	x	x	x	x	x	x	x
7	325.0917	7.96	[325]: 145, 163, 187	C15H17O8	x		x	x		x						
12	325.0917	9.98	[325]: 145	C15H17O8	x	x	x		x	x	x	x	x	x	x	x
13	367.1021	10.23	[367]: 161 , 134	C17H19O9	x	x	x		x	x			x		x	
15	367.1021	11.45	[367]: 193 , 134	C17H19O9	x	x	x	x	x	x	x	x	x	x	x	x
19	529.1365	12.8	[529]: 353, 367, 191, 179	C26H25O12			x			x	x	x	x	x	x	x
21	337.0919	14.78	[337]:173	C16H17O8	x				x	x	x	x	x			x
22	337.0919	15.29	[337]:173	C16H17O8	x					x	x	x				
23	367.1021	15.65	[367]: 193 , 134	C17H19O9	x	x	x	x	x	x						x
24	351.1082	16.99	[351]: 177 , 293 , 235 , 191, 133	C17H19O8	x				x							x
25	571.1675	17.44	[571]: 553, 529, 511, 487, 307	C25H31O15			x		x		x		x	x	x	x
29	351.1082	20.55	[351]:177 , 293 , 235 , 191, 133	C17H19O8	x		x	x		x	x					
30	571.1675	21.03	[571]: 529, 511, 307, 175	C25H31O15			x	x			x	x	x	x	x	x
Flavonoids																
4	447.0913	5.89	[447]: 300, 285	C21H19O11	x	x	x	x	x	x	x	x	x	x	x	x
18	447.0913	12.57	[447]: 300, 301	C21H19O11	x	x		x	x		x	x	x	x	x	
31	463.0901	21.95	[463]: 300, 301	C21H19O12	x		x				x		x	x	x	
32	609.1488	22.86	[609]:300, 301	C27H29O16	x	x	x		x	x	x	x	x	x	x	x
33	463.0875	23.89	[463]: 300, 301	C21H19O12	x	x	x	x	x	x	x	x	x	x	x	x
34	463.0875	25.46	[463]: 300, 301	C21H19O12	x		x				x		x			

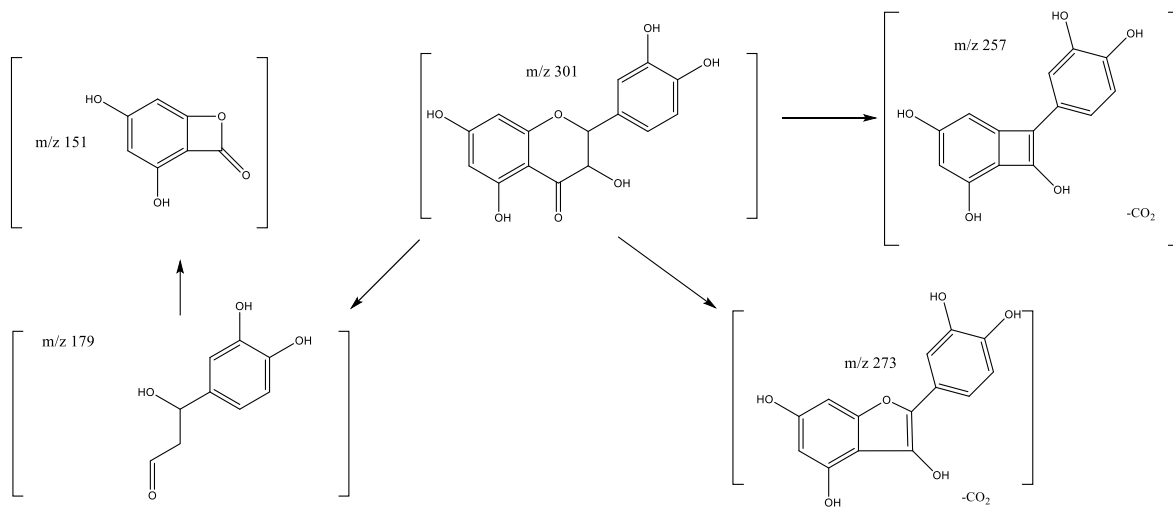
[illegible]



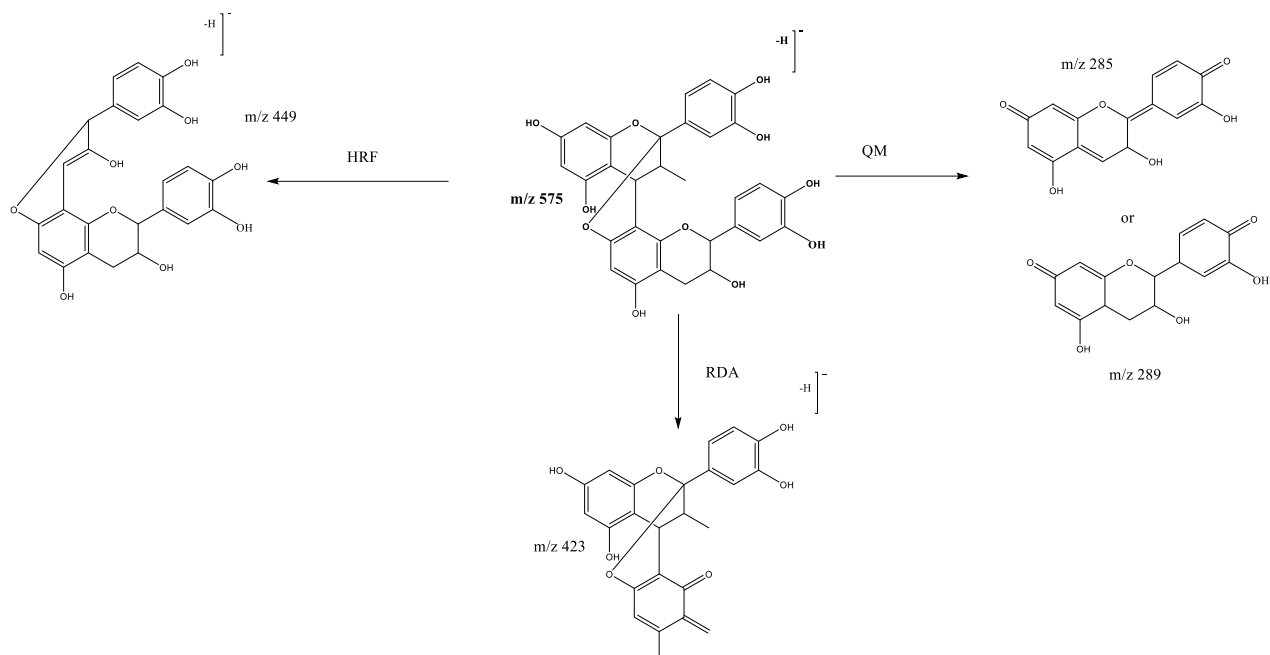
**Figure S1.** Caffeoyl-feruloyl-quinic acid fragmentation pathway.



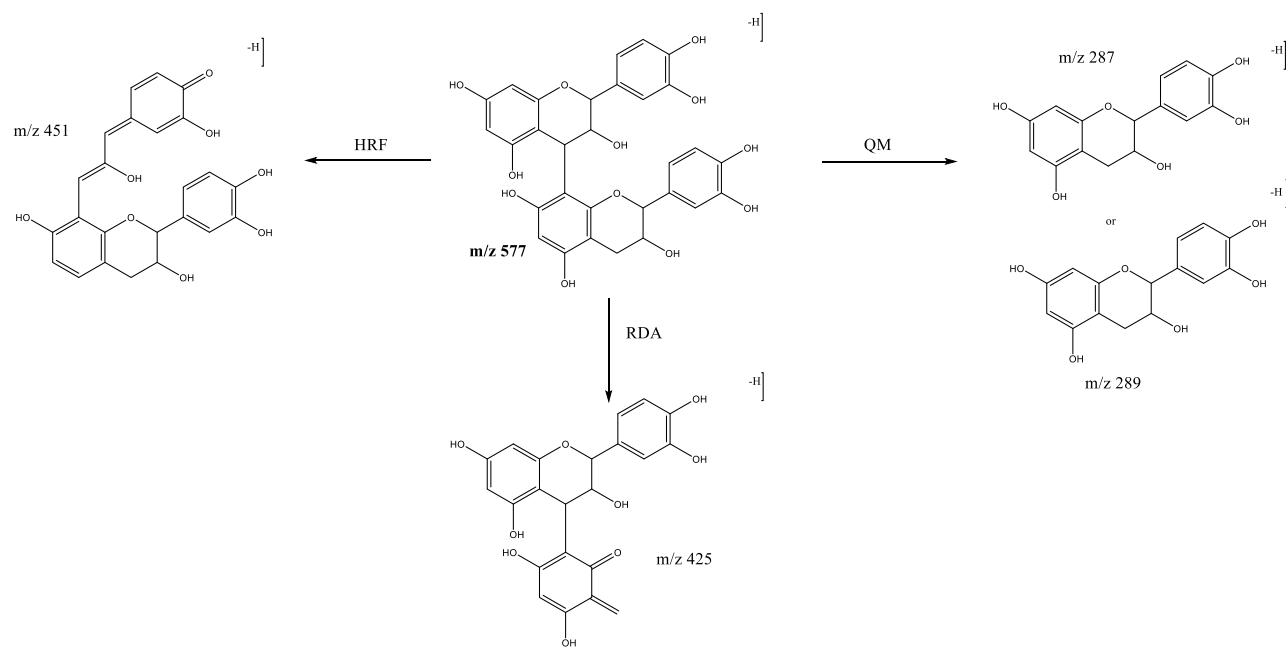
**Figure S2.** Structure and fragmentation of di-O-acetyl-O-*p*-coumaroylsucrose.



**Figure S3.** Quercetin fragmentation pathway .



**Figure S4.** Fragmentation pathway of A-type procyanidin dimer showing the products formed by heterocyclic ring fussion (HRF), quinone methide (QM) and retro-Diels–Alder (RDA) reactions.



**Figure S5.** Fragmentation pathway of B-type procyanidin dimer showing the products formed by heterocyclic ring fussion (HRF), quinone methide (QM) and retro-Diels–Alder (RDA) reactions.