

Non phenolic compounds information

Among other compounds, several amino acids were characterized in *F.carica* leaves and fruit (Table S1). Their elution pattern and fragmentation agreed with our previous studies.²⁹ In general, neutral losses of NH_3 (17.0265 u) and CO_2 (43.9898) from the amino- and caboxy-terminal, among other fragments, were observed in the MS/MS spectra. Furthermore, several organic acids were tentatively identified that were not equally distributed in *F. carica* extracts. Quinic, malic and citric acid were reported to be the most abundant organic acid in *F. carica* leaves and fruit.^{1,9,14,34} Isopropylmalic acid was not found in the Moraceae family, but was detected in tomato (Solanaceae family)²⁸ and lettuce leaves,²⁹ as well as gluconic acid/galactonic acid.

References

See references listed in the manuscript.

Fig. S1: UV-Vis spectra of several phenolic compounds types: vanillic acid, chlorogenic acid, quercetin, luteolin 7-*O*-glucoside, naringenin, (+)-catechin, genistein, 7-hydroxycoumarin and cyanidin 3-*O*-rutinoside, and psoralen.

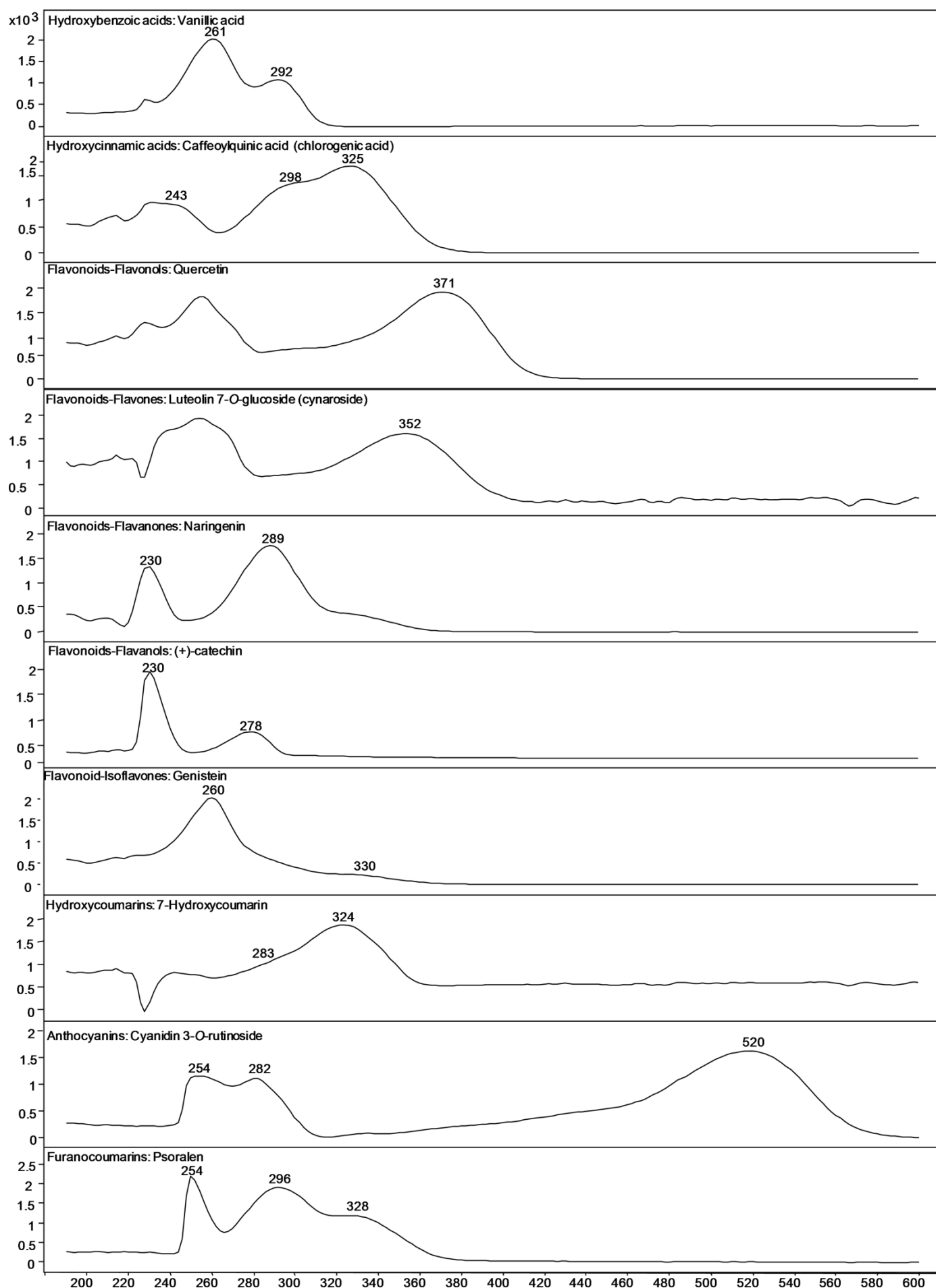


Fig. S2: General identification process for the characterization of quercetin 3-*O*-rutinoside and performed with the software Mass Hunter Qualitative Analysis B.06.00.

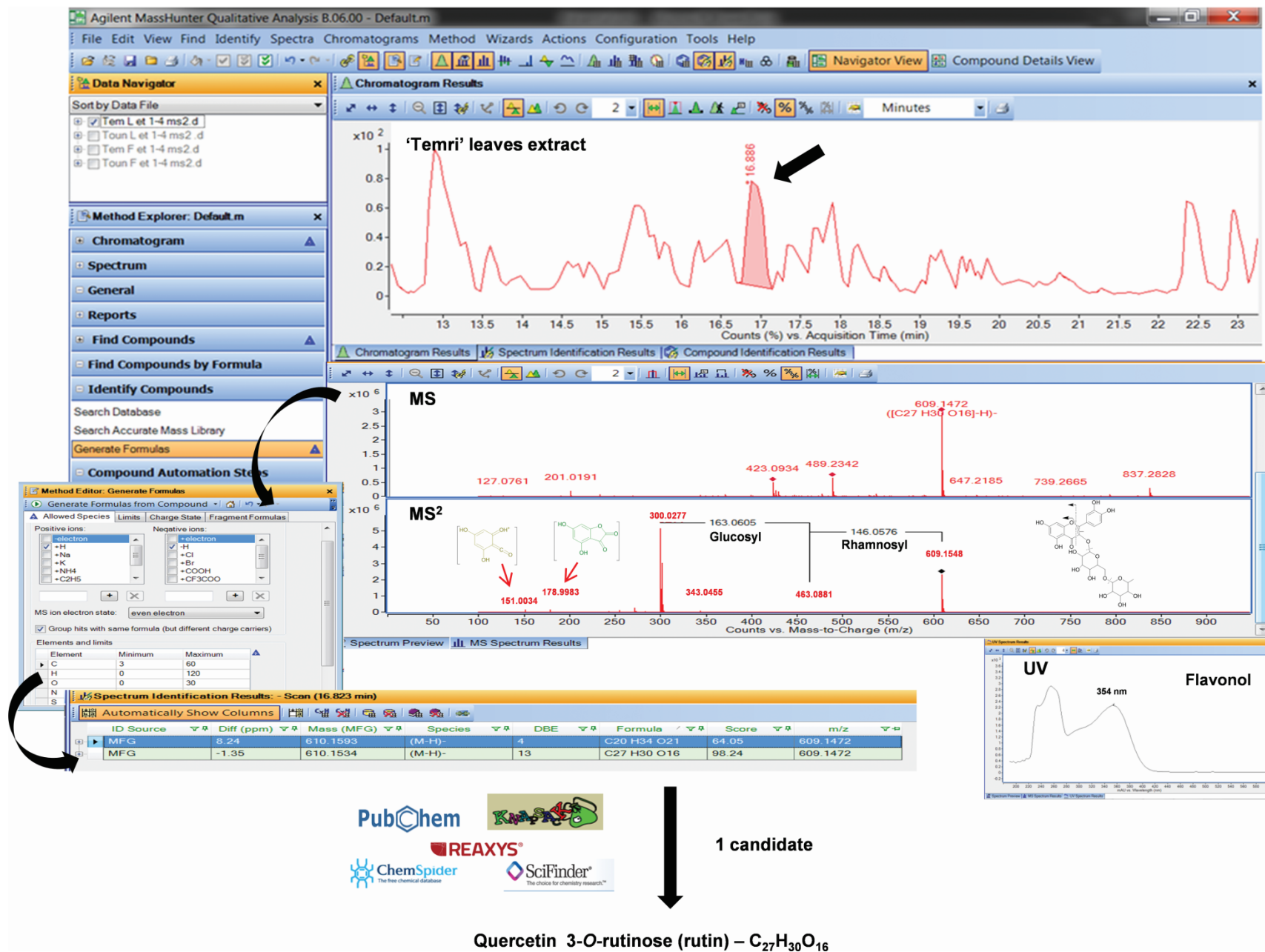


Fig. S3: Summary of the identification results, highlighting the number of compounds tentatively reported in *F. carica* for the first time in this work.

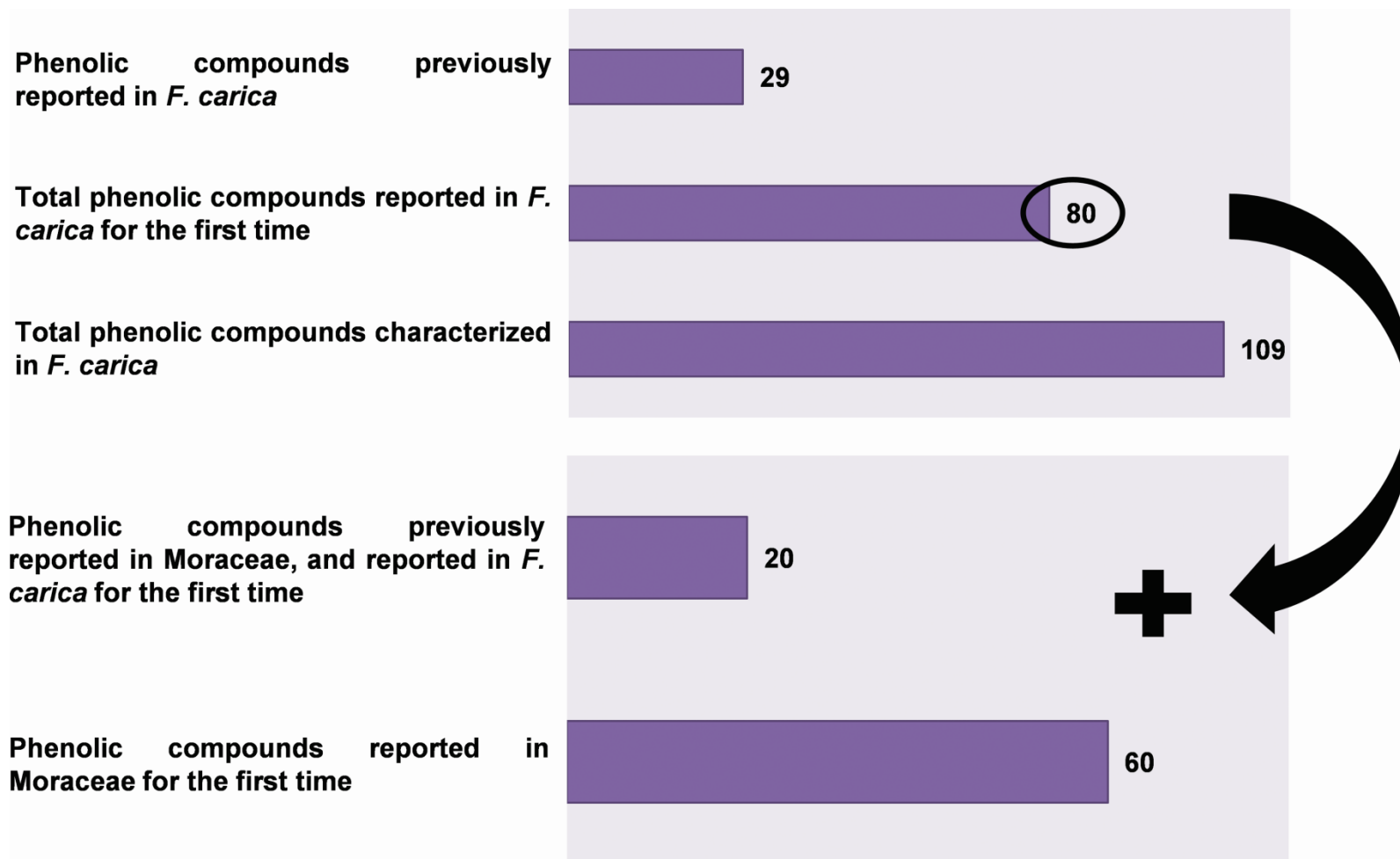


Fig. S4: Extracted ion chromatograms of the compounds: a) hydroxycinnamic acids, b) psoralic acid glucoside, and c) prenylated isoflavones in ‘Tounsi’ samples, and d) hydroxycinnamic acids, e) psoralic acid glucoside, and f) prenylated isoflavones in ‘Temri’ samples. The intensity of a and d, b and e as well as c and f was normalized to the largest area of these chromatograms.

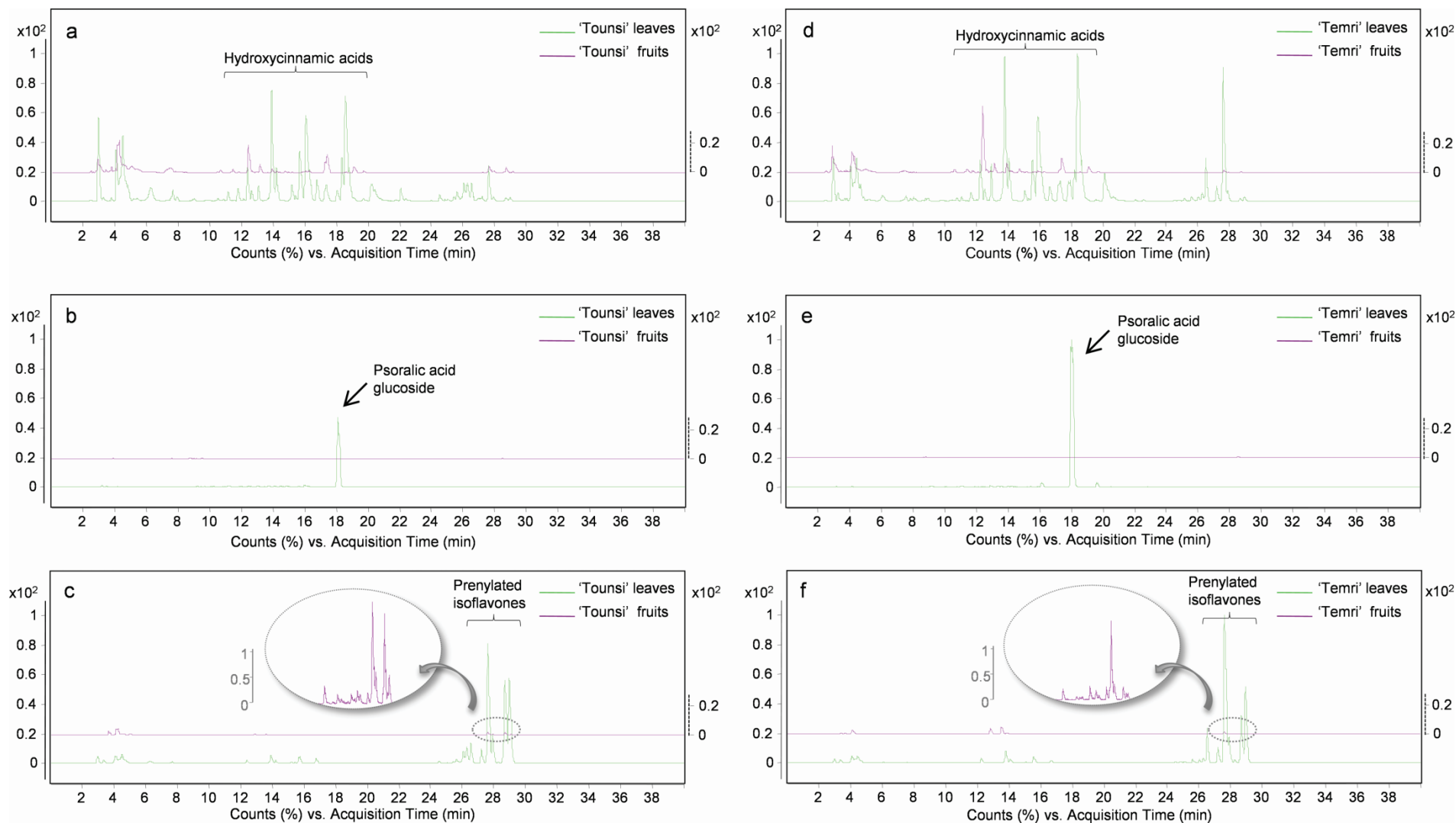


Table S1: Phenolic compounds characterized using the negative ionization mode in leaves and fruits of *F. carica* cultivars ‘Tounsi’ and ‘Temri’.

	RT (min)	M	[M-H] ⁻	Formula	Score	Error (ppm)	UV (nm)	Main fragments via MS/MS	Proposed compound	Plant family	Ref.	Presence			
												Tounsi		Temri	
												Leaves	Fruit	Leaves	Fruit
<i>Hydroxybenzoic acids and derivatives</i>															
1	10.61	360.1053	359.0976	C ₁₅ H ₂₀ O ₁₀	94.7	1.6	280	197.0455; 179.0346; 153.0549; 135.0452; 85.0292	Syringic acid hexoside I	Asteraceae (<i>Lactuca sativa</i>)	¹	+	-	+	-
2	10.76	316.0794	315.0725	C ₁₃ H ₁₆ O ₉	98.9	-1.2	-	153.0190; 152.0109; 108.0212; 109.0293	Dihydroxybenzoic acid hexoside I	Asteraceae (<i>Lactuca sativa</i>)	¹	+	+	+	+
3	10.76	314.0638	313.0569	C ₁₃ H ₁₄ O ₉	84.0	-1.2	280	197.0462; 167.0354; 153.0559; 135.0454; 133.0145; 123.0455; 115.0039	Syringic acid malate I			+	-	+	-
4	10.94	360.1067	359.0993	C ₁₅ H ₂₀ O ₁₀	89.3	-2.9	280	197.0458; 179.0352; 153.0352; 135.0454; 123.0453; 85.0297	Syringic acid hexoside II	Asteraceae (<i>Lactuca sativa</i>)	¹	+	-	+	-
5	11.07	330.0951	329.0886	C ₁₄ H ₁₈ O ₉	80.3	-2.4	255; 291	167.0345; 152.0111; 123.0450; 108.0213	Vanillic acid glucoside	Asteraceae (<i>Lactuca sativa</i>)	¹	+	+	-	+
6	11.07	314.0638	313.0573	C ₁₃ H ₁₄ O ₉	82.7	-2.7	280	179.0350; 135.0450; 133.0142; 115.0037	Syringic acid malate II			+	-	+	-
7	11.09	476.1548	475.1473	C ₂₀ H ₂₈ O ₁₃	86.7	-3.8	-	329.0880; 167.0347; 109.0293	Vanillic acid hexoside deoxyhexoside			+	-	+	-
8	11.19	434.1060	433.1002	C ₁₇ H ₂₂ O ₁₃	95.3	-3.2	280	301.0564; 169.0138;	Gallic acid di- pentoside I			+	-	+	-

								168.0061; 151.0035; 125.0242							
9	11.23	316.0794	315.0726	C ₁₃ H ₁₆ O ₉	98.9	-1.5	-	153.0188; 109.0294	Dihydroxybenzoic acid hexoside II	Asteraceae (<i>Lactuca sativa</i>)	¹	+	+	+	+
10	11.50	434.1060	433.0996	C ₁₇ H ₂₂ O ₁₃	98.2	-1.6	280	301.0568; 169.0130; 168.0064; 151.0041; 125.0245	Gallic acid di-pentoside II			+	+	+	+
11	11.57	448.1217	447.1143	C ₁₈ H ₂₄ O ₁₃	99.3	0.4	305	315.0714; 271.0816; 152.0112; 109.0291; 108.0217	Dihydroxybenzoic acid hexoside pentoside I	Fagaceae (<i>Lithocarpus polystachyu</i>)	²	+	+	+	+
12	12.32	448.1217	447.0900	C ₁₈ H ₂₄ O ₁₃	97.4	0.2	260; 297	152.0114; 109.0291	Dihydroxybenzoic acid hexoside pentoside II	Fagaceae (<i>Lithocarpus polystachyu</i>)	²	+	+	+	+
13	12.54	154.0266	153.0198	C ₇ H ₆ O ₄	92.5	-4.1	260; 290	109.0296; 108.0220	Dihydroxybenzoic acid	Moraceae (<i>Ficus carica</i>)	³	+	+	+	+
14	12.56	316.0794	315.0723	C ₁₃ H ₁₆ O ₉	99.7	-0.5	-	153.0194; 152.0194; 109.0291; 108.0219	Dihydroxybenzoic acid hexoside III	Asteraceae (<i>Lactuca sativa</i>)	¹	+	-	+	-
15	12.62	286.0689	285.0613	C ₁₂ H ₁₄ O ₈	97.3	1.2	260; 300	152.0115; 153.0191; 108.0217; 109.0295	Dihydroxybenzoic acid pentoside I	Solanaceae (<i>Solanum esculentum</i>)	⁴	+	+	+	+
16	12.68	448.1217	447.1151	C ₁₈ H ₂₄ O ₁₃	94.3	-1.6	-	153.0192; 109.0295	Dihydroxybenzoic acid hexoside pentoside III	Fagaceae (<i>Lithocarpus polystachyu</i>)	²	+	+	+	+
17	13.17	286.0689	285.0621	C ₁₂ H ₁₄ O ₈	85.2	-1.4	-	153.0191; 152.0113; 109.0294; 108.0219	Dihydroxybenzoic acid pentoside II	Solanaceae (<i>Solanum esculentum</i>)	⁴	+	+	+	+
18	13.25	418.1111	417.1043	C ₁₇ H ₂₂ O ₁₂	98.2	-1.0	310	285.0613; 241.0718; 153.0165; 152.0119; 108.0217; 109.0287	Dihydroxybenzoic acid di-pentoside	Fabaceae (<i>Cyclopia genistoides</i>)	⁵	+	+	+	+
19	14.66	138.0318	137.025	C ₇ H ₆ O ₃	96.1	-5.0	-	109.0294; 108.0221; 93.0349; 92.0273	Hydroxybenzoic acid I	Asteraceae (<i>Lactuca sativa</i>)	¹	+	-	+	-

20	15.17	138.0319	137.0245	C ₇ H ₆ O ₃	95.3	-1.7	-	93.0344	Hydroxybenzoic acid II	Asteraceae (<i>Lactuca sativa</i>)	¹	+	+	+	+
21	15.90	168.0423	167.0349	C ₈ H ₈ O ₄	96.9	0.9	261; 292	152.0110; 123.0431; 124.0163; 108.0214	Vanillic acid*			+	+	+	+
<i>Hydroxycinnamic acids and derivatives</i>															
22	11.19	516.1483	515.1408	C ₂₂ H ₂₈ O ₁₄	88.4	-0.9	234; 264; 327	353.0881; 191.0560; 179.0346	Caffeoylquinic acid hexoside I	Asteraceae (<i>Cynara scolymus</i>)	⁶	+	-	+	-
23	11.75	516.1483	515.1408	C ₂₂ H ₂₈ O ₁₄	98.2	-0.7	232; 262; 324	341.0872; 323.0771; 191.0559; 179.0348; 173.0451; 135.0451	Caffeoylquinic acid hexoside II	Asteraceae (<i>Cynara scolymus</i>)	⁶	+	+	+	+
24	12.31	354.0951	353.0884	C ₁₆ H ₁₈ O ₉	98.3	-1.3	230; 264; 328	191.0560; 179.0349; 135.0448	Caffeoylquinic acid I	Moraceae (<i>Ficus carica</i>)	⁷⁻¹⁰	+	+	+	+
25	12.37	344.1107	343.1043	C ₁₅ H ₂₀ O ₉	95.9	-2.7	282	181.0508; 163.0400; 137.0609; 135.0443	Dihydrocaffeic acid hexose	Asteraceae (<i>Lactuca sativa</i>)	¹	+	+	+	+
26	12.64	516.1483	515.1408	C ₂₂ H ₂₈ O ₁₄	98.5	-1.0	280; 320	341.0773; 323.0773; 191.0560; 179.0347; 135.0446	Caffeoylquinic acid hexoside III	Asteraceae (<i>Cynara scolymus</i>)	⁶	+	+	+	+
27	12.89	356.1107	355.1038	C ₁₆ H ₂₀ O ₉	99.1	-1.0	322	193.0502; 178.0267; 149.0606; 134.0369	Ferulic acid hexoside I	Solanaceae (<i>Solanum esculentum</i>)	⁴	-	+	-	+
28	13.79	338.1002	337.0926	C ₁₆ H ₁₈ O ₈	81.3	0.8	300; 320	191.0557; 173.0454; 163.0399	Coumaroylquinic acid I	Asteraceae (<i>Lactuca sativa</i>)	¹	+	-	+	-
29	13.90	354.0951	353.0883	C ₁₆ H ₁₈ O ₉	98.2	-1.3	243; 298; 325	191.0566; 179.0347	Caffeoylquinic acid II* (chlorogenic acid)	Moraceae (<i>Ficus carica</i>)	⁷⁻¹⁰	+	+	+	+
30	14.11	326.1003	325.0929	C ₁₅ H ₁₈ O ₈	92.4	-0.5	326	163.0397; 119.0499	Comaroyl hexoside	Solanaceae (<i>Solanum esculentum</i>)	⁴	-	+	-	+
31	14.21	354.0951	353.0882	C ₁₆ H ₁₈ O ₉	83.7	-1.1	325	-	Caffeoylquinic acid III	Moraceae (<i>Ficus carica</i>)	⁷⁻¹⁰	+	+	+	+
32	14.72	356.1107	355.1036	C ₁₆ H ₂₀ O ₉	99.3	-0.4	323	193.0502;	Ferulic acid	Solanaceae	⁴	-	+	-	+

								178.0267; 149.0602; 134.0370	hexoside II	(<i>Solanum esculentum</i>)					
33	15.28	354.0951	353.0885	C ₁₆ H ₁₈ O ₉	83.2	-1.6	232; 272; 328	191.0565	Caffeoylquinic acid IV	Moraceae (<i>Ficus carica</i>)	7-10	+	+	+	+
34	15.61	338.1002	337.0929	C ₁₆ H ₁₈ O ₈	98.4	0.5	234; 272; 328	191.0568	Coumaroylquinic acid II	Asteraceae (<i>Lactuca sativa</i>)	¹	+	-	+	-
35	15.84	180.0436	179.036	C ₉ H ₈ O ₄	94.5	-5.5	241; 295; 324	135.056; 134.0377; 89.0399	Caffeic acid*	Moraceae (<i>Ficus carica</i>)	¹¹	-	+	-	+
36	16.03	296.0532	295.0467	C ₁₃ H ₁₂ O ₈	95.9	-2.5	298; 330	179.0350; 133.0143; 115.0038	Caffeoylmalic acid	Moraceae (<i>Ficus carica</i>)	⁹	+	-	+	-
37	16.83	338.1002	337.0929	C ₁₆ H ₁₈ O ₈	99.8	0.0	232; 272; 326	191.0558	Coumaroylquinic acid III	Asteraceae (<i>Lactuca sativa</i>)	¹	+	-	+	-
38	17.30	386.1216	385.1144	C ₁₇ H ₂₂ O ₁₀	82.0	-0.9	234; 268; 326	267.0724; 249.0617; 223.0458; 205.0353; 147.0294; 113.0241; 91.0551; 85.0294	Sinapic acid hexoside	Solanaceae (<i>Solanum esculentum</i>)	⁴	+	+	+	+
39	18.01	280.0583	279.0513	C ₁₃ H ₁₂ O ₇	99.0	-1.0	248; 291; 324	163.0398; 133.0139; 119.0499; 115.0033	Coumaroylmalic acid I	Fabaceae (<i>Pisum sativum</i>)	¹²	+	-	+	-
40	18.10	340.0794	339.0729	C ₁₅ H ₁₆ O ₉	98.1	-1.7	244; 286; 330	309.0621; 223.0616; 208.0372; 193.0507; 164.0480; 149.02543; 133.0142; 115.0039	Sinapic acid malate	Brassicaceae (<i>Arabidopsis thaliana</i>)	¹³	+	-	+	-
41	18.25	280.0583	279.051	C ₁₃ H ₁₂ O ₇	99.2	0.0	236; 298; 320	163.0401; 133.0139; 119.0500; 115.0033	Coumaroylmalic acid II	Fabaceae (<i>Pisum sativum</i>)	¹²	+	-	+	-
42	18.40	310.0689	309.0625	C ₁₄ H ₁₄ O ₈	96.0	-2.8	240; 286; 325	193.0510; 178.0267; 149.0607;	Ferulic acid malate I	Solanaceae (<i>Solanum tuberosum</i>)	¹⁴	+	-	+	-

43	18.67	310.0689	309.0623	C ₁₄ H ₁₄ O ₈	98.0	-2.0	240; 288; 320	133.0146; 115.0039; 193.0556; 134.0371	Ferulic acid malate II	Solanaceae (<i>Solanum tuberosum</i>)	14	+	-	+	-
44	19.09	194.0579	193.0511	C ₁₀ H ₁₀ O ₄	98.3	-2.0	238; 293; 325	134.0373	<i>Trans</i> -ferulic acid*	Moraceae (<i>Ficus carica</i>)	8	-	+	-	+
45	19.62	194.0579	193.0503	C ₁₀ H ₁₀ O ₄	84.7	0.3	238; 282; 325	134.0373	Ferulic acid isomer			-	+	-	+
<i>Flavonoids-Flavonols</i>															
46	13.09	772.2075	771.2002	C ₃₃ H ₄₀ O ₂₁	97.5	-1.7	356	609.1459; 462.0801; 463.0871; 301.0352; 300.0258	Quercetin <i>O</i> - deoxyhexoside di- hexoside	Several families ^a		+	+	+	+
47	13.39	626.1483	625.141	C ₂₇ H ₃₀ O ₁₇	87.5	-1.0	346	463.0893; 462.0814; 301.0360	Quercetin <i>O</i> -di- hexoside	Several families ^a		+	+	+	+
48	15.59	756.2113	755.2052	C ₃₃ H ₄₀ O ₂₀	94.1	-1.6	356	301.0359; 300.0279	Quercetin di- deoxyhexoside hexoside	Several families ^a		+	+	+	+
49	17.18	610.1534	609.1486	C ₂₇ H ₃₀ O ₁₆	93.8	-1.9	354	463.0890; 300.0278; 273.0398; 257.0448; 229.0502; 178.9983; 121.0297; 151.0036; 107.0142	Quercetin-3- <i>O</i> - rutinoside* (rutin)	Moraceae (<i>Ficus carica</i>)	7-9,15	+	+	+	+
50	17.94	464.0955	463.0888	C ₂₁ H ₂₀ O ₁₂	99.8	-0.3	354	301.0349; 300.0278; 151.0037	Quercetin-3- <i>O</i> - glucoside* (isoquercetin)	Moraceae (<i>Ficus carica</i>)	8-10,15	+	+	+	+
51	18.68	550.0955	549.0882	C ₂₄ H ₂₂ O ₁₅	99.2	0.6	354	505.0986; 463.0874; 301.0351; 300.0276	Quercetin 3- <i>O</i> -(6"- malonyl)glucoside	Moraceae (<i>Ficus carica</i>)	9	+	+	+	+
52	23.05	302.0427	301.0373	C ₁₅ H ₁₀ O ₇	83.2	-0.8	371	273.0399; 178.9983; 151.0034; 121.0296; 107.0139	Quercetin*	Moraceae (<i>Ficus carica</i>)	11,16	-	+	-	+

Flavonoids-Flavones

53	14.76	580.1428	579.1367	C ₂₆ H ₂₈ O ₁₅	87.3	-3.3	344	561.1251; 519.1156; 489.1044; 459.0938; 429.0834; 399.0727; 369.0623; 285.0499; 133.0289	Luteolin C- hexoside C- pentoside I	Moraceae (<i>Ficus carica</i>)	¹⁵	+	+	+	+
54	14.89	580.1433	579.136	C ₂₆ H ₂₈ O ₁₅	96.3	-0.7	354	561.1254; 519.1153; 489.1049; 459.0939; 429.0834; 399.0723; 369.0624; 285.0400; 133.0297	Luteolin C- hexoside C- pentoside II	Moraceae (<i>Ficus carica</i>)	¹⁵	+	+	+	+
55	15.10	564.1479	563.1415	C ₂₆ H ₂₈ O ₁₄	98.3	-1.5	336	545.1321; 503.1212; 473.1097; 443.0988; 383.0786; 353.0669; 325.0733; 297.0766; 117.0347	Apigenin C- hexoside C- pentoside I ^b	Moraceae (<i>Ficus carica</i>)	⁹	+	+	+	+
56	15.60	564.1488	563.1435	C ₂₆ H ₂₈ O ₁₄	88.3	-4.7	335	545.1312; 503.1203; 473.1104; 443.0999; 383.07858; 353.0680; 325.0726; 297.0778; 117.0343	Apigenin C- hexoside C- pentoside II ^b	Moraceae (<i>Ficus carica</i>)	⁹	+	+	+	+
57	16.00	448.1006	447.0937	C ₂₁ H ₂₀ O ₁₁	98.7	-1.0	350	429.0821; 387.2027; 357.0615; 327.0512; 285.0404; 133.0138	Luteolin 6-C- glucoside (isoorientin) ^c	Arecaceae (<i>Elaeis guineensis</i>)	¹⁷	+	+	+	+
58	16.21	564.1479	563.142	C ₂₆ H ₂₈ O ₁₄	84.5	-3.3	330	545.1302;	Apigenin 6-C-	Moraceae (<i>Ficus</i>	⁹	+	+	+	+

								503.1195; 473.1092; 443.0989; 383.0777; 353.0670; 297.0766; 117.0357	hexose-8- <i>C</i> -pentose III ^b	<i>carica</i>)					
59	16.58	448.1006	447.0938	C ₂₁ H ₂₀ O ₁₁	98.7	-1.3	350	357.0608; 327.0507; 285.0398; 133.0291	Luteolin 8- <i>C</i> - glucoside (orientin) ^c	Moraceae(<i>Ficus carica</i>); Arecaceae (<i>Elaeis guineensis</i>)	10,17	+	+	+	+
60	16.80	578.1636	577.1579	C ₂₇ H ₃₀ O ₁₄	98.2	-2.0	330	457.1140; 413.0880; 293.0455	Apigenin <i>C</i> - hexoside 8- <i>C</i> - deoxyhexoside	Arecaceae (<i>Elaeis guineensis</i>)	17	+	+	+	+
61	17.42	432.1056	431.0989	C ₂₁ H ₂₀ O ₁₀	99.4	-1.2	326	341.0663; 311.0553; 283.0603; 269.0444; 268.0372; 117.0342	Apigenin 8- <i>C</i> - glucoside (vitexin)	Moraceae (<i>Ficus deltoidea</i>)	18	+	+	+	+
62	17.82	448.1006	447.0932	C ₂₁ H ₂₀ O ₁₁	89.9	-1.0	352	285.0406; 284.0327; 197.0806; 175.0282; 133.0294	Luteolin 7- <i>O</i> - glucoside* (cynaroside)	Several families ^a		+	+	+	+
63	22.46	286.0477	285.0407	C ₁₅ H ₁₀ O ₆	95.7	-1.8	349	267.0298; 257.0453; 243.0297; 241.504; 217.0506; 213.0549; 199.0396; 197.0604; 175.0395; 151.0031; 133.0295	Luteolin *	Moraceae (<i>Ficus carica</i>)	3	+	+	+	+
64	24.29	270.0528	269.0459	C ₁₅ H ₁₀ O ₅	98.8	0.0	336	241.0495; 227.0352; 225.0553; 201.0551; 183.0445; 181.650; 159.0457; 151.0033; 149.0240;	Apigenin*	Moraceae (<i>Ficus formosana</i> ; <i>Ficus hirta</i> ; <i>Ficus tsiangii</i>)	19,20	+	+	+	+

								117.0344; 107.0137							
	Flavonoids-Flavanones														
65	16.09	612.169	611.1624	C ₂₇ H ₃₂ O ₁₆	94.2	-1.5	280	449.1094; 287.0563; 151.0036; 135.0445	Eriodictyol di- hexoside	Several families ^a		-	-	-	+
66	17.95	450.1162	449.1099	C ₂₁ H ₂₂ O ₁₁	96.2	-2.3	280	287.0565; 151.0039; 135.0451; 107.0142	Eriodictyol hexoside I	Several families ^a		-	-	-	+
67	19.87	450.1162	449.1086	C ₂₁ H ₂₂ O ₁₁	96.0	0.9	286	287.058; 151.0033; 135.0450; 107.0138	Eriodictyol hexoside II	Several families ^a		-	-	-	+
68	22.91	288.0569	287.0569	C ₁₅ H ₁₂ O ₆	97.7	-2.5	282	151.0039; 135.0449; 125.0241; 107.0139; 83.0137	Eriodictyol	Moraceae (<i>Ficus tsiangii</i> ; <i>Ficus sarmentosa</i>)	20,21	-	+	-	+
69	24.46	272.0685	271.0617	C ₁₅ H ₁₂ O ₅	98.8	-2.0	289	177.0183; 151.0034; 119.0499; 107.0137	Naringenin	Moraceae (<i>Ficus tsiangii</i>)	20	+	+	+	+
	Flavonoids-Flavanols														
70	14.52	290.079	289.0717	C ₁₅ H ₁₄ O ₆	81.5	0.6	278	245.0821; 205.0497; 203.0707; 161.0606; 125.0245	(+)-catechin*	Moraceae (<i>Ficus carica</i>)	10,15,22	+	+	+	+
	Flavonoid-Flavanonols														
71	19.50	304.0583	303.0510	C ₁₅ H ₁₂ O ₇	98.7	-0.1	283	285.0399; 151.0034; 125.0240	Dihydroquercetin (taxifolin)	Moraceae (<i>Ficus sarmentosa</i> ; <i>Ficus tsiangii</i>)	20,21	-	+	-	+
	Flavonoid-Isoflavones														
72	22.68	548.1166 05	547.1093	C ₂₅ H ₂₄ O ₁₄	88.6	-0.7	-	503.1204; 299.0558; 284.0320; 165.0191; 149.9954; 133.0294; 121.0292	Hydroxygenistein methyl ether malonylhexoside			+	-	+	-

73	24.46	270.0528	269.0459	C ₁₅ H ₁₀ O ₅	85.5	-0.9	260; 330	241.0492; 225.0556; 201.0552; 151.0031;133.0 292; 119.0504; 117.0349; 107.0139	Genistein*	Moraceae (<i>Ficus cordata</i> ; <i>Ficus nymphaeifolia</i> ; <i>Ficus tsiangii</i>)	19,20,23 ,24	-	-	+	-
74	25.82	300.0634	299.0555	C ₁₆ H ₁₂ O ₆	99.6	2.2	260; 335	298.0475; 285.0357; 284.0310; 256.0370; 240.0419; 239.0343; 165.0190; 149.9955; 133.0289; 121.0291	7-methoxy 2'- hydroxy genistein (cajanin)	Moraceae (<i>Ficus nymphaeifoli a</i>)	23	+	+	+	+
75	26.49	354.1103	353.1037	C ₂₀ H ₁₈ O ₆	97.9	-1.9	266	325.1074; 298.0472; 283.0604; 219.0655; 175.0397; 133.0290; 133.0658	Prenylhydroxygenis tein I	Fabaceae ^d		+	-	+	-
76	27.19	354.1103	353.1034	C ₂₀ H ₁₈ O ₆	84.2	-2.2	264	325.1074; 285.1127; 284.0322; 219.0657; 175.0398; 151.0761; 133.0657; 133.0295	Prenylhydroxygenis tein II	Fabaceae ^d		+	+	+	+
77	27.62	354.1103	353.1037	C ₂₀ H ₁₈ O ₆	97.5	-2.0	264; 344	325.1078; 285.1127; 284.0320; 219.0660; 175.0762; 151.0761; 151.0032; 133.0657; 133.0293	Prenylhydroxygenis tein III	Fabaceae ^d		+	+	+	+
78	27.69	338.1154	337.1087	C ₂₀ H ₁₈ O ₅	94.8	-2.7	-	293.0462; 282.0534; 269.1190; 254.0516;	Prenylgenistein I	Moraceae (<i>Ficus tikoua</i> ; <i>Ficus mucoso</i>) ^c	24	+	+	+	+

79	27.82	284.0679	283.0614	C ₁₆ H ₁₂ O ₅	99.7	-0.5	-	133.0658; 117.0346; 268.0374; 239.0348; 151.0040; 132.0214; 107.0133	Genistein 4'-methyl ether (biochanin A)	Moraceae (<i>Ficus nymphaeifolia</i>)	23	+	+	+	+
80	28.54	338.1154	337.1082	C ₂₀ H ₁₈ O ₅	98.2	0.2	265; 339	293.0449; 282.0526; 269.0436; 268.0368; 254.0564; 238.0622; 225.0469; 133.0287	Prenylgenistein II	Moraceae (<i>Ficus tikoua</i>) ^e	24	+	+	+	+
81	29.10	338.1154	337.1084	C ₂₀ H ₁₈ O ₅	99.0	-0.3	266; 340	293.0452; 282.0528; 269.0446; 268.0370; 253.0500; 254.0574; 238.0624; 133.0923	Prenylgenistein III	Moraceae (<i>Ficus tikoua</i>) ^e	24	+	+	+	+
<i>Hydroxycoumarins</i>															
82	13.09	340.0794	339.0728	C ₁₅ H ₁₆ O ₉	94.8	-2.4	279; 330	177.0191; 133.0293	Esculetin hexoside I	Moraceae (<i>Ficus septica</i>)	19,25	+	+	+	+
83	13.71	340.0794	339.075	C ₁₅ H ₁₆ O ₉	83.4	-0.1	279; 335	177.0197	Esculetin hexoside II	Moraceae (<i>Ficus septica</i>)	19,25	+	-	+	-
84	15.39	178.0266	177.0187	C ₉ H ₆ O ₄	97.0	-3.9	-	149.0241; 133.0293; 105.0346	Dihydroxycoumarin I	Moraceae (<i>Ficus tsiangii</i>)	20	+	+	+	+
85	18.32	206.0215	205.0146	C ₁₀ H ₆ O ₅	98.6	-1.8	286	161.0243; 133.0295; 117.0348; 105.0347; 89.0396; 77.0398	6-carboxyl- umbelliferone	Moraceae (<i>Ficus tsiangii</i>)	20	+	-	+	-
86	19.34	162.0317	161.0244	C ₉ H ₆ O ₃	97.4	-1.7	283; 314	133.0291; 117.0342; 105.034	7- Hydroxycoumarin* (umbelliferone)	Moraceae (<i>Ficus carica</i>)	19,27	+	+	+	+
87	20.86	178.0266	177.0194	C ₉ H ₆ O ₄	93.5	0.7	285	149.0247; 133.02937; 105.0346	Dihydroxycoumarin II	Moraceae (<i>Ficus tsiangii</i>)	20	+	+	+	+
88	22.60	206.0579	205.0517	C ₁₁ H ₁₀ O ₄	92.2	-5.2	244;	187.0400;	Phellodenol	Moraceae (<i>Fatoua</i>	28	+	-	+	-

							252sh ; 289; 338	161.0607; 146.0372; 133.0657; 118.0419; 105.0709	A/hydrated form of 4',5'- dihydropсорalen	<i>pilosa</i>)					
89	22.94	236.0685	235.0616	C ₁₂ H ₁₂ O ₅	97.8	-1.7	255; 282	217.0499; 201.0189; 191.0712; 176.0477; 161.0241; 148.0523; 133.0293; 117.0345	Murrayacarpin B/di-hydrated form of bergapten			+	-	+	-
90	27.95	230.0943	229.0872	C ₁₄ H ₁₄ O ₃	99.5	-0.4	-	213.0553; 185.0603; 146.0368; 130.0420; 118.0426	Prenyl-7- hydroxycoumarin	Several families ^a		+	+	+	-
	Other s														
91	17.88	366.0951	365.0964	C ₁₇ H ₁₈ O ₉	97.8	-1.7	244; 288; 334	203.0347; 159.0453; 131.0497; 130.0421; 103.0552	(2Z)-3-[6-(β-D- glucopyranosyloxy) -1-benzofuranyl]-2- propenoic acid (psoralic acid glucoside)	<i>Ficus carica</i>	⁹	+	-	+	-
	RT (min)	M	[M-H] ⁻	Formula	Score	Error (ppm)	UV (nm)	Main fragments via MS/MS	Proposed compound	Plant family	Refer ence	Presenc e Tounsi Leaves	Fruit	Temri Leaves	Fruit
	<i>Organic acids</i>														
92	2.96	196.0583	195.0511	C ₆ H ₁₂ O ₇	99.2	-1.9	-	129.0189; 99.0084; 75.0088	Gluconic acid/Galactonic acid	Oleaceae (<i>Olea europaea</i>)	²⁹	+	+	+	+
93	3.17	192.0634	191.0561	C ₇ H ₁₂ O ₆	86.8	0.5	262	127.0400; 93.0340; 85.0291	Quinic acid	Moraceae (<i>Ficus carica</i>)	^{8,30,31}	+	+	+	+
94	3.81	134.0215	133.0145	C ₄ H ₆ O ₅	97.2	-2.1	253	115.0037	Malic acid	Moraceae (<i>Ficus carica</i>)	^{8,30,31}	+	+	+	+
95	4.07	338.0861	337.0788	C ₁₂ H ₁₈ O ₁₁	94.5	-3.5	260	277.0600; 174.0184; 175.0257; 115.0039; 87.008; 71.0139	Ascorbyl hexoside I			+	-	+	-

96	4.24	192.027	191.0202	C ₆ H ₈ O ₄	98.8	-2.4	261	111.0082; 87.0081; 85.0289	Citric acid I	Moraceae (<i>Ficus carica</i>)	8,30,31	+	+	+	+
97	4.62	338.0861	337.0787	C ₁₂ H ₁₈ O ₁₁	95.8	-3.1	260	277.0570; 175.0246; 174.0168; 115.0038; 87.0093; 71.0142	Ascorbyl hexoside II			+	-	+	-
98	5.10	192.027	191.0203	C ₆ H ₈ O ₄	97.7	-3.0	261	111.0089; 87.0081; 85.0289	Citric acid II	Moraceae (<i>Ficus carica</i>)	8,30,31	+	+	+	+
99	5.98	192.027	191.0201	C ₆ H ₈ O ₄	99.3	-1.8	261	111.0089; 87.0086; 85.0297	Citric acid III	Moraceae (<i>Ficus carica</i>)	8,30,31	+	+	+	+
100	13.79	176.0685	175.0613	C ₇ H ₁₂ O ₅	95.9	-0.6	290	115.0399; 113.0607; 85.0661	Isopropylmalic acid	Solanacees (<i>Solanum esculentum</i>)	4	+	+	+	+
<i>Amino acids</i>															
101	5.43	131.0945	130.8712	C ₆ H ₁₃ NO ₂	99.1	1.3	-	88.0407	Leucine/isoleucine	Moraceae (<i>Ficus carica</i>)	30,31	+	-	-	-
102	7.70	131.0945	130.8781	C ₆ H ₁₃ NO ₂	86.2	-3.6	-	88.0407	Leucine/isoleucine	Moraceae (<i>Ficus carica</i>)	30,31	+	-	-	-
103	8.22	181.0739	180.0669	C ₉ H ₁₁ NO ₃	89.84	-2.1	268	163.0405; 119.0507; 93.0353; 72.0095	Tyrosine	Moraceae (<i>Ficus carica</i>)	30,31	-	+	-	+
104	10.32	165.079	164.0719	C ₉ H ₁₁ NO ₂	99.36	-1.4	262	147.0458; 103.0553	Phenylalanine	Moraceae (<i>Ficus carica</i>)	30,31	+	+	+	+
105	12.84	204.0899	203.083	C ₁₁ H ₁₂ N ₂ O ₂	86.7	-1.8	279	116.0501	Tryptophan	Moraceae (<i>Ficus carica</i>)	30,31	+	+	+	+
106	17.48	207.0895	206.0831	C ₁₁ H ₁₃ NO ₃	96	-3.8	270	164.0718; 147.0444; 103.0555	Acetyl phenylalanine			+	+	+	+
107	18.81	246.1004	245.0936	C ₁₃ H ₁₄ N ₂ O ₃	95	-4.5	224; 279	203.0822; 116.0505	Acetyl tryptophan	Solanaceae (<i>Solanum esculentum</i>)	4	+	+	+	+
<i>Other s</i>															
108	17.71	532.2520	531.2461	C ₂₅ H ₄₀ O ₁₂	96.11	-2.4	253	387.2023; 369.1918; 225.1497; 207.1389; 179.0561	13-Hydroxyblumenol C 9-O-[3'-O-(3"-hydroxy-3"-methylglutaryl)-	Amaryllidaceae (<i>Allium porrum</i>)	33	+	-	+	-

									glucoside]						
10	19.14	210.0528	209.0462	C ₁₀ H ₁₀ O ₅	97.88	-2.8	280	191.0349;	Macrophyllide	Rubiaceae	³⁴	+	-	+	-
9								165.0555;							
								163.0400;							
								150.0320;							
								137.0608;							
								119.0501;							
								106.0422							

^aCompounds described here for first time in family Moraceae. Several saccharide combinations and conjugation positions are reported in different plant families (see KNApSack, Reaxys or SciFinder databases)

^bApigenin *C*-hexoside pentoside could be schaftoside (apigenin 6-*C*-glucoside 8-*C*-arabinoside) or isochaftoside (apigenin 6-*C*-arabinoside 8-*C*-glucoside). The latter were previously described in *Ficus carica* leaves.⁹

^cThe identification was based on the elution pattern under similar analytical conditions.¹⁷

^dCompounds described here for first time in family Moraceae and common in the family Fabaceae (see KNApSack, Reaxys or SciFinder databases)

^e6-, 8- and 3'-prenylgenistein were previously reported in other *Ficus* species.

*Identification confirmed by comparison with standards. RT, retention time; Exp., experimental. The UV data agreed with Gómez-Romero et al.⁴; Lin et al.³²

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Table S2: Phenolic compounds characterized using the positive ionization mode in leaves and fruits of *F. carica* cultivars ‘Tounsi’ and ‘Temri’.

	RT	M	[M+H] ⁺	Formula	Score	Error	UV	Main fragments <i>via</i> MS/MS	Proposed compound	Plant family	Ref.	Presence			
	(min)					(ppm)	(nm)					Tounsi		Temri	
												Leaves	Fruit	Leaves	Fruit
<i>Anthocyanins</i>															
1	11.51	611.1612	611.1603	C ₂₇ H ₃₁ O ₁₆	93.9	-0.3	520	449.1078; 287.0565	Cyanidin 3,5-diglucoside	Moraceae (<i>Ficus carica</i>)	1	-	+	-	+
2	13.13	595.1663	595.1667	C ₂₇ H ₃₁ O ₁₅	98.5	0.5	520	449.1073; 287.0547	Cyanidin 3-rutinoside	Moraceae (<i>Ficus carica</i>)	1	-	+	-	+
<i>Furanocoumarins</i>															
3	15.97	364.0794	365.0872	C ₁₇ H ₁₆ O ₉	98.6	-0.9	250; 264; 308	203.0336; 175.0438; 147.0438; 131.0387; 119.0487; 101.0387; 91.0540	Hydroxypsoralen hexoside I ^a	Umbelliferae (<i>Glehniae Radix</i>)	2	+	-	+	-
4	16.65	364.0974	365.0871	C ₁₇ H ₁₆ O ₉	96.9	-1.0	252; 264; 310	203.0336; 175.0389; 147.0440; 131.0395; 119.0485; 91.0539	Hydroxypsoralen hexoside II ^a	Umbelliferae (<i>Glehniae Radix</i>)	2	+	-	+	-
5	17.58	246.0892	247.0969	C ₁₄ H ₁₄ O ₄	94.3	-2.4	-	229.0845; 213.0548; 189.0574; 175.0393; 147.0438; 119.0489; 103.0545	Marmesin isomer I ^b	Moraceae (<i>Ficus carica</i>)	3	+	+	+	+
6	17.64	408.1420	409.1496	C ₂₀ H ₂₄ O ₉	96.2	-1.0	-	247.0962; 229.0862; 213.0545; 185.0602; 175.0389; 147.0348; 119.0487; 91.0543	Marmesinin	Umbelliferae (<i>Glehniae Radix</i>)	2	+	-	+	-
7	17.77	234.0528	235.0606	C ₁₂ H ₁₀ O ₅	93.2	-3.3	256; 303	217.0505; 202.0259; 174.0547; 131.0489; 115.0537	Methoxypsoralen derivative (hydrate)			+	-	+	-
8	21.8	188.0473	189.0549	C ₁₁ H ₈ O ₃	86.9	-1.5	250; 290	161.0605; 147.0441; 133.0644; 119.0489; 105.0700	4',5'-Dihydropsoralen	Moraceae (<i>Ficus carica</i>)	3,4	+	-	+	-
9	22.05	246.0892	247.0971	C ₁₄ H ₁₄ O ₄	95.0	-2.6	255	229.0858; 213.0545; 189.0537; 175.0392; 147.0442; 119.0492; 103.0544	Marmesin isomer II ^b	Moraceae (<i>Ficus carica</i>)	3	+	+	+	+
10	22.30	304.0947	305.1030	C ₁₆ H ₁₆ O ₆	95.7	-3.0	257; 266; 310	203.0344; 175.0391; 159.0441; 147.0438; 131.0489; 119.0490	Oxypeucedanin hydrate	Moraceae (<i>Ficus pumila</i>)	5	+	-	+	-
11	22.48	202.0266	203.0343	C ₁₁ H ₆ O ₄	85.8	-2.0	254; 269; 306	147.0442; 131.0494; 129.0332; 119.0496;	Hydroxypsoralen ^{c,d}	Umbelliferae (<i>Radix glehniae</i>)	2	+	-	+	-

101,0376; 91.0541

12	24.46	186.0317	187.0317	C ₁₁ H ₆ O ₃	80.0	-1.7	254; 296; 328	159.0440; 131.0492; 115.0542; 103.0543	Psoralen	Moraceae (<i>Ficus carica</i>)	6–9	+	+	+	+
13	26.01	216.0423	217.0502	C ₁₂ H ₈ O ₄	97.6	-2.4	258; 266; 310	202.0259; 174.0311; 159.0447; 146.0359; 131.0490; 118.0410; 115.0486	Methoxypsoralen	Moraceae (<i>Ficus carica</i>)	6–9	+	+	+	+
14	26.26	286.0841	287.0918	C ₁₆ H ₁₄ O ₅	99.4	-1.2	-	203.0338; 175.1124; 159.0429; 147.0430; 131.0477; 119.0487; 103.0550	Oxypeucedanin	Umbelliferae (<i>Radix glehniae</i>)	2	+	-	+	-
15	28.25	270.0892	271.0980	C ₁₆ H ₁₄ O ₄	91.8	-5.3	-	229.0503; 215.0349; 203.0349; 201.0554; 187.0397; 173.0603; 159.0448; 131.0495; 117.0702	Isopentenoxypsoralen ^d	Moraceae and other families		+	-	+	-
16	31.16	284.1049	285.1131	C ₁₇ H ₁₆ O ₄	95.5	-3.4	268; 309	243.0638; 229.0478; 217.0473; 201.0530; 186.0293; 115.0521	Prenyl methoxypsoralen	Moraceae (<i>Dorstenia</i> spp.)	10	+	+	+	+
Isoflavones ^e															
17	30.85	298.0841	299.0906	C ₁₇ H ₁₄ O ₅	96.5	2.9	262; 329	284.0660; 267.0633; 256.0711; 243.0998; 166.0242; 137.0576	Hydroxy-dimethoxyisoflavone ^f	Fabaceae		+	+	+	+
Others															
18	17.21	204.0423	205.0502	C ₁₁ H ₈ O ₄	96.1	-3.5	255; 290; 335	243.0638; 229.0478; 215.0682; 201.0530; 186.0293; 157.0627; 129.0674; 115.0521	Psoralic acid/dihydro-hydroxypsoralen			+	-	+	-

^a Hydroxypsoralen hexoside could be 5-hydroxypsoralen hexoside (bergaptol hexoside) or 8-hydroxypsoralen hexoside (xanthoxol hexoside)

^b Marmesin was previously described in *F. carica*⁴ and its enantiomeric form nodakenetin¹¹ in *Ficus tsiangii*

^c Hydroxypsoralen could be 5-hydroxypsoralen (bergaptol) or 8-hydroxypsoralen (xanthoxol) according to Yang et al.²

^d Compounds described here for first time in *F. carica* but described in family Moraceae and other families (see KNApSack, Reaxys or SciFinder databases)

^e Non detected in negative ionization mode

^f Compounds described here for first time in family Moraceae and common in the family Fabaceae (see KNApSack, Reaxys or SciFinder databases)

RT, retention time; Exp., experimental. The UV data agreed with Dueñas *et al.*,¹ Frérot *et al.*,¹² Teixeira *et al.*,⁶ Tang *et al.*¹³

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Table S3: Chromatographic and mass spectrometric information about unknown compounds found in the negative ionization mode.

	RT (min)	M	[M-H] ⁻	Formula	Score	Error (ppm)	UV (nm)	Main fragments <i>via</i> MS/MS	DBE ^a	Brief description	Presence			
											Tounsi		Temri	
											Leaves	Fruit	Leaves	Fruit
1	14.18	460.1581	459.1512	C ₂₀ H ₂₈ O ₁₂	98.3	-1.4	296	167.0347; 152.0113; 123.0449; 108.0214	7	Derivative of vanillic acid	+	+	+	+
2	14.27	606.2097	605.2093	C ₂₆ H ₃₈ O ₁₆	97.6	-1.2	302	167.0346; 152.0110; 123.0446; 108.0216	8	Derivative of vanillic acid	+	+	+	+
4	16.20	372.1056	371.0991	C ₁₆ H ₂₀ O ₁₀	98.0	-1.4	274; 326	249.0609; 189.0402; 121.0294	7	Benzoyl derivative	+	+	+	+
5	16.33	472.1581	471.1515	C ₂₁ H ₂₈ O ₁₂	99.2	-0.4	272; 332	137.0240	8	Derivative of hydroxybenzoic acid	+	+	+	+
6	16.57	502.1686	501.1629	C ₂₂ H ₃₀ O ₁₃	93.0	-3.3	294	167.0351; 152.0112; 123.0449; 108.0216	8	Derivative of vanillic acid	+	+	+	+
7	16.69	648.2265	647.2204	C ₂₈ H ₄₀ O ₁₇	98.2	-1.3	268; 320	167.0350; 152.0111; 123.0451; 108.0219	7	Derivative of vanillic acid	+	+	+	+
8	20.75	528.1773	527.1783	C ₂₄ H ₃₂ O ₁₃	99.8	-0.4	-	167.0348; 152.0110; 123.0449; 108.0216	9	Derivative of vanillic acid	-	+	-	+

^aThe calculated number of rings and double bonds in the formula.