Table S1: Phytochemicals identified from HPLC analysis of *C. planchonii* using different extraction methods: Maceration (MAC); Homogenization (HAE); Sonification (SON); Soxhlet (SOX)

S/N	Retention Time (Min)	Compounds	PubChem ID	Molecular Weight (g/mol)	References
1	1.91	Quinic acid	6508	192.17	[14,32]
2	2.10	Galloyl glucose	124021	332.26	[14,33-37]
3	5.40	Epigallocatechin	72277	306.27	[14,32,35-36,38]
4	7.78	3,4,5-Trimethoxyphenol	69505	184.19	[14,14]
5	8.10	Digalloyl hexoside	129633550	484.40	[14,32-33,36]
6	8.20	Catechin	9064	290.27	[14,35-37]
7	8.80	Galloyl HHDP hexoside	503250	618.50	[14,33,35-37]
8	9.30	3'-Galloylprodelphinidin B2	14520967	762.60	[14,35,38]
9	9.63	1,2,6-Trigalloylglucose	440308	636.50	[14,35-36]
10	9.80	Trigalloylglucose	90116889	636.50	[14,35-36]
11	10.10	Epigallocatechin gallate	65064	458.40	[14,35-36,38-39]
12	10.50	2,3-(S)-Hexahydroxydiphenoyl-D-glucose	492390	482.30	[14,36,40]
13	10.90	Hexahydroxydiphenylglucose	129777580	428.30	[14,36,40]
14	11.00	Prodelphinidin B	5089687	610.50	[14,36,41-42]
15	11.80	Penta-O-galloyl-glucose	65238	940.70	[14,36]
16	12.30	Dimethyl ellagic acid glucuronide	118033042	506.40	[14,32,35,40]
17	13.50	Ellagic acid	5281855	302.19	[14,35,40-41]
18	15.40	3-O-methylellagic acid	13915428	316.22	[14,14]
19	8.16	Dihydrokaempferol rhamnoside	71307293	450.40	[14,42]
20	8.96	Quercetin 3,4'-diglucoside	5320835	626.50	[14,33,42-45]
21	9.63	Isovitexin-7,2'-di-O-glucoside	44257758	756.70	[14,33,42-45]
22	11.00	Myricetin-3-O-β-D-galactopyranoside	5491408/171571857	480.40	[14,33,42-45]
23	11.50	Quercetin-3-O-deoxyhexosyl-(1-2) deoxyhexoside	56664758	594.50	[14,33,42-46]

24	8.10	Digalloyl hexoside	129633550	484.40	[14,32-33,36]
25	12.35	Chrysoeriol-7-O-beta-D-glucopyranoside	13871880	462.40	[14,33,42-46]
26	12.60	Quercetin-3-O-glucopyranoside	5280804	464.40	[14,33,43-45]
27	12.70	Quercetin-3-O-rhamnoside	5280459	448.40	[14,33,43-45]
28	12.77	Quercetin-3-O-beta-D-xylopyranoside	5320861	434.30	[14,33,41,43-45,47]
29	12.90	Quercetin-3'-glucoside	9934142	464.40	[14,32-33,43-45]
30	13.85	Kaempferol-3-O-alpha-L-rhamnoside	15558501	432.40	[14,32-33,43-45,47]
31	14.58	Kaempferol-3-O-rutinoside	5318767	594.50	[14,32-33,41,43-45,47]
32	16.41	Kaempferol 3-O-rutinoside 7-O-glucoside	21676298	756.70	[14,32-33,41,43-45,47]

Table S2: GC-MS analysis of phytochemicals identified in the ethanolic extract of *C. tinctorium*

S/N	Retention Time (Min)	Compounds	PubChem ID	Molecular Weight (g/mol)	Area (%)	References
1	7.344	5-Indanol	15118	134.17	1.29	[31]
2	8.025	2-Ethylbenzaldehyde	123406	134.17	0.36	[31]
3	8.465	3,5-Dimethylbenzaldehyde	34225	134.17	0.21	[31]
4	8.700	11,13-Dimethyl-12-tetradecen-1-ol acetate	549821	282.50	0.09	[31]
5	9.181	1-(4-Bromobutyl)-2-piperidinone	536377	234.13	0.19	[31]
6	10.119	4-Tetradecene, (E)-	5364426	196.37	3.85	[31]
7	10.920	1-Tridecene	17095	182.35	0.97	[31]
8	12.093	Cyclododecane	9268	168.32	0.26	[31]
9	12.093	Hexadecane, 1-(ethenyloxy)-	69971	268.50	1.84	[31]

10	12.408	Tridecanoic acid, 12-methyl-, methyl ester	21204	242.40	1.21	[31]
11	13.152	Cetene	12395	224.00	0.50	[31]
12	13.484	Bicyclo [3.2.2] non-3-en-2-one, 6,7-epoxy-	533436	150.17	0.27	[31]
13	13.861	2-Acetylbenzoic acid	68474	164.16	0.24	[31]
14	14.262	7-Hexadecenoic acid, methyl ester, (Z)-	5364431	268.4	0.44	[31]
15	14.491	Hexadecanoic acid, methyl ester	8181	270.50	5.22	[31]
16	14.891	9-Hexadecenoic acid, methyl ester, (Z)-	643801	268.40	0.44	[31]
17	15.166	Hexadecanoic acid, ethyl ester	12366	284.50	0.65	[31]
18	15.469	Methyl 11-oxo-9-undecenoate	534673	212.28	0.09	[31]
19	16.167	9-Octadecenoic acid (Z)-, methyl ester	5364509	296.50	12.46	[31]
20	16.408	Methyl stearate	8201	298.50	3.21	[31]
21	16.768	9,12-Octadecadienoyl chloride, (Z, Z)-	9817754	298.90	2.42	[31]
22	17.031	2-Monoolein	5319879	356.50	0.89	[31]
23	17.615	n-Hexadecanoic acid	985	256.42	3.38	[31]
24	17.958	Cyclopropaneoctanal, 2-octyl-	550143	280.50	3.40	[31]
25	18.193	Pentadecanoic acid	13849	242.40	1.69	[31]
26	18.536	Octadecanoic acid	5281	284.50	2.22	[31]
27	21.214	Oleic Acid	445639	282.50	8.29	[31]
28	19.560	2-Methyl-Z,Z-3,13-octadecadienol	5364412	280.50	1.87	[31]
29	19.829	9-Eicosene, (E)-	5365037	280.50	3.41	[31]
30	20.333	Z-(13,14-Epoxy) tetradec-11-en-1-ol acetate	5363633	268.39	2.10	[31]
31	22.038	9-Octadecenoic acid, 2,3-dihydroxy-, propyl ester	86041086	356.50	20.23	[31]
32	25.174	3-(Azepan-1-yl)-1,2-benzothiazole 1,1-dioxide	535203	264.35	0.16	[31]

Table S3: HPLC-UV analysis of phytochemicals identified in the ethanolic/methanolic extract of *C. tinctorium*

S/N	Compounds	PubChem ID	Molecular Weight (g/mol)	References
1	3-O-p-trans-Coumaroylalphitolic acid	131751948	618.80	[18,48]
2	Alphitolic acid	12305768	472.70	[18,48]
3	Betulinic acid	64971	456.70	[18,48]
4	3-tetradecanone	69418	212.37	[20]
5	3-hexadecanone	87789	240.42	[20,49]
6	Arjunolic acid	73641	488.70	[50]
7	Carotenoid	152743345	568.90	[51]
8	3,7-Di-O-Methylquercetin	5280417	330.29	[52]
9	3,4'-O-Dimethylquercetin	44446550	332.30	[52]
10	Cochloxanthin (2E,4E,6E,8E,10E,12E)-13-[(1S)-1-hydroxy-2,6,6-trimethyl-4-oxocyclohex-2-en-1-yl]-2,6,11-trimethyltrideca-2,4,6,8,10,12-hexaenoic acid	101202074	396.50	[18,52]
11	2-Tridecanone	11622	198.34	[49]
12	1-Dodecanol	8193	186.33	[49]
13	1-Tetradecanol	8209	214.39	[49]
14	2-Pentadecanone	61303	226.40	[49]
15	2-Stearoylglycerol	79075	385.80	[49]
16	2-Octadecanone	162822	284.50	[49]
17	3-Octadecanone	87532	268.50	[49]
18	1-Hydroxy-3-hexadecanone	15726205	256.42	[49]
19	1-Nonadecanol	80281	284.50	[49]
20	1-Hydroxy-1-phenyl-3-octadecanone	131751844	360.60	[49]

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