

New Insights on Primary and Secondary Metabolite Contents of Seven Italian Wild Food Plants with Medicinal Applications: A Comparative Study

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Abstract: Wild food plants are widely consumed all over the world and many have both nutritional and therapeutic value due to the presence of biologically active compounds. The present research, for the first time, aims to compare primary and secondary metabolite levels among different plant organs (flower, leaf, stem, root, bark) of seven species (*Borago officinalis* L., *Cynodon dactylon* (L.) Pers., *Foeniculum vulgare* Mill., *Hypericum perforatum* L., *Malva sylvestris* L., *Sambucus nigra* L., *Urtica dioica* L.) collected in three different Italian regions (Liguria, Tuscany, Apulia). Plant organ samples were extracted with water or 95% (v/v) methanol and liquid fractions were analyzed using spectrophotometric assays. The best results were obtained for *Hypericum perforatum* L. samples, followed by *Sambucus nigra* L. and *Borago officinalis* L. As also confirmed via PCA analysis on normalized data, flower and leaf extracts of all species exhibited higher levels of polyphenols (up to 105.7 mg GA eq/gDW), reducing sugars (up to 389.2 mg GLUC eq/gDW), proteins (up to 675.7 mg BSA eq/gDW) and of antioxidant capacity (up to 263.5 mg AA eq/gDW). No differences among the regions of gathering were detected after spectrophotometric assays, which was confirmed via PCA analysis. These data contribute to further validate the traditionally reported healing effects of these species on human health.

Keywords: antioxidant activity; medicinal plants; polyphenols; wild food plants

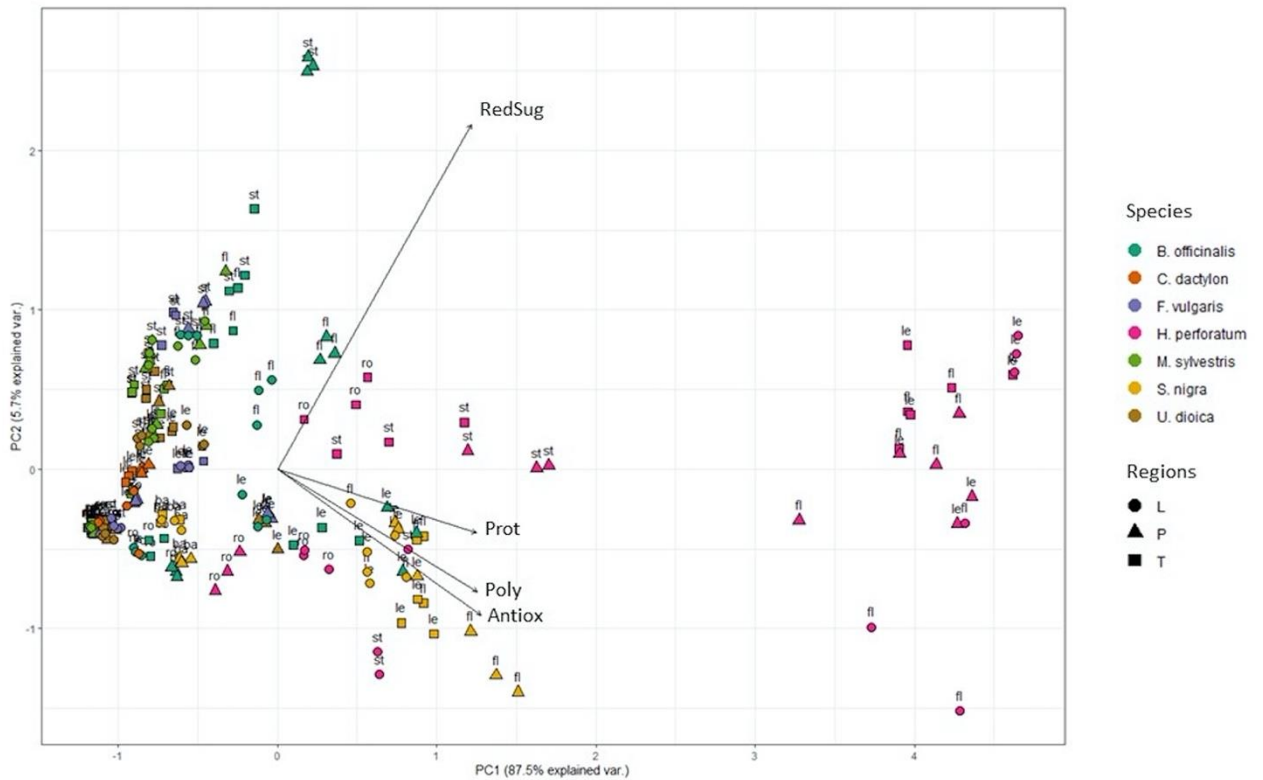
Supplementary Materials list of contents:

Figure S1: PCA analysis of spectrophotometric results on methanol extracts, showing the grouping of species according to total polyphenols, reducing sugars, proteins and antioxidant activity data.

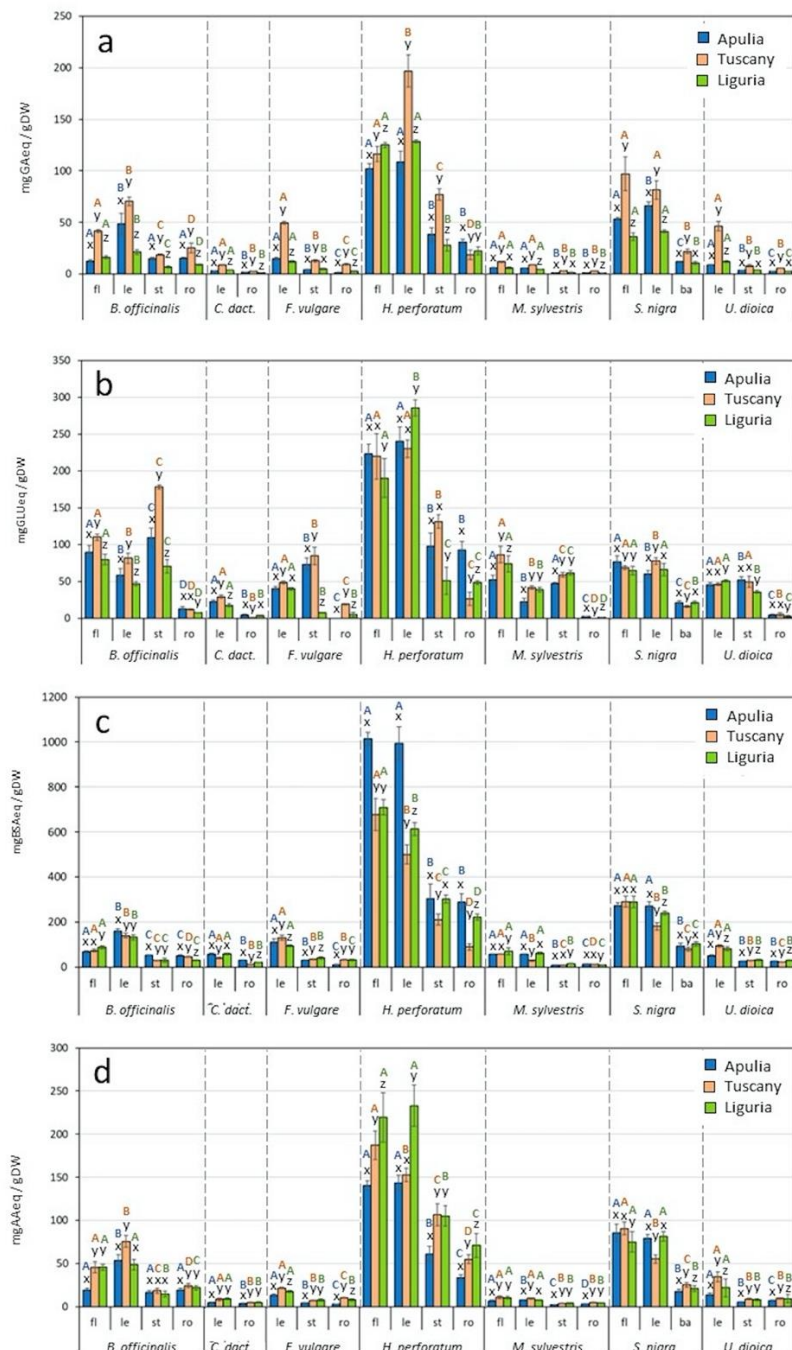
Figure S2: Total amounts of polyphenols, reducing sugars, proteins and antioxidant activity of methanol extracts after spectrophotometric analysis.

Figure S3: PCA analysis of methanol extracts spectrophotometric results after normalization showing the grouping of organs according to the concentrations of reducing sugars, polyphenols, proteins and antioxidant activity.

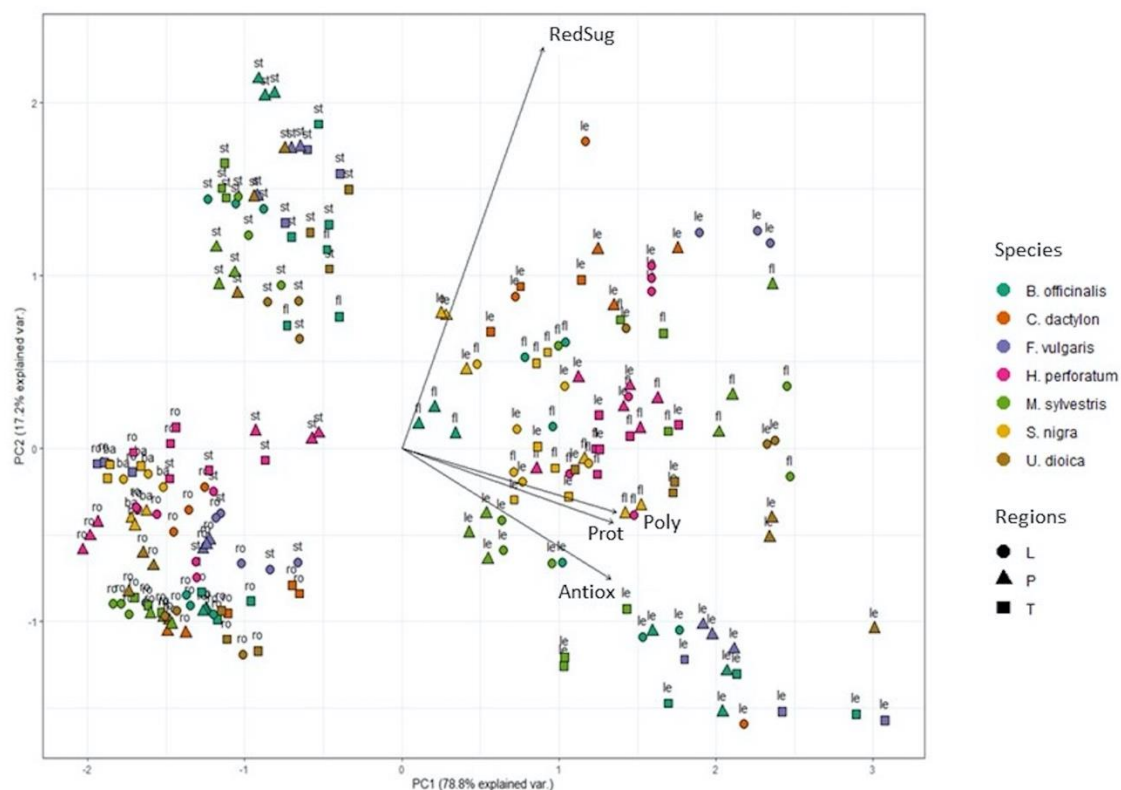
Table S1: Complete dataset. Original and normalized spectrophotometric data on water and methanol extracts.



Supplementary Figure S1. PCA analysis of spectrophotometrical results on methanol extracts, showing the grouping of species according to total polyphenols, reducing sugars, proteins and antioxidant activity data (Fig. S2). L: Liguria; P: Apulia; T: Tuscany; fl: flowers; le: leaves; st: stems; ro: roots; ba: bark; RedSug: reducing sugars; Poly: polyphenols; Antiox: antioxidant activity; Prot: proteins.



Supplementary Figure S2. Total amounts of polyphenols (a), reducing sugars (b), proteins (c) and antioxidant activity (d) of methanol extracts after spectrophotometrical analysis. fl: flowers; le: leaves; st: stems; ro: roots; ba: bark; GA: gallic acid, GLU: D-glucose, BSA: bovine serum albumin, AA: ascorbic acid, eq: equivalent, DW: dry weight. Different letters indicate a statistically significant difference (one-way ANOVA followed by post hoc Tukey HSD test or Kruskal-Wallis followed by Dunn test, $p < 0.05$) among the regions (x, y, z) and among the organs of each species (A, B, C, D). Data are the mean \pm SD ($n = 3$).



Supplementary Figure S3. PCA analysis of methanol extracts spectrophotometrical results (Table S1) after normalization (see Methods section) showing the grouping of organs according to the concentrations of reducing sugars, polyphenols, proteins and antioxidant activity. L: Liguria; P: Apulia; T: Tuscany; fl: flowers; le: leaves; st: stems; ro: roots; ba: bark; RedSug: reducing sugars; Poly: polyphenols; Antiox: antioxidant activity; Prot: proteins.

Supplementary Table S1: Complete dataset. Original and normalized (see Methods section) spectrophotometrical data on water and methanol extracts. Polyphenols (Poly), reducing sugars (RedSug), proteins (Prot) and antioxidant activity (Antiox); Poly_norm: normalized polyphenols values; RedSug_norm: normalized reducing sugars values; Prot_norm: normalized proteins values; fl: flowers; le: leaves; st: stems; ro: roots; ba: bark; L: Liguria; P: Apulia; T: Tuscany. Antiox_norm: normalized antioxidant activity values; AA: ascorbic acid; GA: gallic acid; GLU: D-glucose; BSA: bovine serum albumin; eq: equivalent, DW: dry weight.

Species	Organ	Region	Solvent extraction	Antiox (mgAAeq/gDW)	Poly (mgGAeq/gDW)	RedSug (mgGLUeq/gDW)	Prot (mgBSAeq/gDW)	Antiox_norm	Poly_norm	RedSug_norm	Prot_norm
<i>B. officinalis</i>	fl	P	water	74.05	15.10	137.55	163.47	0.84	0.45	0.57	0.62
<i>B. officinalis</i>	fl	P	water	75.49	16.34	158.57	180.19	0.85	0.49	0.66	0.68
<i>B. officinalis</i>	fl	P	water	62.81	17.19	149.91	196.67	0.71	0.51	0.62	0.74
<i>B. officinalis</i>	le	P	water	97.62	33.65	121.26	199.04	1.10	1.00	0.50	0.75
<i>B. officinalis</i>	le	P	water	64.53	33.97	107.60	188.83	0.73	1.01	0.45	0.71
<i>B. officinalis</i>	le	P	water	58.61	36.72	116.05	187.16	0.66	1.09	0.48	0.71
<i>B. officinalis</i>	st	P	water	19.35	7.27	174.39	62.68	0.22	0.22	0.72	0.24
<i>B. officinalis</i>	st	P	water	19.55	7.90	161.68	81.89	0.22	0.24	0.67	0.31
<i>B. officinalis</i>	st	P	water	14.07	9.00	168.01	88.45	0.16	0.27	0.70	0.33
<i>B. officinalis</i>	ro	P	water	17.56	10.09	66.97	105.03	0.20	0.30	0.28	0.40
<i>B. officinalis</i>	ro	P	water	14.35	7.09	37.97	66.22	0.16	0.21	0.16	0.25
<i>B. officinalis</i>	ro	P	water	13.82	7.29	47.71	69.46	0.16	0.22	0.20	0.26
<i>B. officinalis</i>	fl	T	water	67.76	21.58	144.78	228.30	0.78	0.59	0.58	0.71
<i>B. officinalis</i>	fl	T	water	50.15	22.21	148.27	183.09	0.58	0.60	0.59	0.57
<i>B. officinalis</i>	fl	T	water	63.18	20.96	134.09	214.25	0.73	0.57	0.53	0.66
<i>B. officinalis</i>	le	T	water	99.46	35.72	112.95	297.29	1.15	0.97	0.45	0.92
<i>B. officinalis</i>	le	T	water	80.20	34.40	118.24	278.77	0.92	0.93	0.47	0.86
<i>B. officinalis</i>	le	T	water	79.70	38.05	108.59	299.99	0.92	1.03	0.43	0.93
<i>B. officinalis</i>	st	T	water	13.73	8.84	198.07	71.11	0.16	0.24	0.79	0.22
<i>B. officinalis</i>	st	T	water	12.46	7.59	214.52	73.68	0.14	0.21	0.85	0.23
<i>B. officinalis</i>	st	T	water	13.29	7.90	234.72	63.01	0.15	0.21	0.93	0.20
<i>B. officinalis</i>	ro	T	water	12.79	7.68	31.79	69.59	0.15	0.21	0.13	0.22
<i>B. officinalis</i>	ro	T	water	13.82	7.17	29.47	73.73	0.16	0.19	0.12	0.23
<i>B. officinalis</i>	ro	T	water	14.46	9.07	33.02	84.99	0.17	0.25	0.13	0.26
<i>B. officinalis</i>	fl	L	water	49.31	17.50	131.77	163.97	0.83	0.62	0.70	0.68
<i>B. officinalis</i>	fl	L	water	50.00	17.70	154.86	149.68	0.84	0.63	0.83	0.62
<i>B. officinalis</i>	fl	L	water	51.50	19.49	143.38	183.43	0.87	0.70	0.77	0.76
<i>B. officinalis</i>	le	L	water	38.51	20.18	54.62	213.58	0.65	0.72	0.29	0.88
<i>B. officinalis</i>	le	L	water	41.75	21.81	98.36	241.46	0.70	0.78	0.53	1.00

<i>B. officinalis</i>	le	L	water	45.27	16.80	68.76	185.31	0.76	0.60	0.37	0.76
<i>B. officinalis</i>	st	L	water	16.15	13.07	155.15	59.27	0.27	0.47	0.83	0.24
<i>B. officinalis</i>	st	L	water	13.56	9.47	135.51	39.33	0.23	0.34	0.72	0.16
<i>B. officinalis</i>	st	L	water	18.14	12.40	113.35	78.73	0.31	0.44	0.61	0.32
<i>B. officinalis</i>	ro	L	water	12.74	6.97	22.12	44.59	0.21	0.25	0.12	0.18
<i>B. officinalis</i>	ro	L	water	10.72	6.28	21.71	43.70	0.18	0.22	0.12	0.18
<i>B. officinalis</i>	ro	L	water	8.46	6.34	22.65	52.63	0.14	0.23	0.12	0.22
<i>C. dactylon</i>	le	P	water	12.50	8.20	80.27	108.89	0.60	0.79	0.67	0.73
<i>C. dactylon</i>	le	P	water	17.04	8.01	87.91	115.60	0.82	0.77	0.73	0.78
<i>C. dactylon</i>	le	P	water	13.13	8.49	80.96	117.69	0.63	0.81	0.67	0.79
<i>C. dactylon</i>	ro	P	water	6.74	2.13	43.85	39.68	0.32	0.20	0.37	0.27
<i>C. dactylon</i>	ro	P	water	6.92	2.47	37.28	31.13	0.33	0.24	0.31	0.21
<i>C. dactylon</i>	ro	P	water	6.28	2.02	29.98	32.11	0.30	0.19	0.25	0.22
<i>C. dactylon</i>	le	T	water	14.70	10.71	53.68	152.11	0.70	0.80	0.63	0.82
<i>C. dactylon</i>	le	T	water	17.05	12.61	62.93	180.21	0.81	0.95	0.74	0.97
<i>C. dactylon</i>	le	T	water	14.05	10.26	46.88	144.46	0.67	0.77	0.55	0.78
<i>C. dactylon</i>	ro	T	water	6.83	2.15	36.96	33.22	0.32	0.16	0.43	0.18
<i>C. dactylon</i>	ro	T	water	5.35	2.07	28.35	15.03	0.25	0.16	0.33	0.08
<i>C. dactylon</i>	ro	T	water	5.13	2.19	26.17	32.72	0.24	0.16	0.31	0.18
<i>C. dactylon</i>	le	L	water	10.49	9.69	30.37	109.39	0.55	0.82	0.54	0.78
<i>C. dactylon</i>	le	L	water	11.33	8.90	27.04	107.52	0.59	0.75	0.48	0.76
<i>C. dactylon</i>	le	L	water	11.60	10.13	27.29	113.83	0.60	0.86	0.48	0.81
<i>C. dactylon</i>	ro	L	water	7.80	2.36	29.84	31.74	0.41	0.20	0.53	0.23
<i>C. dactylon</i>	ro	L	water	8.31	2.19	26.87	29.43	0.43	0.18	0.47	0.21
<i>C. dactylon</i>	ro	L	water	8.06	2.28	28.35	30.58	0.42	0.19	0.50	0.22
<i>F. vulgaris</i>	le	P	water	27.50	18.37	71.93	215.20	1.06	1.04	0.41	1.08
<i>F. vulgaris</i>	le	P	water	24.95	20.46	61.61	180.24	0.96	1.16	0.35	0.90
<i>F. vulgaris</i>	le	P	water	23.98	20.73	68.93	222.14	0.92	1.18	0.39	1.11
<i>F. vulgaris</i>	st	P	water	11.29	5.17	171.57	71.06	0.43	0.29	0.97	0.36
<i>F. vulgaris</i>	st	P	water	7.17	4.88	189.23	74.44	0.28	0.28	1.07	0.37
<i>F. vulgaris</i>	st	P	water	6.56	5.07	181.02	66.89	0.25	0.29	1.03	0.34
<i>F. vulgaris</i>	ro	P	water	5.60	1.56	12.88	23.51	0.22	0.09	0.07	0.12
<i>F. vulgaris</i>	ro	P	water	5.02	1.42	22.87	22.00	0.19	0.08	0.13	0.11
<i>F. vulgaris</i>	ro	P	water	4.75	1.51	13.45	22.23	0.18	0.09	0.08	0.11
<i>F. vulgaris</i>	le	T	water	19.76	16.45	114.74	193.80	0.83	0.94	0.45	0.94
<i>F. vulgaris</i>	le	T	water	14.53	15.42	126.88	170.74	0.61	0.89	0.50	0.83

<i>F. vulgaris</i>	le	T	water	17.55	18.93	126.47	195.49	0.74	1.09	0.50	0.95
<i>F. vulgaris</i>	st	T	water	8.83	6.31	215.35	82.62	0.37	0.36	0.84	0.40
<i>F. vulgaris</i>	st	T	water	6.36	5.80	242.82	79.93	0.27	0.33	0.95	0.39
<i>F. vulgaris</i>	st	T	water	5.34	5.30	192.76	82.55	0.23	0.30	0.76	0.40
<i>F. vulgaris</i>	ro	T	water	7.33	3.43	42.98	31.78	0.31	0.20	0.17	0.15
<i>F. vulgaris</i>	ro	T	water	15.48	3.36	43.28	51.01	0.65	0.19	0.17	0.25
<i>F. vulgaris</i>	ro	T	water	11.41	3.39	43.13	41.40	0.48	0.19	0.17	0.20
<i>F. vulgaris</i>	le	L	water	27.00	25.97	91.36	231.16	0.91	1.41	0.72	1.40
<i>F. vulgaris</i>	le	L	water	31.19	23.10	91.19	156.67	1.05	1.26	0.72	0.95
<i>F. vulgaris</i>	le	L	water	27.40	16.02	74.87	164.91	0.92	0.87	0.59	1.00
<i>F. vulgaris</i>	st	L	water	10.96	3.00	90.65	39.40	0.37	0.16	0.71	0.24
<i>F. vulgaris</i>	st	L	water	8.72	4.16	86.62	42.72	0.29	0.23	0.68	0.26
<i>F. vulgaris</i>	st	L	water	8.37	4.29	92.59	37.71	0.28	0.23	0.73	0.23
<i>F. vulgaris</i>	ro	L	water	7.51	2.25	19.55	23.56	0.25	0.12	0.15	0.14
<i>F. vulgaris</i>	ro	L	water	7.73	2.23	16.93	24.83	0.26	0.12	0.13	0.15
<i>F. vulgaris</i>	ro	L	water	4.47	1.70	9.76	20.22	0.15	0.09	0.08	0.12
<i>H. perforatum</i>	fl	P	water	230.49	72.49	309.45	503.54	0.77	0.66	0.69	0.70
<i>H. perforatum</i>	fl	P	water	322.08	66.53	322.63	523.78	1.07	0.61	0.72	0.73
<i>H. perforatum</i>	fl	P	water	208.36	79.78	295.44	466.07	0.69	0.73	0.66	0.65
<i>H. perforatum</i>	le	P	water	204.04	73.19	367.14	678.46	0.68	0.67	0.82	0.94
<i>H. perforatum</i>	le	P	water	211.67	109.82	412.32	681.57	0.70	1.00	0.93	0.94
<i>H. perforatum</i>	le	P	water	232.49	107.92	388.10	667.15	0.77	0.99	0.87	0.92
<i>H. perforatum</i>	st	P	water	75.40	26.55	113.15	140.01	0.25	0.24	0.25	0.19
<i>H. perforatum</i>	st	P	water	78.68	33.97	149.49	179.72	0.26	0.31	0.34	0.25
<i>H. perforatum</i>	st	P	water	56.20	28.78	125.85	153.97	0.19	0.26	0.28	0.21
<i>H. perforatum</i>	ro	P	water	64.09	18.91	62.23	118.89	0.21	0.17	0.14	0.16
<i>H. perforatum</i>	ro	P	water	62.66	19.72	62.96	105.98	0.21	0.18	0.14	0.15
<i>H. perforatum</i>	ro	P	water	56.29	19.45	63.62	109.38	0.19	0.18	0.14	0.15
<i>H. perforatum</i>	fl	T	water	175.02	105.47	355.13	429.29	0.79	0.91	0.97	0.88
<i>H. perforatum</i>	fl	T	water	180.39	104.11	337.30	331.22	0.82	0.90	0.93	0.68
<i>H. perforatum</i>	fl	T	water	190.45	107.39	328.52	426.09	0.86	0.93	0.90	0.87
<i>H. perforatum</i>	le	T	water	164.88	81.15	217.51	363.07	0.75	0.70	0.60	0.74
<i>H. perforatum</i>	le	T	water	141.79	91.08	235.02	398.03	0.64	0.79	0.64	0.82
<i>H. perforatum</i>	le	T	water	92.70	95.44	228.06	409.53	0.42	0.82	0.63	0.84
<i>H. perforatum</i>	st	T	water	71.80	29.48	129.64	147.31	0.33	0.25	0.36	0.30
<i>H. perforatum</i>	st	T	water	90.78	28.30	136.94	166.05	0.41	0.24	0.38	0.34

<i>H. perforatum</i>	st	T	water	86.37	29.56	134.86	139.51	0.39	0.26	0.37	0.29
<i>H. perforatum</i>	ro	T	water	45.79	7.77	27.26	38.05	0.21	0.07	0.07	0.08
<i>H. perforatum</i>	ro	T	water	39.26	7.79	28.82	41.07	0.18	0.07	0.08	0.08
<i>H. perforatum</i>	ro	T	water	42.52	7.78	28.04	39.56	0.19	0.07	0.08	0.08
<i>H. perforatum</i>	fl	L	water	178.92	85.31	276.28	526.01	0.58	0.84	0.82	0.92
<i>H. perforatum</i>	fl	L	water	258.92	71.31	308.18	462.28	0.84	0.70	0.91	0.81
<i>H. perforatum</i>	fl	L	water	217.21	80.72	300.63	402.78	0.71	0.80	0.89	0.70
<i>H. perforatum</i>	le	L	water	318.03	95.65	254.76	524.74	1.04	0.94	0.75	0.92
<i>H. perforatum</i>	le	L	water	200.30	107.10	260.85	569.02	0.65	1.06	0.77	1.00
<i>H. perforatum</i>	le	L	water	272.08	85.99	275.49	476.65	0.89	0.85	0.81	0.83
<i>H. perforatum</i>	st	L	water	106.93	21.18	93.72	119.82	0.35	0.21	0.28	0.21
<i>H. perforatum</i>	st	L	water	72.72	15.00	69.40	85.66	0.24	0.15	0.20	0.15
<i>H. perforatum</i>	st	L	water	95.81	17.47	84.83	103.84	0.31	0.17	0.25	0.18
<i>H. perforatum</i>	ro	L	water	31.49	10.61	37.86	77.60	0.10	0.10	0.11	0.14
<i>H. perforatum</i>	ro	L	water	45.99	11.81	34.98	46.59	0.15	0.12	0.10	0.08
<i>H. perforatum</i>	ro	L	water	43.90	6.15	35.22	35.13	0.14	0.06	0.10	0.06
<i>M. sylvestris</i>	fl	P	water	29.52	16.24	107.65	156.28	0.60	0.75	0.73	0.73
<i>M. sylvestris</i>	fl	P	water	45.49	17.18	125.16	195.35	0.93	0.79	0.85	0.91
<i>M. sylvestris</i>	fl	P	water	37.52	18.10	106.58	177.44	0.77	0.84	0.72	0.83
<i>M. sylvestris</i>	le	P	water	49.28	22.63	53.44	202.79	1.01	1.05	0.36	0.95
<i>M. sylvestris</i>	le	P	water	39.65	16.51	29.93	184.88	0.81	0.76	0.20	0.87
<i>M. sylvestris</i>	le	P	water	35.24	14.14	18.16	157.07	0.72	0.65	0.12	0.73
<i>M. sylvestris</i>	st	P	water	14.06	5.13	123.71	29.03	0.29	0.24	0.84	0.14
<i>M. sylvestris</i>	st	P	water	9.81	6.09	124.65	49.28	0.20	0.28	0.84	0.23
<i>M. sylvestris</i>	st	P	water	11.73	5.83	116.06	45.06	0.24	0.27	0.78	0.21
<i>M. sylvestris</i>	ro	P	water	7.62	2.65	28.12	28.45	0.16	0.12	0.19	0.13
<i>M. sylvestris</i>	ro	P	water	6.78	2.56	26.59	28.29	0.14	0.12	0.18	0.13
<i>M. sylvestris</i>	ro	P	water	7.20	2.61	27.35	28.37	0.15	0.12	0.18	0.13
<i>M. sylvestris</i>	fl	T	water	31.54	16.14	189.95	158.52	0.73	0.75	1.13	0.71
<i>M. sylvestris</i>	fl	T	water	31.16	17.17	159.29	174.22	0.73	0.79	0.95	0.78
<i>M. sylvestris</i>	fl	T	water	26.93	15.24	150.59	173.73	0.63	0.70	0.90	0.78
<i>M. sylvestris</i>	le	T	water	29.80	21.76	42.63	237.47	0.69	1.01	0.25	1.07
<i>M. sylvestris</i>	le	T	water	52.96	20.43	42.38	218.50	1.23	0.95	0.25	0.98
<i>M. sylvestris</i>	le	T	water	44.55	18.47	37.66	131.48	1.04	0.85	0.22	0.59
<i>M. sylvestris</i>	st	T	water	7.62	4.26	109.20	46.25	0.18	0.20	0.65	0.21
<i>M. sylvestris</i>	st	T	water	9.22	4.50	112.30	53.76	0.21	0.21	0.67	0.24

<i>M. sylvestris</i>	st	T	water	8.45	4.56	103.38	44.98	0.20	0.21	0.61	0.20
<i>M. sylvestris</i>	ro	T	water	5.84	2.57	20.81	36.73	0.14	0.12	0.12	0.16
<i>M. sylvestris</i>	ro	T	water	4.94	2.10	21.30	35.90	0.11	0.10	0.13	0.16
<i>M. sylvestris</i>	ro	T	water	4.70	2.49	19.28	25.71	0.11	0.12	0.11	0.12
<i>M. sylvestris</i>	fl	L	water	23.02	21.74	128.63	222.72	0.58	0.76	0.88	0.79
<i>M. sylvestris</i>	fl	L	water	28.61	21.61	129.35	210.82	0.72	0.76	0.88	0.74
<i>M. sylvestris</i>	fl	L	water	37.39	23.12	116.43	209.18	0.94	0.81	0.79	0.74
<i>M. sylvestris</i>	le	L	water	31.37	28.79	59.67	268.88	0.79	1.01	0.41	0.95
<i>M. sylvestris</i>	le	L	water	42.28	29.48	62.95	329.04	1.07	1.04	0.43	1.16
<i>M. sylvestris</i>	le	L	water	37.18	26.30	67.40	281.34	0.94	0.92	0.46	0.99
<i>M. sylvestris</i>	st	L	water	6.56	4.54	99.08	46.07	0.17	0.16	0.68	0.16
<i>M. sylvestris</i>	st	L	water	9.21	4.19	101.37	34.07	0.23	0.15	0.69	0.12
<i>M. sylvestris</i>	st	L	water	7.99	4.90	72.58	38.82	0.20	0.17	0.49	0.14
<i>M. sylvestris</i>	ro	L	water	3.33	2.23	16.25	20.90	0.08	0.08	0.11	0.07
<i>M. sylvestris</i>	ro	L	water	5.10	1.72	10.80	17.38	0.13	0.06	0.07	0.06
<i>M. sylvestris</i>	ro	L	water	5.65	2.12	15.53	19.16	0.14	0.07	0.11	0.07
<i>S. nigra</i>	fl	P	water	73.53	36.78	201.87	358.22	0.52	0.42	0.71	0.61
<i>S. nigra</i>	fl	P	water	68.02	33.53	175.96	367.70	0.48	0.38	0.62	0.63
<i>S. nigra</i>	fl	P	water	77.86	40.32	167.38	376.49	0.55	0.46	0.59	0.64
<i>S. nigra</i>	le	P	water	112.19	72.48	153.83	367.79	0.80	0.82	0.54	0.63
<i>S. nigra</i>	le	P	water	103.66	81.74	173.62	365.08	0.73	0.92	0.61	0.62
<i>S. nigra</i>	le	P	water	117.80	86.63	175.14	416.39	0.84	0.98	0.61	0.71
<i>S. nigra</i>	ba	P	water	28.29	15.35	72.89	135.51	0.20	0.17	0.26	0.23
<i>S. nigra</i>	ba	P	water	27.30	17.19	77.79	115.89	0.19	0.19	0.27	0.20
<i>S. nigra</i>	ba	P	water	26.02	14.58	86.63	141.39	0.18	0.16	0.30	0.24
<i>S. nigra</i>	fl	T	water	71.20	31.01	188.07	156.21	0.53	0.47	0.67	0.53
<i>S. nigra</i>	fl	T	water	123.91	37.91	182.84	161.69	0.92	0.57	0.65	0.55
<i>S. nigra</i>	fl	T	water	102.75	36.20	162.35	166.74	0.77	0.55	0.57	0.57
<i>S. nigra</i>	le	T	water	81.43	50.08	186.73	119.57	0.61	0.76	0.66	0.41
<i>S. nigra</i>	le	T	water	61.34	51.39	186.93	135.89	0.46	0.78	0.66	0.46
<i>S. nigra</i>	le	T	water	83.42	45.97	184.66	114.66	0.62	0.70	0.65	0.39
<i>S. nigra</i>	ba	T	water	28.20	14.84	60.46	166.38	0.21	0.22	0.21	0.57
<i>S. nigra</i>	ba	T	water	25.77	15.72	59.92	134.78	0.19	0.24	0.21	0.46
<i>S. nigra</i>	ba	T	water	26.23	14.04	60.47	167.88	0.20	0.21	0.21	0.57
<i>S. nigra</i>	fl	L	water	79.90	28.78	100.86	249.13	0.79	0.53	0.45	0.60
<i>S. nigra</i>	fl	L	water	63.65	27.19	120.62	182.63	0.63	0.50	0.53	0.44

<i>S. nigra</i>	fl	L	water	64.14	26.28	102.97	242.80	0.64	0.49	0.45	0.59
<i>S. nigra</i>	le	L	water	52.54	47.99	197.27	284.18	0.52	0.89	0.87	0.69
<i>S. nigra</i>	le	L	water	65.77	44.08	172.96	277.65	0.65	0.82	0.76	0.67
<i>S. nigra</i>	le	L	water	67.46	41.02	193.59	275.82	0.67	0.76	0.86	0.67
<i>S. nigra</i>	ba	L	water	19.91	10.14	46.68	125.71	0.20	0.19	0.21	0.30
<i>S. nigra</i>	ba	L	water	18.69	8.72	42.81	127.97	0.19	0.16	0.19	0.31
<i>S. nigra</i>	ba	L	water	21.73	8.52	41.09	100.20	0.22	0.16	0.18	0.24
<i>U. dioica</i>	le	P	water	55.12	12.85	49.77	178.77	1.19	0.89	0.42	0.93
<i>U. dioica</i>	le	P	water	56.87	14.40	60.51	148.38	1.23	1.00	0.52	0.77
<i>U. dioica</i>	le	P	water	42.71	13.26	50.83	197.43	0.92	0.92	0.43	1.02
<i>U. dioica</i>	st	P	water	10.42	5.05	71.07	67.56	0.22	0.35	0.61	0.35
<i>U. dioica</i>	st	P	water	9.01	4.88	78.94	64.17	0.19	0.34	0.67	0.33
<i>U. dioica</i>	st	P	water	7.29	4.73	72.89	63.35	0.16	0.33	0.62	0.33
<i>U. dioica</i>	ro	P	water	7.85	3.11	42.55	51.21	0.17	0.22	0.36	0.27
<i>U. dioica</i>	ro	P	water	10.03	3.20	52.99	62.55	0.22	0.22	0.45	0.32
<i>U. dioica</i>	ro	P	water	9.27	3.64	48.99	36.05	0.20	0.25	0.42	0.19
<i>U. dioica</i>	le	T	water	64.49	16.92	116.29	269.13	1.16	0.94	0.64	1.01
<i>U. dioica</i>	le	T	water	65.45	18.97	135.51	232.14	1.18	1.05	0.74	0.87
<i>U. dioica</i>	le	T	water	66.27	19.62	129.77	275.73	1.20	1.09	0.71	1.04
<i>U. dioica</i>	st	T	water	9.62	5.38	112.67	75.41	0.17	0.30	0.62	0.28
<i>U. dioica</i>	st	T	water	7.03	4.46	101.98	65.07	0.13	0.25	0.56	0.24
<i>U. dioica</i>	st	T	water	9.31	4.68	94.77	65.71	0.17	0.26	0.52	0.25
<i>U. dioica</i>	ro	T	water	9.28	4.09	45.56	74.74	0.17	0.23	0.25	0.28
<i>U. dioica</i>	ro	T	water	7.40	3.30	45.04	72.17	0.13	0.18	0.25	0.27
<i>U. dioica</i>	ro	T	water	10.33	3.53	38.71	66.64	0.19	0.20	0.21	0.25
<i>U. dioica</i>	le	L	water	59.01	16.42	61.48	195.62	1.26	1.01	0.72	0.93
<i>U. dioica</i>	le	L	water	38.77	17.86	64.33	173.65	0.83	1.10	0.76	0.83
<i>U. dioica</i>	le	L	water	57.56	15.86	57.27	206.94	1.23	0.97	0.67	0.99
<i>U. dioica</i>	st	L	water	9.90	4.71	49.97	51.52	0.21	0.29	0.59	0.25
<i>U. dioica</i>	st	L	water	6.50	4.43	41.53	56.98	0.14	0.27	0.49	0.27
<i>U. dioica</i>	st	L	water	8.73	4.67	43.80	64.07	0.19	0.29	0.51	0.31
<i>U. dioica</i>	ro	L	water	12.71	3.21	18.57	62.11	0.27	0.20	0.22	0.30
<i>U. dioica</i>	ro	L	water	7.82	2.81	23.37	63.71	0.17	0.17	0.27	0.30
<i>U. dioica</i>	ro	L	water	9.70	3.29	22.59	70.20	0.21	0.20	0.27	0.33
<i>B. officinalis</i>	fl	P	methanol	18.29	10.91	79.77	64.00	0.33	0.24	0.59	0.39
<i>B. officinalis</i>	fl	P	methanol	19.01	12.55	100.50	68.63	0.35	0.27	0.74	0.41

<i>B. officinalis</i>	fl	P	methanol	21.36	14.32	88.08	72.67	0.39	0.31	0.65	0.44
<i>B. officinalis</i>	le	P	methanol	59.65	58.49	67.01	172.94	1.09	1.28	0.50	1.04
<i>B. officinalis</i>	le	P	methanol	52.29	38.41	48.57	147.23	0.96	0.84	0.36	0.89
<i>B. officinalis</i>	le	P	methanol	49.58	49.06	60.14	160.42	0.91	1.07	0.44	0.97
<i>B. officinalis</i>	st	P	methanol	16.01	13.43	125.62	50.91	0.29	0.29	0.93	0.31
<i>B. officinalis</i>	st	P	methanol	14.18	15.02	97.54	53.93	0.26	0.33	0.72	0.33
<i>B. officinalis</i>	st	P	methanol	19.21	16.03	106.03	53.15	0.35	0.35	0.78	0.32
<i>B. officinalis</i>	ro	P	methanol	21.33	16.16	16.99	57.13	0.39	0.35	0.13	0.34
<i>B. officinalis</i>	ro	P	methanol	19.29	15.39	8.91	49.42	0.35	0.34	0.07	0.30
<i>B. officinalis</i>	ro	P	methanol	17.75	14.11	12.67	44.79	0.32	0.31	0.09	0.27
<i>B. officinalis</i>	fl	T	methanol	42.60	43.13	105.48	67.84	0.52	0.55	0.55	0.47
<i>B. officinalis</i>	fl	T	methanol	42.24	41.39	112.81	78.10	0.51	0.53	0.59	0.54
<i>B. officinalis</i>	fl	T	methanol	52.14	40.47	111.47	73.23	0.63	0.52	0.58	0.51
<i>B. officinalis</i>	le	T	methanol	70.74	64.80	85.18	128.66	0.86	0.83	0.45	0.89
<i>B. officinalis</i>	le	T	methanol	78.90	73.44	86.32	142.87	0.96	0.94	0.45	0.99
<i>B. officinalis</i>	le	T	methanol	77.64	72.90	72.71	150.17	0.94	0.93	0.38	1.04
<i>B. officinalis</i>	st	T	methanol	16.81	18.45	179.67	28.23	0.20	0.24	0.94	0.19
<i>B. officinalis</i>	st	T	methanol	20.85	18.59	179.07	29.95	0.25	0.24	0.94	0.21
<i>B. officinalis</i>	st	T	methanol	18.01	18.82	175.74	31.02	0.22	0.24	0.92	0.21
<i>B. officinalis</i>	ro	T	methanol	24.05	26.35	12.30	46.49	0.29	0.34	0.06	0.32
<i>B. officinalis</i>	ro	T	methanol	22.93	28.73	11.17	44.48	0.28	0.37	0.06	0.31
<i>B. officinalis</i>	ro	T	methanol	26.70	21.08	12.25	48.21	0.32	0.27	0.06	0.33
<i>B. officinalis</i>	fl	L	methanol	47.45	16.94	86.91	85.66	0.72	0.63	0.83	0.62
<i>B. officinalis</i>	fl	L	methanol	45.15	14.56	80.68	83.52	0.69	0.54	0.77	0.61
<i>B. officinalis</i>	fl	L	methanol	44.83	17.12	70.92	96.67	0.68	0.64	0.68	0.70
<i>B. officinalis</i>	le	L	methanol	51.35	21.78	43.98	134.26	0.78	0.81	0.42	0.97
<i>B. officinalis</i>	le	L	methanol	50.67	23.76	47.71	144.73	0.77	0.89	0.45	1.05
<i>B. officinalis</i>	le	L	methanol	44.00	18.34	48.48	116.97	0.67	0.68	0.46	0.85
<i>B. officinalis</i>	st	L	methanol	12.01	6.18	74.33	21.09	0.18	0.23	0.71	0.15
<i>B. officinalis</i>	st	L	methanol	17.88	8.00	78.45	27.56	0.27	0.30	0.75	0.20
<i>B. officinalis</i>	st	L	methanol	14.94	7.09	76.39	24.32	0.23	0.26	0.73	0.18
<i>B. officinalis</i>	ro	L	methanol	19.07	9.18	7.37	31.22	0.29	0.34	0.07	0.23
<i>B. officinalis</i>	ro	L	methanol	22.35	8.48	6.92	29.72	0.34	0.32	0.07	0.22
<i>B. officinalis</i>	ro	L	methanol	24.36	9.64	7.72	32.05	0.37	0.36	0.07	0.23
<i>C. dactylon</i>	le	P	methanol	5.80	3.36	24.68	55.45	0.70	0.66	0.94	0.62
<i>C. dactylon</i>	le	P	methanol	4.08	3.26	22.31	60.46	0.49	0.64	0.85	0.67

<i>C. dactylon</i>	le	P	methanol	4.09	2.97	19.82	58.67	0.50	0.58	0.75	0.65
<i>C. dactylon</i>	ro	P	methanol	3.96	1.96	5.18	31.23	0.48	0.38	0.20	0.35
<i>C. dactylon</i>	ro	P	methanol	3.91	2.03	4.94	33.98	0.47	0.40	0.19	0.38
<i>C. dactylon</i>	ro	P	methanol	2.90	1.75	2.18	29.38	0.35	0.34	0.08	0.33
<i>C. dactylon</i>	le	T	methanol	6.71	9.32	28.71	40.61	0.50	0.81	0.96	0.76
<i>C. dactylon</i>	le	T	methanol	9.40	9.34	31.54	43.36	0.71	0.81	1.06	0.82
<i>C. dactylon</i>	le	T	methanol	9.70	8.11	27.52	37.06	0.73	0.70	0.92	0.70
<i>C. dactylon</i>	ro	T	methanol	4.42	2.68	0.78	12.51	0.33	0.23	0.03	0.24
<i>C. dactylon</i>	ro	T	methanol	5.13	2.52	0.82	13.80	0.39	0.22	0.03	0.26
<i>C. dactylon</i>	ro	T	methanol	4.60	2.63	0.28	12.14	0.35	0.23	0.01	0.23
<i>C. dactylon</i>	le	L	methanol	23.35	9.06	7.32	30.88	1.22	1.30	0.41	0.45
<i>C. dactylon</i>	le	L	methanol	9.73	3.52	14.72	53.63	0.51	0.50	0.83	0.77
<i>C. dactylon</i>	le	L	methanol	9.12	3.84	19.95	61.30	0.48	0.55	1.13	0.88
<i>C. dactylon</i>	ro	L	methanol	5.47	1.57	4.60	21.14	0.29	0.22	0.26	0.31
<i>C. dactylon</i>	ro	L	methanol	4.76	1.46	2.82	20.17	0.25	0.21	0.16	0.29
<i>C. dactylon</i>	ro	L	methanol	5.12	1.51	3.71	20.66	0.27	0.22	0.21	0.30
<i>F. vulgaris</i>	le	P	methanol	10.93	14.03	36.56	94.42	0.81	1.01	0.41	0.93
<i>F. vulgaris</i>	le	P	methanol	14.19	14.07	39.18	106.85	1.05	1.02	0.44	1.05
<i>F. vulgaris</i>	le	P	methanol	14.10	16.77	44.25	130.22	1.04	1.21	0.50	1.28
<i>F. vulgaris</i>	st	P	methanol	3.68	4.30	77.27	30.36	0.27	0.31	0.88	0.30
<i>F. vulgaris</i>	st	P	methanol	4.74	4.61	77.16	33.42	0.35	0.33	0.87	0.33
<i>F. vulgaris</i>	st	P	methanol	3.96	3.97	65.75	28.63	0.29	0.29	0.74	0.28
<i>F. vulgaris</i>	ro	P	methanol	3.39	1.81	19.92	14.35	0.25	0.13	0.23	0.14
<i>F. vulgaris</i>	ro	P	methanol	2.82	1.32	18.21	8.53	0.21	0.10	0.21	0.08
<i>F. vulgaris</i>	ro	P	methanol	2.95	1.40	19.06	9.47	0.22	0.10	0.22	0.09
<i>F. vulgaris</i>	le	T	methanol	21.73	49.10	47.84	141.55	0.84	1.02	0.47	1.07
<i>F. vulgaris</i>	le	T	methanol	21.48	50.80	49.18	119.69	0.83	1.06	0.48	0.91
<i>F. vulgaris</i>	le	T	methanol	21.64	48.70	48.51	130.22	0.83	1.02	0.48	0.99
<i>F. vulgaris</i>	st	T	methanol	7.41	13.98	88.89	35.87	0.28	0.29	0.88	0.27
<i>F. vulgaris</i>	st	T	methanol	6.99	13.33	87.70	36.02	0.27	0.28	0.86	0.27
<i>F. vulgaris</i>	st	T	methanol	6.71	11.39	77.31	31.73	0.26	0.24	0.76	0.24
<i>F. vulgaris</i>	ro	T	methanol	10.15	10.04	19.92	34.44	0.39	0.21	0.20	0.26
<i>F. vulgaris</i>	ro	T	methanol	10.61	8.99	18.21	31.92	0.41	0.19	0.18	0.24
<i>F. vulgaris</i>	ro	T	methanol	10.38	9.52	19.06	33.18	0.40	0.20	0.19	0.25
<i>F. vulgaris</i>	le	L	methanol	18.54	12.18	40.67	95.73	0.82	0.92	1.16	0.86
<i>F. vulgaris</i>	le	L	methanol	16.67	11.28	38.61	89.44	0.74	0.85	1.10	0.80

<i>F. vulgaris</i>	le	L	methanol	18.27	13.10	40.17	97.14	0.81	0.99	1.15	0.87
<i>F. vulgaris</i>	st	L	methanol	6.32	4.20	7.94	35.00	0.28	0.32	0.23	0.31
<i>F. vulgaris</i>	st	L	methanol	8.61	5.68	7.71	47.88	0.38	0.43	0.22	0.43
<i>F. vulgaris</i>	st	L	methanol	8.74	4.99	6.67	41.38	0.39	0.38	0.19	0.37
<i>F. vulgaris</i>	ro	L	methanol	8.60	2.72	8.24	31.01	0.38	0.21	0.24	0.28
<i>F. vulgaris</i>	ro	L	methanol	9.51	3.32	6.53	36.81	0.42	0.25	0.19	0.33
<i>F. vulgaris</i>	ro	L	methanol	6.38	2.26	1.06	27.65	0.28	0.17	0.03	0.25
<i>H. perforatum</i>	fl	P	methanol	143.78	99.20	210.41	987.04	0.76	0.71	0.64	0.76
<i>H. perforatum</i>	fl	P	methanol	133.98	100.91	220.49	1014.63	0.71	0.72	0.67	0.78
<i>H. perforatum</i>	fl	P	methanol	143.48	106.16	238.00	1041.13	0.76	0.76	0.73	0.80
<i>H. perforatum</i>	le	P	methanol	144.95	98.71	241.94	910.37	0.77	0.70	0.74	0.70
<i>H. perforatum</i>	le	P	methanol	133.98	105.11	220.95	999.47	0.71	0.75	0.68	0.77
<i>H. perforatum</i>	le	P	methanol	150.89	121.49	257.01	1073.39	0.80	0.87	0.79	0.82
<i>H. perforatum</i>	st	P	methanol	51.66	30.63	80.13	238.71	0.27	0.22	0.25	0.18
<i>H. perforatum</i>	st	P	methanol	72.28	45.73	118.29	383.71	0.38	0.33	0.36	0.29
<i>H. perforatum</i>	st	P	methanol	58.53	38.93	95.52	293.89	0.31	0.28	0.29	0.23
<i>H. perforatum</i>	ro	P	methanol	29.44	27.76	78.86	239.62	0.16	0.20	0.24	0.18
<i>H. perforatum</i>	ro	P	methanol	36.49	32.57	94.24	311.44	0.19	0.23	0.29	0.24
<i>H. perforatum</i>	ro	P	methanol	36.02	33.04	104.11	318.56	0.19	0.24	0.32	0.24
<i>H. perforatum</i>	fl	T	methanol	169.00	106.39	181.31	592.98	0.67	0.52	0.60	0.80
<i>H. perforatum</i>	fl	T	methanol	191.79	121.84	247.30	749.32	0.76	0.60	0.81	1.01
<i>H. perforatum</i>	fl	T	methanol	200.84	120.90	230.69	691.74	0.80	0.59	0.76	0.94
<i>H. perforatum</i>	le	T	methanol	153.71	209.46	236.42	506.56	0.61	1.02	0.78	0.69
<i>H. perforatum</i>	le	T	methanol	158.03	202.88	225.79	509.49	0.63	0.99	0.74	0.69
<i>H. perforatum</i>	le	T	methanol	146.96	178.19	228.30	483.77	0.59	0.87	0.75	0.65
<i>H. perforatum</i>	st	T	methanol	90.02	70.63	120.71	177.49	0.36	0.35	0.40	0.24
<i>H. perforatum</i>	st	T	methanol	116.74	76.35	134.60	225.61	0.47	0.37	0.44	0.31
<i>H. perforatum</i>	st	T	methanol	113.44	84.01	138.22	227.22	0.45	0.41	0.46	0.31
<i>H. perforatum</i>	ro	T	methanol	58.78	14.87	18.71	77.41	0.23	0.07	0.06	0.10
<i>H. perforatum</i>	ro	T	methanol	51.61	22.21	33.98	101.87	0.21	0.11	0.11	0.14
<i>H. perforatum</i>	ro	T	methanol	55.20	18.54	26.34	89.64	0.22	0.09	0.09	0.12
<i>H. perforatum</i>	fl	L	methanol	246.80	124.62	174.64	743.25	0.79	0.82	0.61	0.80
<i>H. perforatum</i>	fl	L	methanol	219.01	126.07	223.92	708.17	0.70	0.83	0.78	0.77
<i>H. perforatum</i>	fl	L	methanol	192.32	124.30	171.58	677.44	0.61	0.82	0.60	0.73
<i>H. perforatum</i>	le	L	methanol	234.15	127.28	279.77	628.08	0.74	0.84	0.97	0.68
<i>H. perforatum</i>	le	L	methanol	231.86	129.87	291.10	598.74	0.74	0.85	1.01	0.65

<i>H. perforatum</i>	le	L	methanol	233.00	128.58	285.44	613.41	0.74	0.85	0.99	0.66
<i>H. perforatum</i>	st	L	methanol	96.37	34.77	75.51	288.08	0.31	0.23	0.26	0.31
<i>H. perforatum</i>	st	L	methanol	114.19	21.90	35.77	316.72	0.36	0.14	0.12	0.34
<i>H. perforatum</i>	st	L	methanol	105.28	27.00	41.14	302.40	0.33	0.18	0.14	0.33
<i>H. perforatum</i>	ro	L	methanol	66.55	23.35	47.09	211.03	0.21	0.15	0.16	0.23
<i>H. perforatum</i>	ro	L	methanol	75.37	26.54	49.92	233.82	0.24	0.17	0.17	0.25
<i>H. perforatum</i>	ro	L	methanol	70.96	17.47	48.51	222.43	0.23	0.11	0.17	0.24
<i>M. sylvestris</i>	fl	P	methanol	5.50	6.01	54.27	57.16	0.56	0.82	0.87	0.85
<i>M. sylvestris</i>	fl	P	methanol	6.89	6.25	56.36	55.21	0.70	0.85	0.91	0.82
<i>M. sylvestris</i>	fl	P	methanol	7.06	6.48	46.94	59.59	0.72	0.88	0.76	0.88
<i>M. sylvestris</i>	le	P	methanol	6.93	5.78	18.64	55.60	0.70	0.79	0.30	0.82
<i>M. sylvestris</i>	le	P	methanol	7.91	5.91	28.28	58.46	0.80	0.80	0.46	0.86
<i>M. sylvestris</i>	le	P	methanol	7.32	5.34	20.05	55.53	0.74	0.73	0.32	0.82
<i>M. sylvestris</i>	st	P	methanol	2.39	1.53	48.93	8.64	0.24	0.21	0.79	0.13
<i>M. sylvestris</i>	st	P	methanol	2.80	1.43	46.03	8.60	0.28	0.19	0.74	0.13
<i>M. sylvestris</i>	st	P	methanol	2.45	1.49	46.42	9.44	0.25	0.20	0.75	0.14
<i>M. sylvestris</i>	ro	P	methanol	3.07	1.27	2.16	10.97	0.31	0.17	0.03	0.16
<i>M. sylvestris</i>	ro	P	methanol	3.57	1.34	2.43	13.99	0.36	0.18	0.04	0.21
<i>M. sylvestris</i>	ro	P	methanol	3.32	1.30	2.29	12.48	0.34	0.18	0.04	0.18
<i>M. sylvestris</i>	fl	T	methanol	10.72	12.50	101.23	58.76	0.72	0.92	1.07	1.09
<i>M. sylvestris</i>	fl	T	methanol	11.08	11.47	75.51	57.76	0.75	0.85	0.80	1.07
<i>M. sylvestris</i>	fl	T	methanol	11.31	11.65	82.33	56.86	0.76	0.86	0.87	1.05
<i>M. sylvestris</i>	le	T	methanol	10.77	8.70	39.76	28.16	0.73	0.64	0.42	0.52
<i>M. sylvestris</i>	le	T	methanol	9.57	9.01	41.16	27.20	0.65	0.67	0.44	0.50
<i>M. sylvestris</i>	le	T	methanol	8.50	9.30	44.12	33.66	0.57	0.69	0.47	0.62
<i>M. sylvestris</i>	st	T	methanol	3.69	3.16	61.21	7.90	0.25	0.23	0.65	0.15
<i>M. sylvestris</i>	st	T	methanol	4.13	3.10	56.26	8.71	0.28	0.23	0.59	0.16
<i>M. sylvestris</i>	st	T	methanol	4.29	3.30	59.30	9.85	0.29	0.24	0.63	0.18
<i>M. sylvestris</i>	ro	T	methanol	4.96	3.18	2.16	13.19	0.34	0.23	0.02	0.24
<i>M. sylvestris</i>	ro	T	methanol	5.10	2.55	2.43	9.86	0.34	0.19	0.03	0.18
<i>M. sylvestris</i>	ro	T	methanol	4.65	3.20	2.29	12.48	0.31	0.24	0.02	0.23
<i>M. sylvestris</i>	fl	L	methanol	12.00	6.85	82.41	73.95	0.90	1.02	0.94	0.94
<i>M. sylvestris</i>	fl	L	methanol	11.44	6.68	69.42	88.02	0.85	1.00	0.79	1.11
<i>M. sylvestris</i>	fl	L	methanol	8.13	4.95	69.48	50.76	0.61	0.74	0.80	0.64
<i>M. sylvestris</i>	le	L	methanol	8.42	4.99	38.82	63.47	0.63	0.75	0.44	0.80
<i>M. sylvestris</i>	le	L	methanol	7.28	4.41	36.42	62.53	0.54	0.66	0.42	0.79

<i>M. sylvestris</i>	le	L	methanol	7.53	4.33	40.88	58.77	0.56	0.65	0.47	0.74
<i>M. sylvestris</i>	st	L	methanol	3.29	1.52	65.06	15.16	0.25	0.23	0.74	0.19
<i>M. sylvestris</i>	st	L	methanol	3.82	1.51	60.98	17.36	0.29	0.23	0.70	0.22
<i>M. sylvestris</i>	st	L	methanol	5.44	1.87	57.71	15.35	0.41	0.28	0.66	0.19
<i>M. sylvestris</i>	ro	L	methanol	4.21	1.06	1.39	9.82	0.31	0.16	0.02	0.12
<i>M. sylvestris</i>	ro	L	methanol	4.20	0.96	0.80	8.56	0.31	0.14	0.01	0.11
<i>M. sylvestris</i>	ro	L	methanol	4.66	1.02	0.92	10.30	0.35	0.15	0.01	0.13
<i>S. nigra</i>	fl	P	methanol	85.38	53.53	83.65	258.93	0.70	0.61	0.79	0.61
<i>S. nigra</i>	fl	P	methanol	77.38	54.40	79.74	276.77	0.63	0.62	0.76	0.65
<i>S. nigra</i>	fl	P	methanol	94.63	52.22	66.02	285.90	0.78	0.60	0.63	0.67
<i>S. nigra</i>	le	P	methanol	78.69	66.26	65.66	254.52	0.65	0.76	0.62	0.60
<i>S. nigra</i>	le	P	methanol	82.69	70.15	60.08	291.58	0.68	0.80	0.57	0.69
<i>S. nigra</i>	le	P	methanol	76.54	61.96	54.61	267.80	0.63	0.71	0.52	0.63
<i>S. nigra</i>	ba	P	methanol	15.22	12.06	18.59	87.98	0.12	0.14	0.18	0.21
<i>S. nigra</i>	ba	P	methanol	20.94	12.56	24.08	109.91	0.17	0.14	0.23	0.26
<i>S. nigra</i>	ba	P	methanol	16.96	11.10	21.33	81.94	0.14	0.13	0.20	0.19
<i>S. nigra</i>	fl	T	methanol	89.53	85.14	71.95	268.59	0.78	0.64	0.66	0.73
<i>S. nigra</i>	fl	T	methanol	89.50	111.90	68.07	297.79	0.78	0.84	0.63	0.81
<i>S. nigra</i>	fl	T	methanol	93.22	94.47	66.29	307.95	0.82	0.71	0.61	0.84
<i>S. nigra</i>	le	T	methanol	60.96	72.22	81.41	168.58	0.53	0.54	0.75	0.46
<i>S. nigra</i>	le	T	methanol	52.55	92.17	72.01	200.40	0.46	0.69	0.66	0.54
<i>S. nigra</i>	le	T	methanol	52.65	79.94	79.92	174.97	0.46	0.60	0.74	0.48
<i>S. nigra</i>	ba	T	methanol	23.57	24.73	17.87	89.44	0.21	0.18	0.16	0.24
<i>S. nigra</i>	ba	T	methanol	25.69	20.45	15.79	72.95	0.22	0.15	0.15	0.20
<i>S. nigra</i>	ba	T	methanol	26.59	20.77	14.97	76.16	0.23	0.16	0.14	0.21
<i>S. nigra</i>	fl	L	methanol	61.31	32.51	70.57	266.20	0.52	0.55	0.69	0.63
<i>S. nigra</i>	fl	L	methanol	86.08	40.82	66.06	323.30	0.73	0.70	0.65	0.77
<i>S. nigra</i>	fl	L	methanol	77.80	35.26	57.97	279.84	0.66	0.60	0.57	0.66
<i>S. nigra</i>	le	L	methanol	85.52	42.66	76.63	241.73	0.72	0.73	0.75	0.57
<i>S. nigra</i>	le	L	methanol	75.10	40.92	64.59	239.82	0.63	0.70	0.64	0.57
<i>S. nigra</i>	le	L	methanol	84.18	39.91	57.70	238.36	0.71	0.68	0.57	0.56
<i>S. nigra</i>	ba	L	methanol	22.88	12.44	21.82	115.82	0.19	0.21	0.21	0.27
<i>S. nigra</i>	ba	L	methanol	17.55	9.27	19.44	92.43	0.15	0.16	0.19	0.22
<i>S. nigra</i>	ba	L	methanol	22.83	9.94	22.80	102.04	0.19	0.17	0.22	0.24
<i>U. dioica</i>	le	P	methanol	11.33	8.87	41.54	45.22	0.65	0.87	0.61	0.65
<i>U. dioica</i>	le	P	methanol	14.69	9.05	46.13	55.02	0.84	0.89	0.68	0.80

<i>U. dioica</i>	le	P	methanol	15.49	9.21	47.85	49.70	0.89	0.90	0.71	0.72
<i>U. dioica</i>	st	P	methanol	5.95	3.60	48.13	26.11	0.34	0.35	0.71	0.38
<i>U. dioica</i>	st	P	methanol	5.34	3.67	57.36	28.36	0.31	0.36	0.85	0.41
<i>U. dioica</i>	st	P	methanol	4.89	3.29	50.50	25.74	0.28	0.32	0.75	0.37
<i>U. dioica</i>	ro	P	methanol	6.19	2.74	5.71	25.28	0.36	0.27	0.08	0.37
<i>U. dioica</i>	ro	P	methanol	7.75	2.93	4.19	28.74	0.44	0.29	0.06	0.42
<i>U. dioica</i>	ro	P	methanol	6.74	2.60	3.31	26.85	0.39	0.25	0.05	0.39
<i>U. dioica</i>	le	T	methanol	29.46	49.07	47.37	89.74	0.83	1.22	0.70	0.91
<i>U. dioica</i>	le	T	methanol	33.45	42.07	46.65	92.93	0.94	1.05	0.69	0.94
<i>U. dioica</i>	le	T	methanol	41.39	47.85	44.36	100.83	1.16	1.19	0.66	1.02
<i>U. dioica</i>	st	T	methanol	8.64	9.57	57.55	31.20	0.24	0.24	0.86	0.32
<i>U. dioica</i>	st	T	methanol	8.08	7.72	50.72	30.47	0.23	0.19	0.75	0.31
<i>U. dioica</i>	st	T	methanol	10.11	7.05	40.06	28.25	0.28	0.18	0.60	0.29
<i>U. dioica</i>	ro	T	methanol	10.42	6.07	6.54	24.28	0.29	0.15	0.10	0.25
<i>U. dioica</i>	ro	T	methanol	9.59	5.94	7.15	22.27	0.27	0.15	0.11	0.23
<i>U. dioica</i>	ro	T	methanol	9.00	5.27	2.09	24.33	0.25	0.13	0.03	0.25
<i>U. dioica</i>	le	L	methanol	26.68	12.91	50.54	74.30	1.00	1.03	0.85	0.77
<i>U. dioica</i>	le	L	methanol	13.53	11.41	50.69	82.02	0.51	0.91	0.85	0.85
<i>U. dioica</i>	le	L	methanol	25.56	11.99	51.02	88.99	0.96	0.96	0.86	0.92
<i>U. dioica</i>	st	L	methanol	7.65	3.75	35.76	28.00	0.29	0.30	0.60	0.29
<i>U. dioica</i>	st	L	methanol	8.11	4.14	37.42	34.55	0.31	0.33	0.63	0.36
<i>U. dioica</i>	st	L	methanol	9.24	3.85	34.26	35.31	0.35	0.31	0.58	0.36
<i>U. dioica</i>	ro	L	methanol	7.18	2.84	1.24	28.70	0.27	0.23	0.02	0.30
<i>U. dioica</i>	ro	L	methanol	13.66	2.72	3.44	32.62	0.51	0.22	0.06	0.34
<i>U. dioica</i>	ro	L	methanol	7.90	2.63	2.52	31.17	0.30	0.21	0.04	0.32