

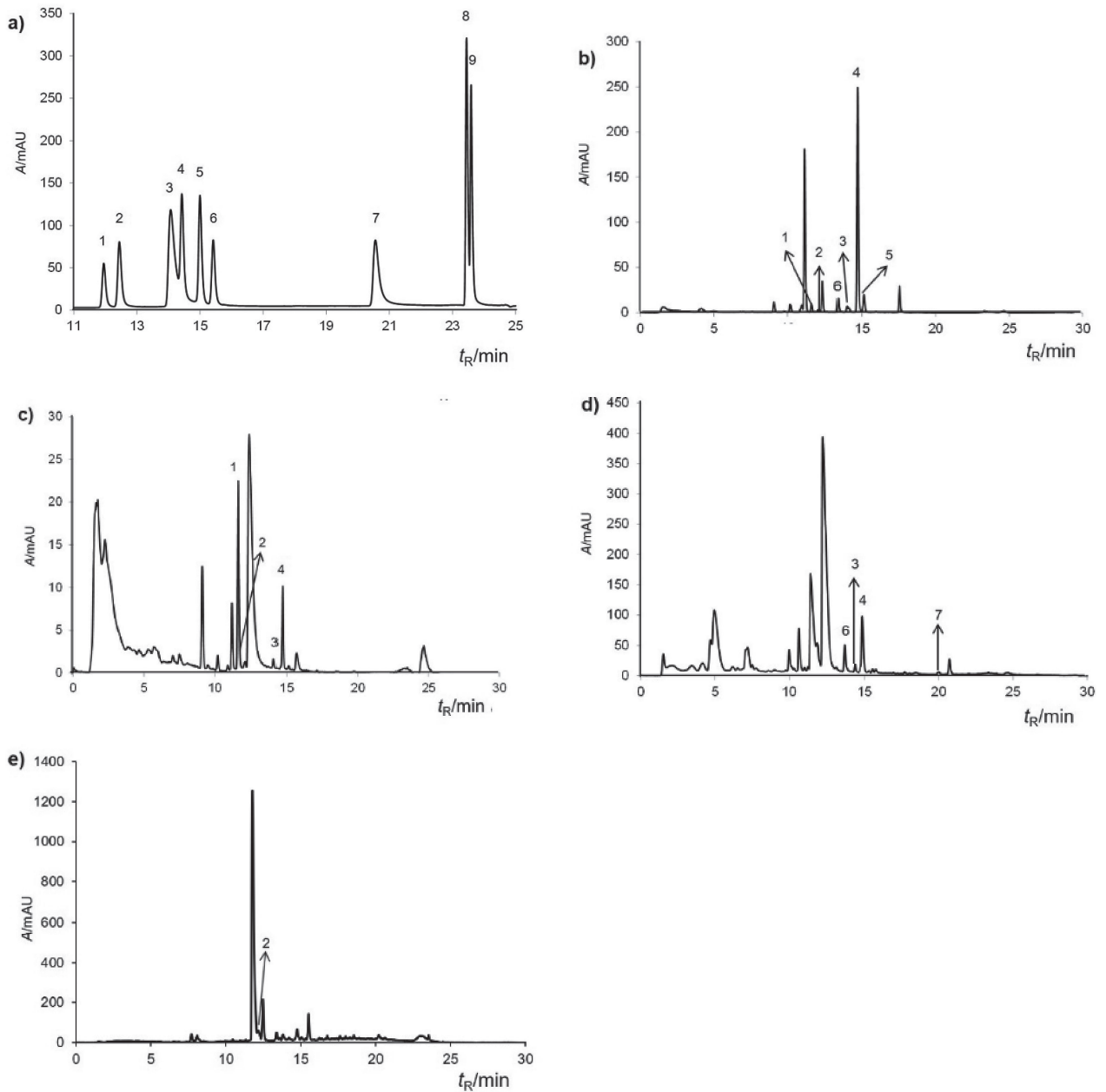
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Fig. S1. RP-HPLC profiles recorded at $\lambda=360$ nm of: a) phenolic standards, and phenolic compounds from non-hydrolysed aqueous infusions of b) *Calendula officinalis* L., c) *Chelidonium majus* L., d) *Alchemilla vulgaris* L., and e) *Teucrium chamaedrys* L. 1=quercetin-3-O-rutinoside, 2=quercetin-3- β -D-glucoside, 3=kaempferol-3-O-rutinoside, 4=isorhamnetin-3-O-rutinoside, 5=isorhamnetin-3-O-glucoside, 6=quercetagenin, 7=quercetin, 8=kaempferol, 9=isorhamnetin

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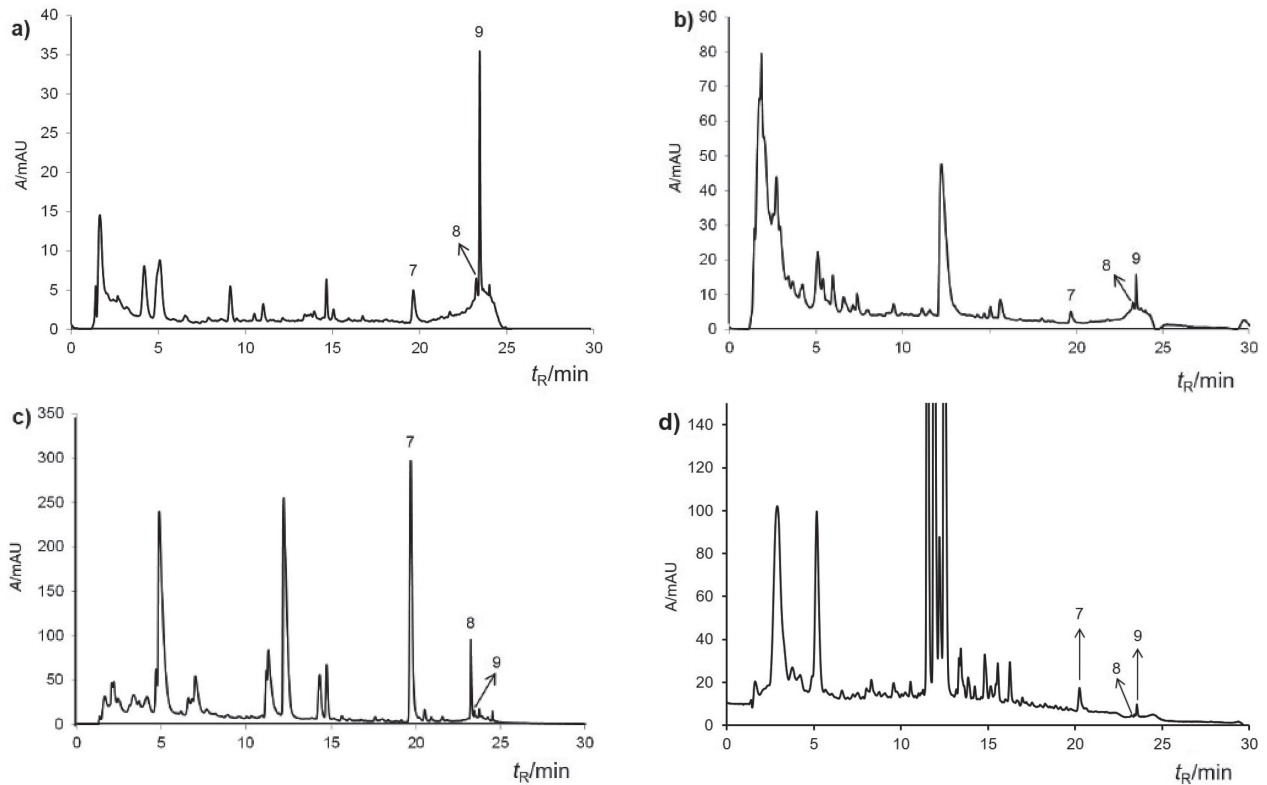


Fig. S2. RP-HPLC profiles recorded at $\lambda=360$ nm of phenolics from hydrolysed aqueous infusions of: a) *Calendula officinalis* L., b) *Chelidonium majus* L., c) *Alchemilla vulgaris* L. and d) *Teucrium chamaedrys* L. 7=quercetin, 8=kaempferol, 9=isorhamnetin

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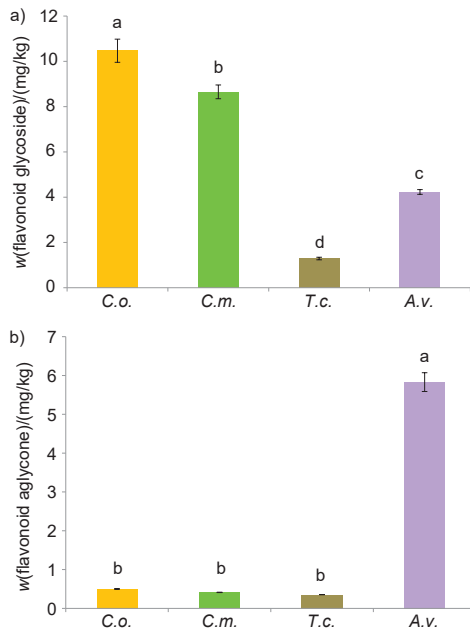


Fig. S3. Mass fractions of identified flavonoids on dry mass basis: a) glycosides in non-hydrolysed extracts, and b) aglycones in hydrolysed extracts of *Calendula officinalis* L. (C.o.), *Chelidonium majus* L. (C.m.), *Teucrium chamaedrys* (T.c.) and *Alchemilla vulgaris* L. (A.v.) shoots. Data are the mean values of three replicates \pm S.D. Different letters indicate a significant difference among the values (ANOVA, Duncan's test, $p \leq 0.05$)

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Table S1. Peak designations, calibration curves and R^2 values of flavonoid standards

Peak	Phenolic compound	Calibration curve	R^2
1	quercetin-3- <i>O</i> -rutinoside	$y=451.72x-13.644$	0.997
2	quercetin-3- β - <i>D</i> -glucoside	$y=823.37x-25.617$	0.998
3	kaempferol-3- <i>O</i> -rutinoside	$y=1032.1x-15.212$	0.999
4	isorhamnetin-3- <i>O</i> -rutinoside	$y=1126x-18.995$	0.999
5	isorhamnetin-3- <i>O</i> -glucoside	$y=778.99x+2.4566$	1.000
6	quercetagenin	$y=2703.3x-634.05$	0.992
7	quercetin	$y=866.26x-83.147$	0.987
8	kaempferol	$y=1730.8x-108.87$	0.997
9	isorhamnetin	$y=1873.5x-63.697$	0.998

Data are the mean values of $N=3$. Test of linearity range was conducted at $\gamma=1-250$ $\mu\text{g/mL}$, except for isorhamnetin where it was $\gamma=0.7-167$ $\mu\text{g/mL}$

Table S2. Pearson's correlation coefficients (r) between the phenolics, antioxidant and antiproliferative activity of aqueous infusions of *Calendula officinalis*, *Chelidonium majus*, *Teucrium chamaedrys* and *Alchemilla vulgaris*

Factor	TP	DPPH	FRAP	Rancimat	Q-rut	Q-gluc	K-rut	Iso-rut	Iso-gluc	Q	K	Iso	Qaget	TIG	TIA	MD-MBA-231	T24	A549
TP	1.000																	
DPPH	0.180	1.000																
FRAP	0.908	-0.169	1.000															
Rancimat	0.697	0.641	0.577	1.000														
Q-rut	-0.469	0.761	-0.767	0.023	1.000													
Q-gluc	0.799	0.016	0.624	0.202	-0.365	1.000												
K-rut	-0.250	-0.294	0.090	0.151	-0.293	-0.715	1.000											
Iso-rut	-0.784	-0.742	-0.533	-0.921	-0.134	-0.481	0.245	1.000										
Iso-gluc	-0.716	-0.578	-0.626	-0.997	0.052	-0.203	-0.200	0.899	1.000									
Q	-0.014	-0.343	0.336	0.268	-0.483	-0.517	0.968	0.117	-0.328	1.000								
K	-0.027	-0.363	0.329	0.246	-0.491	-0.521	0.969	0.139	-0.307	1.000	1.000							
Iso	-0.721	-0.409	-0.715	-0.961	0.224	-0.169	-0.339	0.810	0.980	-0.484	-0.465	1.000						
Qaget	-0.551	-0.766	-0.151	-0.500	-0.424	-0.639	0.764	0.791	0.446	0.699	0.715	0.282	1.000					
TIG	-0.853	-0.599	-0.686	-0.959	0.064	-0.471	0.086	0.974	0.954	-0.074	-0.053	0.908	0.651	1.000				
TIA	-0.036	-0.356	0.319	0.246	-0.480	-0.531	0.972	0.140	-0.306	1.000	1.000	-0.463	0.715	-0.050	1.000			
MD-MBA-231	0.289	0.452	0.339	0.839	0.036	-0.331	0.635	-0.572	-0.851	0.669	0.651	-0.871	-0.012	-0.655	0.655	1.000		
T24	-0.852	0.331	-0.895	-0.247	0.785	-0.850	0.256	0.346	0.290	0.010	0.011	0.361	0.223	0.457	0.023	0.110	1.000	
A549	0.333	0.750	0.221	0.908	0.317	-0.195	0.328	-0.760	-0.892	0.344	0.322	-0.837	-0.352	-0.765	0.327	0.927	0.175	1.000

TP=total phenolics, DPPH=2,2 diphenyl-1-picrylhydrazyl, FRAP=ferric reducing ability of plasma, Q-rut=quercetin-rutinoside, Q-gluc=quercetin glucoside, K-rut=kaempferol-rutinoside, Iso-rut=isorhamnetin rutinoside, Iso-gluc=isorhamnetin glucoside, Q=quercetin, K=kaempferol, Iso=isorhamnetin, Qaget=quercetagenin, TIG=total identified glucosides, TIA=total identified aglycones, MDA-MB-231=breast cancer cells, T24=urinary bladder cancer cells, A549=lung cancer cells