

Table S1. Total bioactive components in the tested extracts*.

Extracts	Total phenolic content (mg GAE/g)	Total flavonoid content (mg RE/g)
Crude (1)	74.48±0.88 ^b	16.25±0.32 ^c
Crude (2)	66.90±0.17 ^c	14.05±0.11 ^d
Pure XAD (3)	132.40±1.07 ^a	66.69±0.65 ^a
Pure SP (4)	132.73±0.33 ^a	50.54±0.68 ^b

* Values expressed are means ± S.D. of three parallel measurements. GAE: Gallic acid equivalent; RE: Rutin equivalent. Different letters indicate significant differences in the extracts ($p < 0.05$).

Table S2. Antioxidant properties of the tested extracts*.

Extracts	DPPH (mg TE/g)	ABTS (mg TE/g)	CUPRAC (mg TE/g)	FRAP (mg TE/g)	Chelating ability (mg EDTAE/g)	Phosphomolybdenum (mmol TE/g)
Crude (1)	189.45±0.66 ^c	179.25±4.75 ^c	338.84±0.75 ^b	190.70±0.43 ^c	16.30±1.32 ^a	2.53±0.05 ^b
Crude (2)	190.68±0.20 ^c	185.74±4.09 ^c	327.24±6.29 ^b	197.01±3.03 ^c	12.61±0.76 ^b	2.77±0.08 ^a
Pure XAD (3)	483.86±0.12 ^a	564.91±3.56 ^a	991.90±38.34 ^a	588.79±1.31 ^a	5.55±0.43 ^c	1.13±0.05 ^c
Pure SP (4)	481.96±0.84 ^b	525.45±2.33 ^b	953.38±14.97 ^a	528.83±4.35 ^b	1.61±0.61 ^d	1.04±0.01 ^c

* Values expressed are means ± S.D. of three parallel measurements. TE: Trolox equivalent; EDTAE: EDTA equivalent. Different letters indicate significant differences in the extracts ($p < 0.05$).

Table S3. Enzyme inhibitory properties of the tested extracts*.

Extracts	AChE inhibition		BChE inhibition		Tyrosinase inhibition		Amylase inhibition		Glucosidase inhibition	
	mg GALAE/g	IC ₅₀ (mg /ml)	mg GALAE/g	IC ₅₀ (mg /ml)	mg KAE/g	IC ₅₀ (mg /ml)	mmol ACAE/g	IC ₅₀ (mg /ml)	mmol ACAE/g	IC ₅₀ (mg /ml)
Crude (1)	1.38±0.06 ^a	1.96±0.06 ^b	0.63±0.08 ^a	>5	28.72±0.33 ^a	3.11±0.04 ^b	0.34±0.01 ^b	3.67±0.04 ^c	0.39±0.01 ^c	3.47±0.07 ^d
Crude (2)	1.37±0.02 ^a	1.97±0.03 ^b	0.16±0.03 ^b	>5	25.85±1.27 ^{ab}	3.46±0.17 ^{bc}	0.34±0.01 ^b	3.70±0.08 ^c	0.31±0.01 ^d	4.27±0.16 ^e
Pure XAD (3)	1.35±0.04 ^a	2.00±0.06 ^b	Ni	Ni	23.55±0.26 ^{bc}	3.80±0.04 ^{cd}	0.37±0.01 ^a	3.38±0.08 ^b	1.13±0.01 ^a	1.19±0.01 ^b
Pure SP (4)	1.14±0.11 ^b	2.39±0.24	Ni	Ni	21.25±1.83 ^c	4.23±0.35 ^d	0.20±0.01 ^c	>5	1.02±0.01 ^b	1.31±0.02 ^c
Galatamine	-	0.003±0.001 ^a	-	0.005±0.01	-	Nt	-	Nt	-	Nt
Kojic acid	-	Nt	-	Nt	-	0.09±0.01 ^a	-	Nt	-	Nt
Acarbose	-	Nt	-	Nt	-	NT	-	0.80±0.08 ^a	-	0.86±0.01 ^a

*Values expressed are means ± S.D. of three parallel measurements. GALAE: Galatamine equivalent; KAE: Kojic acid equivalent; ACAE: Acarbose equivalent. Ni: no inhibition. Nt: No tested. Different letters indicate significant differences in the extracts (p<0.05, the letter "a" indicates strong ability). IC₅₀ (mg/mL), inhibition concentration at which 50% of the enzyme activities were inhibited