

Supplementary Material

Extraction of chemical compounds from poplar bark

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Supporting Information

SI.1. Extraction methodology

Table S1. Physical properties of the selected solvents.

Solvent	Boling point (°C)	Dipole moment (Db)	Dielectric constant
Hexane	69	0	2.02
Dichloromethane	40	1.60	9.08
Ethyl acetate	78	1.78	6.02
MeOH	65	1.70	33.00
Water	100	1.85	78.20

SI.2. Antioxidant activity

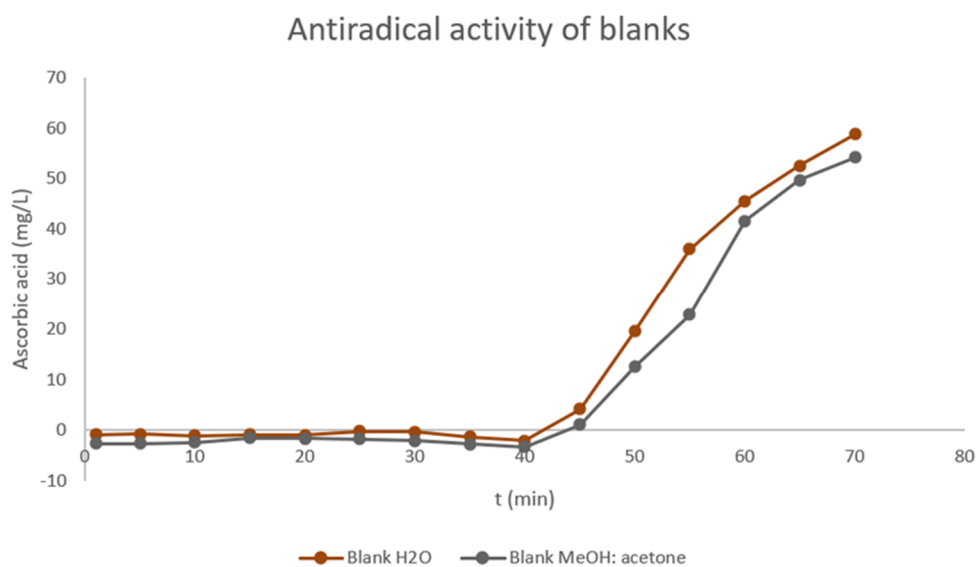


Figure S1. Antiradical activity in blank solutions

SI.3 Fractionation of extracts

Table S2. Fractionation of H extracts

Fraction	#fractions	Total volume/ mL	Eluent
H1	13	95	Hexanes : Ethyl acetate 1:1
H2	3	22	Ethyl acetate
H3	5	37	Ethyl acetate
H4	5	37	Ethyl acetate
H5	4	29	Ethyl acetate
H6	4	29	Ethyl acetate

Table S3. Fractionation of D extracts

Fraction	#fractions	Total volume/ mL	Eluent	Mass/ mg
D1	14	100	DCM: Ethyl acetate 7:3	9.3
D2	2	14	DCM: Ethyl acetate 7:3	19.5
D3	11	76	DCM: Ethyl acetate 1:1	55.3
D4	4	28	DCM: Ethyl acetate 1:1	17.2
D5	4	28	DCM: Ethyl acetate 1:1	49.3
D6	16	112	DCM: Ethyl acetate 1:5	11.2
D7	6	42	Ethyl acetate	48.1
			Total	209

Table S4. Fractionation of EA extracts

Fraction	#fractions	Total volume/ mL	Eluent	Mass/ mg
EA1	5	62	DCM/MeOH 7:3	192
EA2	4	50	DCM/MeOH 1:3	1057
EA3	4	50	DCM/MeOH 1:3	551
EA4	4	50	DCM/MeOH 1:3	132
EA5	6	75	DCM/MeOH 1:3	54
EA6	4	50	DCM/MeOH 1:3	8
EA7	3	38	DCM/MeOH 1:3	3
EA8	4	50	DCM/MeOH 3;7; MeOH	0
			Total	1997

Table S5. Fractionation of M extracts

Fraction	#fractions	Total volume/ mL	Eluent	Mass/ mg
M1	16	132	DCM/ AcOEt	24
M2	4	33	DCM/EA 3:7 DCM/MeOH	90
M3	2	16	DCM/MeOH 7:3	7
M4	2	16	DCM/MeOH 7:3	136
M5	4	33	DCM/MeOH 7:3	1749
M6	8	66	DCM/MeOH 7:3	3544
M7	5	41	DCM/MeOH 3:7	1346
M8	4	33	DCM/MeOH 3:7	259
M9	3	25	DCM/MeOH 3:7	84
M10	4	33	DCM/MeOH 3:7	149
M11	1	8	DCM/MeOH 3:7	26
M12	18	214	MeOH and iPrOH	20
			Total	7434

Table S6. Fractionation of W extracts

Fraction	#fractions	Total volume/ mL	Eluent	Mass/ mg
W1	10	98	AcOEt	54.2
W2	4	39	AcOEt	38.6
W3	2	20	MeOH	35.7
W4	5	49	MeOH	70.2
W5	1	10	MeOH	8.6
W6	4	39	MeOH	31.3
W7	1	10	iPrOH	4.6
W8	4	39	iPrOH	5.1
			Total	248