

Table S1. GC-MS analysis of the chloroform soluble fraction of chestnut wood extractives.

Compound	r.t. [min]	KI	Untreated (chloroform soluble fraction)		THM (chloroform soluble fraction)				
			Extraction technique		Extraction techniques				
			ASE	E/T ^a	Water	ASE	E/T ^a	Water	E/T/M ^b
Furan	4.04	492							0.23
2-Furancarboxylic Acid	4.28	836			0.36		0.36	0.12	2.18
Benzaldehyde	4.31	961		0.29		1.34		1.49	
Phenol	4.47	967			0.05		0.05		
Methyl 2-Furancarboxylate	5.17	985			0.10				
Benzyl Alcohol	5.21	1007		0.34		0.59			
Levulinic Acid	5.34	1063			0.10		0.10		9.91
<i>p</i> -Cresol	5.61	1077		0.02				0.07	
PhenylmethylFormate	5.66	1082					0.13		
Nonanal	5.80	1105	0.08	0.04					
2-Methoxyphenol	5.82	1106						5.88	
Methyl Benzoate	5.88	1111				0.09	0.10		
Benzaldehyde Dimethyl Acetal	6.03	1200				0.11			
Maltol	6.05	1140			0.11		0.11		
PhenylmethylAcetate	6.54	1162					0.10		
Creosol	6.84	1203					0.06		
5-Hydroxymethylfurfural	7.15	1224			3.60			0.90	
Nonanoic Acid	7.40	1272				0.05	3.60		
2,3-Dihydro-3,5-Dihydroxy-6-Methyl-4H-Pyran-4-One	7.78	1290							
5-Acetoxyethyl-2-Furaldehyde	7.94	1304					0.27		
2,6-Decadienal	8.04	1317	0.04						
2-Methoxy-4-Vinylphenol	8.06	1320	0.11			0.20			
2,6-Dimethoxyphenol	8.14	1357	0.14		0.17		0.17	0.17	4.16
Decanoic Acid	8.16	1370		0.07		0.13			
2-Methoxy-4-Propylphenol	8.18	1382			0.19	0.34		0.80	

Eugenol	8.20	1389	0.13		0.13	0.15
(e)-2-Tetradecene	8.37	1421	0.66		2.43	0.37
2,2'-Dimethylbiphenyl	8.44	1425				
(e)-Cinnamic Acid	8.67	1430	0.05			
Methyl 2- Phenylcyclopropancarboxylate	8.78	1433		0.18		
1-Methyl-3-(1-Methyl-2- Propenyl)Benzene	8.80	1435	0.38			
2,3-Dihydro-5,6-Dimethyl-1H-Indene	8.82	1438		0.09		
Vanillin	8.95	1440	0.34	0.16	1.56	0.26
Apocynin	9.14	1498		0.21		0.21
Pentadecane	9.15	1500	0.13		0.17	0.19
2,4-Bis(1,1-Dimethylethyl)Phenol	9.25	1513	0.35			0.25
Butylated Hydroxytoluene	9.28	1524	0.19			
3-Hydroxy-4-Methoxy Benzoic Acid	9.59	1560	0.19			9.19
4-Hydroxy-3-Methoxy Benzoic Acid	9.62	1566		1.96		1.96
Dodecanoic Acid	9.64	1570	0.41	0.20	0.40	
Cetene	9.68	1590		2.86		4.58
2,6-Dimethoxy-4-(2-Propenyl)Phenol	9.87	1607		0.49		0.49
1-Methyl Ethyl Dodecanoate	9.89	1618	0.64		0.67	0.22
1,2,3-Benzenetriol	10.04	1620				
Benzophenone	10.09	1621	0.18			
Homovanillic Acid	10.12	1633				0.52
4-Hydroxy-3,5- Dimethoxybenzaldehyde	10.22	1652	0.30	4.06	0.22	0.30
Dodecyl Acrylate	10.29	1675	0.66			
Heptadecane	10.32	1700			0.79	
2,6,10,14-Tetramethylpentadecane	10.36	1704	0.24			
4-Hydroxy-2- Methoxycinnamaldehyde	10.67	1720		1.84	1.40	1.84
Coniferyl	10.72	1744		4.73		4.73
Tetradecanoic Acid	10.82	1786	0.51	0.57		
1-Octadecene	10.85	1794	3.18			
Octadecane	10.90	1800		0.55		0.55
2,6,10,14-Tetramethylhexadecane	10.93	1811	0.44			0.72
Ambrosin	10.99	1815	0.45			
4-Hydroxy-3,5-Dimethoxybenzoic Acid	11.06	1823		2.26	2.26	1.55
						1.85

2-Hydroxycyclopentadecanone	11.13	1839	0.76						
6,10,14-Trimethyl-2-Pentadecanone	11.40	1846	0.66		0.80				
Nonacedene	11.44	1875	0.68		0.38	1.87			
Pentadecanoic Acid	11.46	1867	0.52	0.49					
2-Methyl-1-Hexadecanol	11.50	1890	0.61						
Methyl Hexadecanoate	11.84	1903	0.31	1.56	0.54	1.28		1.08	
Methyl 3,4-Dimethoxymandelate	11.92			1.23		1.23			
7,9-Di- <i>T</i> -Butyl-1-Oxaspito[4,5]Deca-6,9-Diene-2,8-Dione	11.96	1917	0.33	0.92		0.68		0.36	
3,5-Dimethoxy-4-Hydroxycinnamaldehyde	11.99	1923		2.14		2.14			
Hexadecanoic Acid	12.05	1968	4.05	4.60	2.12	3.96	4.01	2.12	1.78
Ethyl Hexadecanoate	12.21	1981	1.33		0.85				
Ethylene Brassyate	12.27	1989		0.87					
Methyl 16-Methylheptadecanoate	12.51	2077	0.54						
(<i>Z</i>)-10-Heptadecenoic Acid	12.55	2073		1.09					
Methyl (<i>E</i>)-9-Octadecenoate	12.57	2082		11.15		8.65			
Methyl Stearate	12.70	2123		0.69		0.74			
Heinecosanol	13.16	2110			1.79				
(<i>Z,Z</i>)-9,12-Octadecadienoic Acid	13.17	2127	2.34	6.31	4.75	3.30		1.92	
Octadecanoic Acid	13.33	2140	1.55	3.73	1.82	4.57	2.85	1.82	1.36
Nonacosanol	13.50	2195			1.26				
Ethyl Octadecanoate	14.02	2197		1.82					
TributylAcetylcitrate	14.04	2253	0.69						
Methyl 9-Eicosenoate	14.05	2284		1.11		0.78			
Tricosane	14.08	2300			0.48				
Methyl Eicosanoate	14.25	2339		0.80		0.71			
Eicosanoic Acid	14.60	2380		0.40		0.32			
Tetracosane	14.93	2400	1.34	0.97		0.64			
Methyl Heneicosanoate	15.60	2429				0.41			
Pentacosane	16.25	2500		0.91	0.13	0.66	0.13	0.26	0.21
Behenic Alcohol	16.27	2501		4.29		2.85			
Methyl Docosanoate	16.65	2531		0.52		0.41			
Docosanoic Acid	17.24	2567		1.12		0.96			
Hexacosane	18.68	2600	1.27						
Hexacosene	19.11	2596	0.80			2.15		2.12	
4-Methoxy-4',5'-Methylenedioxybiphenylcarboxylic	19.24	2645		3.20		0.93	3.20		

Acid						
Heptacosane	20.96	2700	1.13	0.83	0.41	0.41
HexacosylAcetate	21.10	2972	0.59			
Tetracosanoic Acid	21.34	2760		0.61	0.35	0.62
1-Pentacosanol	21.41	2749	5.74		1.80	
Methyl Tetracosanoate	21.86	2731	0.81		0.77	
Heptacosane	22.45	2700		0.94	0.60	0.37
Ethyl Tetracosanoate	23.84	2773	2.36			0.55
Octacosane	25.84	2800			0.22	
2-Methyloctacosane	25.86	2861			0.39	
Methyl Hexacosanoate	27.27	2929			0.40	
Tricontane	30.30	3000			0.11	
Stigmasterol	30.34	3148			1.19	
Dl- γ -Tocopherol	30.35	3149			2.02	
Campesterol	32.01	3305			2.77	

a) E/T = Ethanol/toluene in Soxhlet

b) E/T/M = Ethanol/toluene in Soxhlet in the presence of silica-supported MoO₃

c) W/POM = water extraction in an autoclave in the presence of H₃PMo₁₂O₄₀

Table S2. GC-MS analysis of the chloroform insoluble fraction of chestnut wood extractives.

Compound	r.t. [min]	KI	Untreated (chloroform insoluble fraction)			THM (chloroform insoluble fraction)		
			Extraction technique			Extraction technique		
			ASE	E/T ^d	Water r	ASE	E/T ^d	Water
<i>n,n</i> -Dimethylacetamide	3.17	883	Area [%]			Area [%]		
Benzene	3.94	647				0.39		
5-Methyl-2-Furancarboxyaldehyde	4.28	961				2.53		
Benzaldehyde	4.32	961	0.32			0.43		

Methyl 4-Oxopentanoate	4.56	921			0.11				
1,2-Ethanediol Diacetate	4.61	994			0.13				
<i>n,n</i> -Diethylacetamide	4.82	985	0.16	0.01					
<i>n</i> -(2-Methylpropyl)Acetamide	5.03	998			0.58				
2-Methoxyphenol	5.87	1106			0.22				
Phenylmethyl Acetate	6.56	1162	0.22		0.97	0.06			
1-Acetylpyperidine	6.93	1183			0.48				
1-Dodecene	7.00	1193			0.21	0.12			
1,1,2-Triacetoxyethane	7.15	1254	0.11	0.05					
5-Acetoxyethyl-2-Furaldehyde	7.79	1304		0.32	1.30	1.70	0.15		
Glycerol 1,2-Diacetate	8.05	1310	0.60	0.74	0.53	1.26			
Triacetin	8.35	1348			1.03		0.38		
1,2,3-Benzenetriol	8.50	1341		1.24					
Vanillin	8.55	1440	0.19		0.35				
Methyl 2- Phenylcyclopropanecarboxylate	8.79	1433			0.35				
2,6-Dimethoxyphenol Acetate	9.01	1439			0.15				
1-Tetradecene	9.10	1448				0.27			
2,4-Bis(1,1-Dimethylethyl)Phenol	9.25	1513		0.17					
2-Methoxy-4-(1-Propenyl)Phenol Acetate	9.34	1569			0.17				
Vanillin Acetate	9.72	1677			0.31				
Methyl γ -d-Arabinopyranoside Triacetate	10.08				0.08	0.14			
4-Hydroxy-3,5- Dimethoxybenzaldehyde	10.24	1652	0.43		0.49				
1,2,3-Benzenetriol Triacetate	10.48	1820	0.52	1.36	2.26	0.53	0.10	0.29	
Tetraacetyl-L-Rhamnose	10.70			2.06					
4-Acetoxy-3,5- Dimethoxybenzaldehyde	10.72		0.36			0.21			
2,3,4,5-Tetraacetate d-Arabinose	10.81			3.73					
γ -d-DeoxyribopyranoseTetraacetate	10.83					7.31			
Methyl γ -d-Ribopyranose Triacetate	10.91		2.47				1.75		
γ -d-RibopyranoseTetraacetate	10.97		3.96	4.10	6.57	0.81	2.39	9.25	0.28
1,2,3,5-Tetra-O-Acetyl- β -D- Ribofuranose	11.12		2.89	1.10	2.20			3.37	
Methyl Hexadecanoate	11.54				0.35				
4-Hydroxy-3-	11.62				1.56		0.43		

Methoxycinnamaldehyde								
Methyl α-D-MannopyranosideTetraacetate	11.74					0.15		
1-O- <i>t</i> -Butyl-2,3,4,6-Tetra-O-Acetyl-α-D-Glucopyranoside	12.20				2.77		2.23	
D-Glucose 2,3,4,5,6-Pentaacetate	12.25						2.04	
β-D-GalactopyranosePentaacetate	12.35	8.44	0.75	1.15			0.50	
β-D-GlucopyranosePentaacetate	12.41	7.28				4.08	3.90	
α-D-GlucopyranosePentaacetate	12.49	6.65	12.67	2.27				
β-D-MannopyranosePentaacetate	12.56	5.52		1.80				
Allo-Inositol Hexaacetate	12.64	21.05	16.92	17.52	12.07	19.38	8.25	13.13
Myo-Inositol Hexaacetate	12.87	12.74	17.20	11.05	24.29	4.05	21.94	29.55
Muco-Inositol Hexaacetate	13.00	4.89	3.68	7.30		4.78	6.77	2.17
<i>d</i> -MannopyranosePentaacetate	13.24		0.56	0.20				
Methyl Eicosanoate	14.27	2339	0.22					
<i>p</i> -Acetoxyphenyl-2,3,4-Tri-O-Acetyl-β-D-Arabinopyranoside	15.48			0.22				
(E)-5-Eicosene	16.25		0.31					
Methyl Docosanoate	16.68	2528	0.26		0.36			
Docosanoic Acid	17.27	2567	0.29					
O-Methyl-γ-Tocopherol	16.79					0.79		
Tricosyl Acetate	18.03		0.41		0.49			
Methyl Tricosanoate	18.41	2632	0.12					
2,3,4-Tri-O-Acetyl-1,5-Anhydro-6-O-Methyl-D-Glucitol	18.80				0.36			
Methyl Tetracosanoate	20.65	2730	0.35		0.52			
7,7-Diethylbenz[a]Anthracene	23.98		0.09					
Methyl Hexacosanoate	27.29	2929	0.08		0.24			
γ-Sitosterol	30.39	3290				0.59		

d) E/T = Ethanol/toluene in Soxhlet

e) E/T/M = Ethanol/toluene in Soxhlet in the presence of silica-supported MoO₃

f) W/POM = water extraction in an autoclave in the presence of H₃PMo₁₂O₄₀

