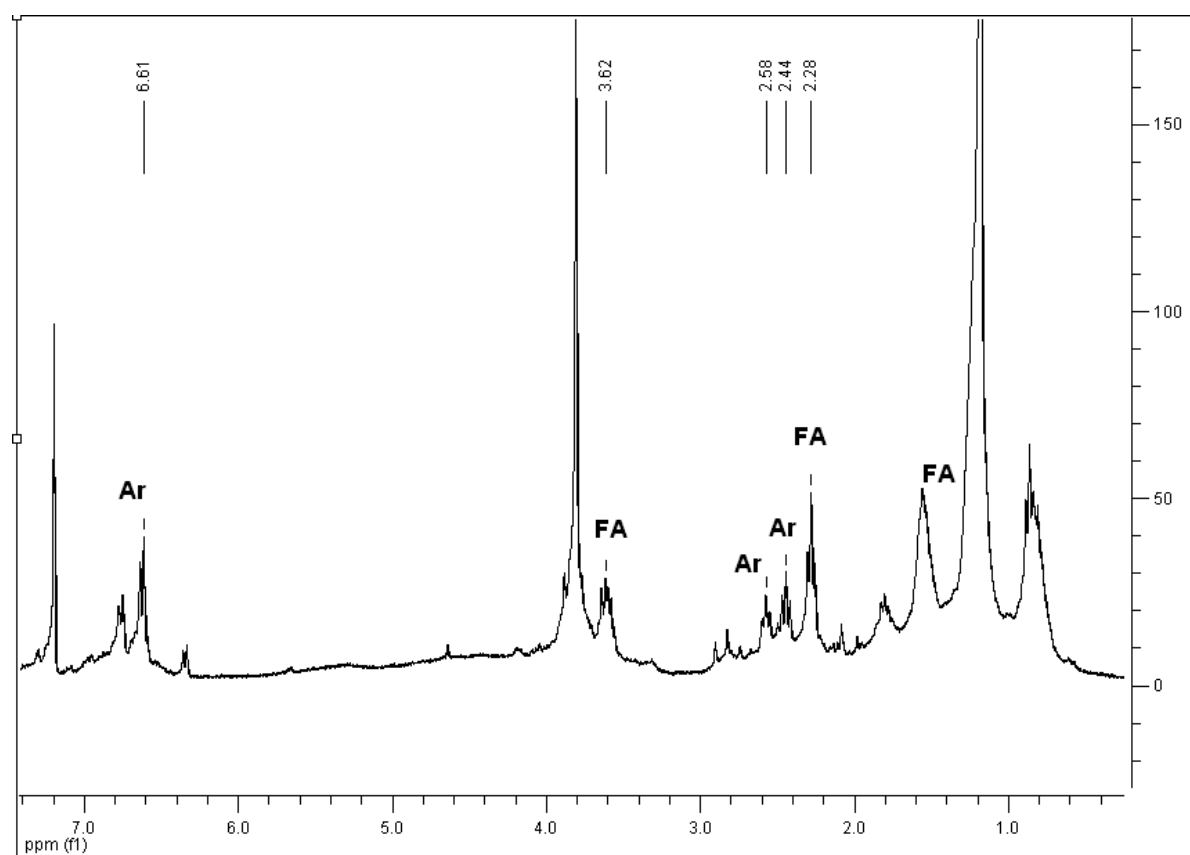


Supporting information

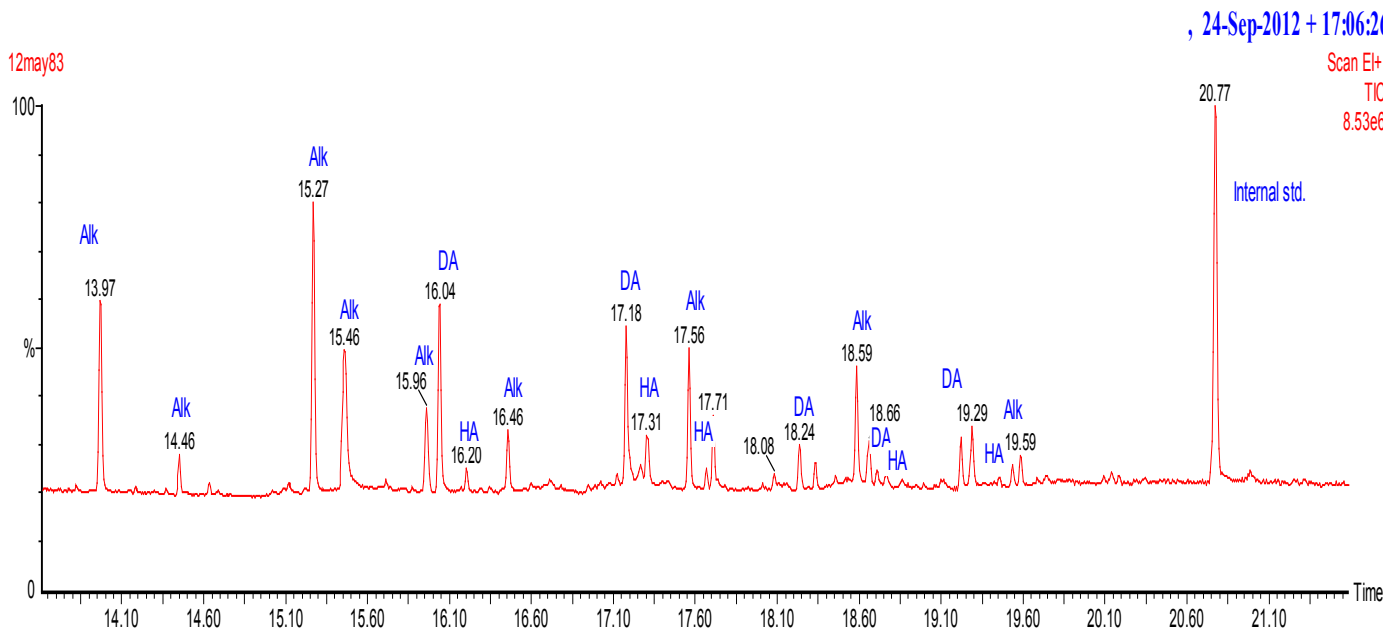
Typical ^1H NMR spectrum of Chloroform-extracted Products from Bark Hydrogenolysis



Ar- Peaks representing aromatic molecules

FA –Peaks representing fatty acid type molecules

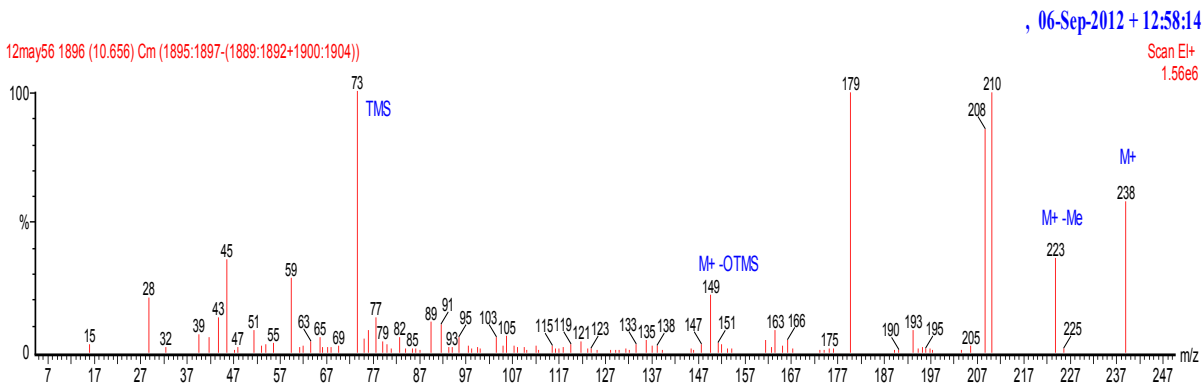
GC-MS Chromatogram of Chloroform-extracted Products from Hydrogenolysis of Sycamore bark with Rh/C



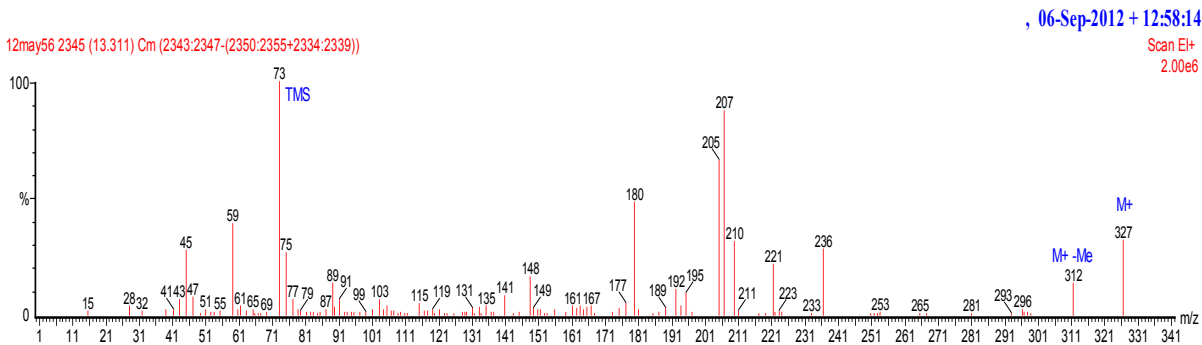
ALK- Alkanoic acids, DA – Diacids, HA- Hydroxyacids. Represented as methylesters, dimethylesters and trimethylsilyl ethers.

Alkanoic acids(ALK)/ Retention time		Diacids(DA)/ Retention time		Hydroxyacids (HA)/ Retention time	
13.97	C16: Methylhexadecanoate	16.04	1,16 Hexadecanedioic acid dimethylester	16.20	Methyl 16-hydroxy-hexadecanoate-TMS ether
14.46	C16: Hexadecanoic acid	17.18	1,18 Octadecanedioic acid dimethylester	17.31	Methyl 18-hydroxy-Octadecanoate-TMS ether
15.27	C18: Methyloctadecanoate	18.24	1,20 Eicosanedioate dimethylester	17.67	Methyl 20-hydroxyeicosanpate-TMS ether
15.46	C18: Octadecanoic acid	18.71	9,10 Dihydroxy-Octadecanedioic acid dimethylester	18.77	9,10 Dihydroxy -methyl 18-hydroxy-Octadecanoate-TMS ether
15.96	C18: Trimethylsilyloctadecanoic acid	19.23	1,22 Docosanedioate dimethylester	19.29	Methyl 22-hydroxyldocosanoate-TMS ether
16.46	C20: Methyleneicosanoate				
17.56	C22:Methyldocasonate				
18.59	C24:Tetracosanoate				
19.54	C26:Hexacosanoate				

Mass Spectrum of TMS-derivatised Propylguaicol

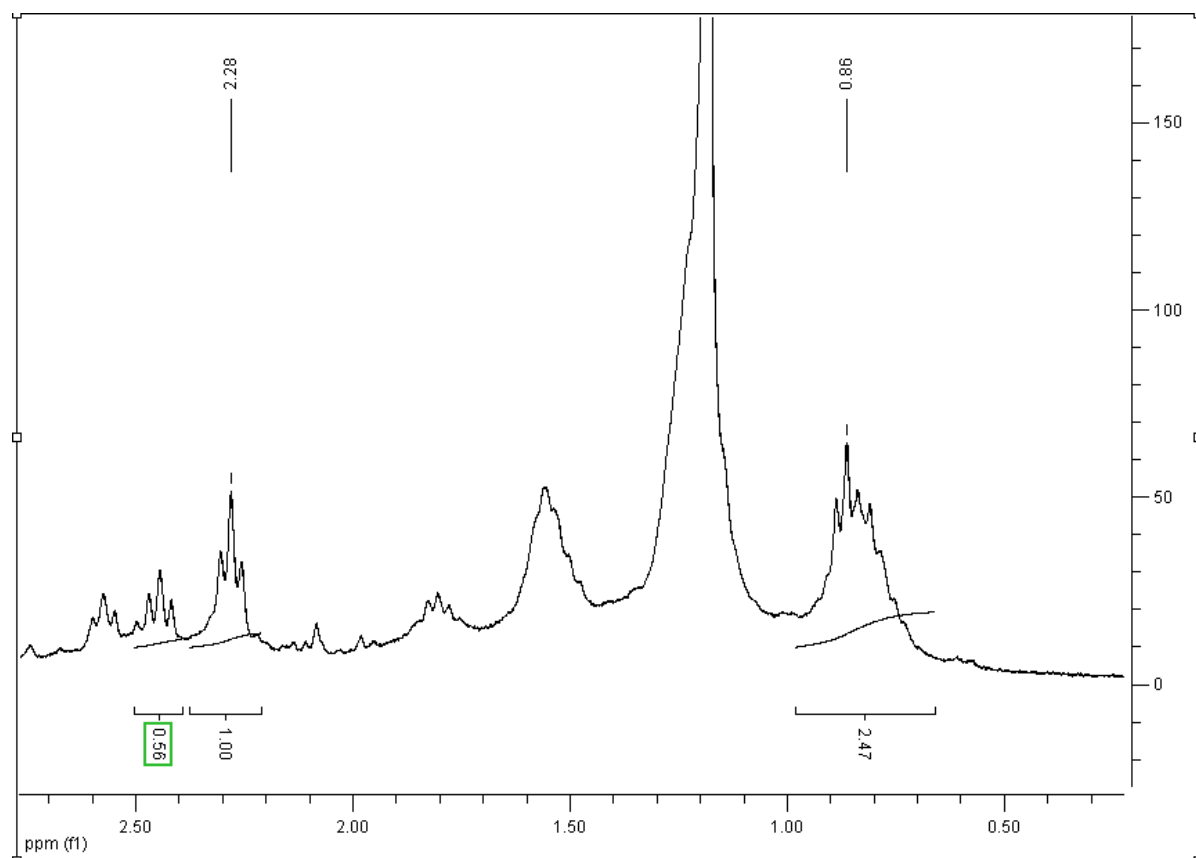


Mass Spectrum of TMS-derivatised Dihydroconiferylalcohol

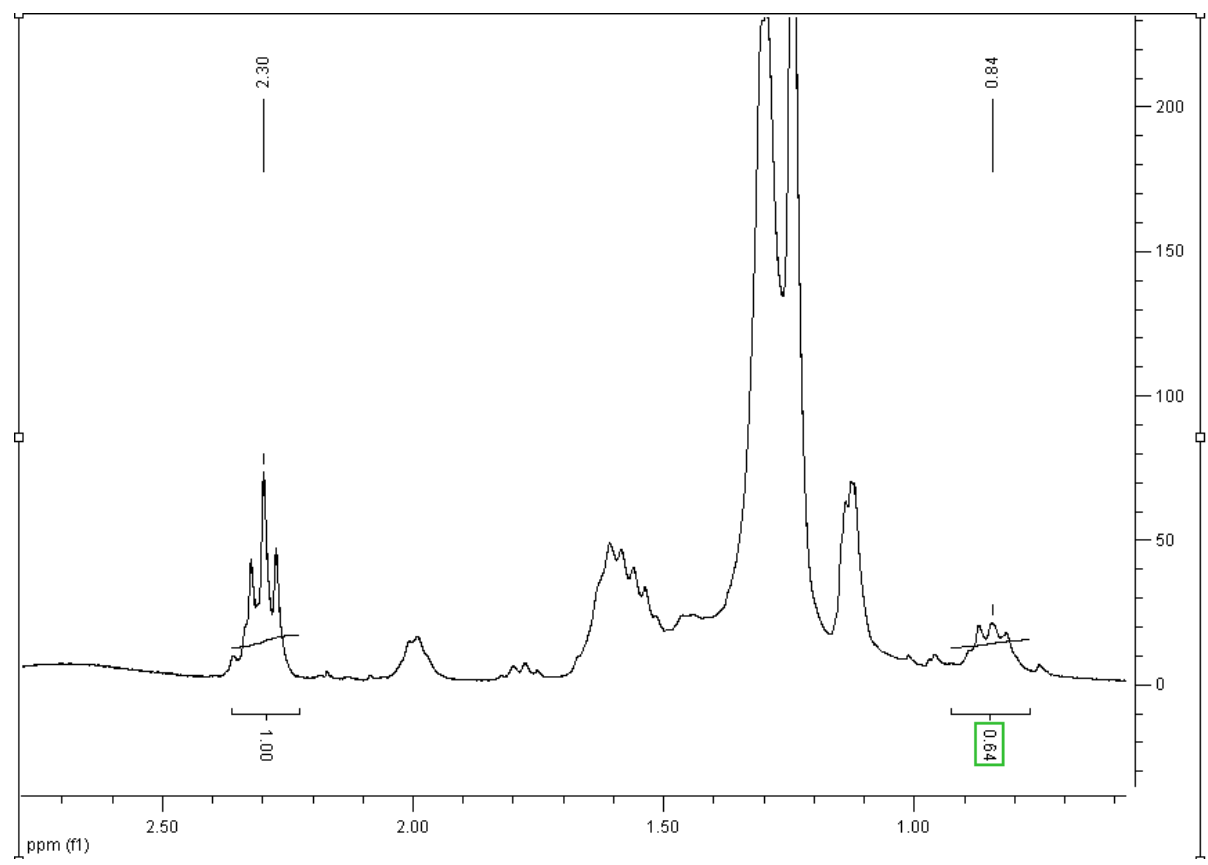


Response factors for GC-MS quantitative analysis of bark hydrogenolysis products

Type of fatty acid	Exact molecule used	Response factor compared to TMS-Cholesterol
Alkanoic acid	methylpalmitate	0.80
Diacid	dimethylundecanedioate	1.31
Hydroxyacid	methyl-10-hydroxydecanoate-TMS ether	1.60
Alkanol	16-Hexanedecanol TMS ether	1.08



^1H NMR SPECTRUM of Fatty acid terminal methyl signals in hydrogenolysis products from sycamore bark with Rh/C catalyst



¹H NMR SPECTRUM of Fatty acid terminal methyl signals in base hydrolysis products from sycamore bark with NaOMe

	Rh/C	Pd/C
BET Surface area (m ² /g)	809	1179
Pore Diameter (nm)	2.98	2.43
Pore Volume (cm ³ /g)	0.66	1.04
Metal Particle size (nm)	19.9	14.3
Metal Distribution (%)	6.13	7.83

Physical characteristics of the two heterogeneous catalysts used in this study.