

## **Supplementary information**

### **Anti-inflammatory Potential of South African Medicinal Plants used for the Treatment of Sexually Transmitted Infections**

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# NMR spectra

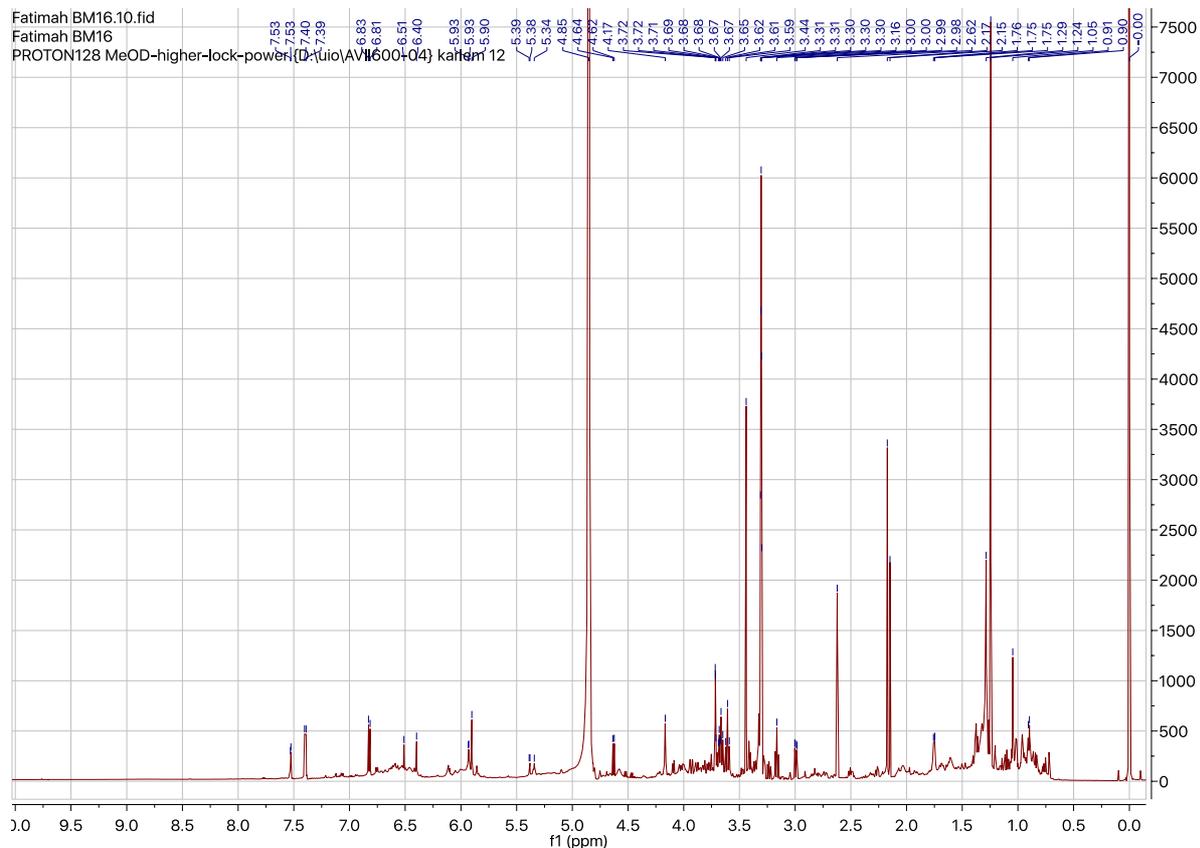


Figure S1: *Bridelia mollis*  $^1\text{H}$  NMR spectrum.

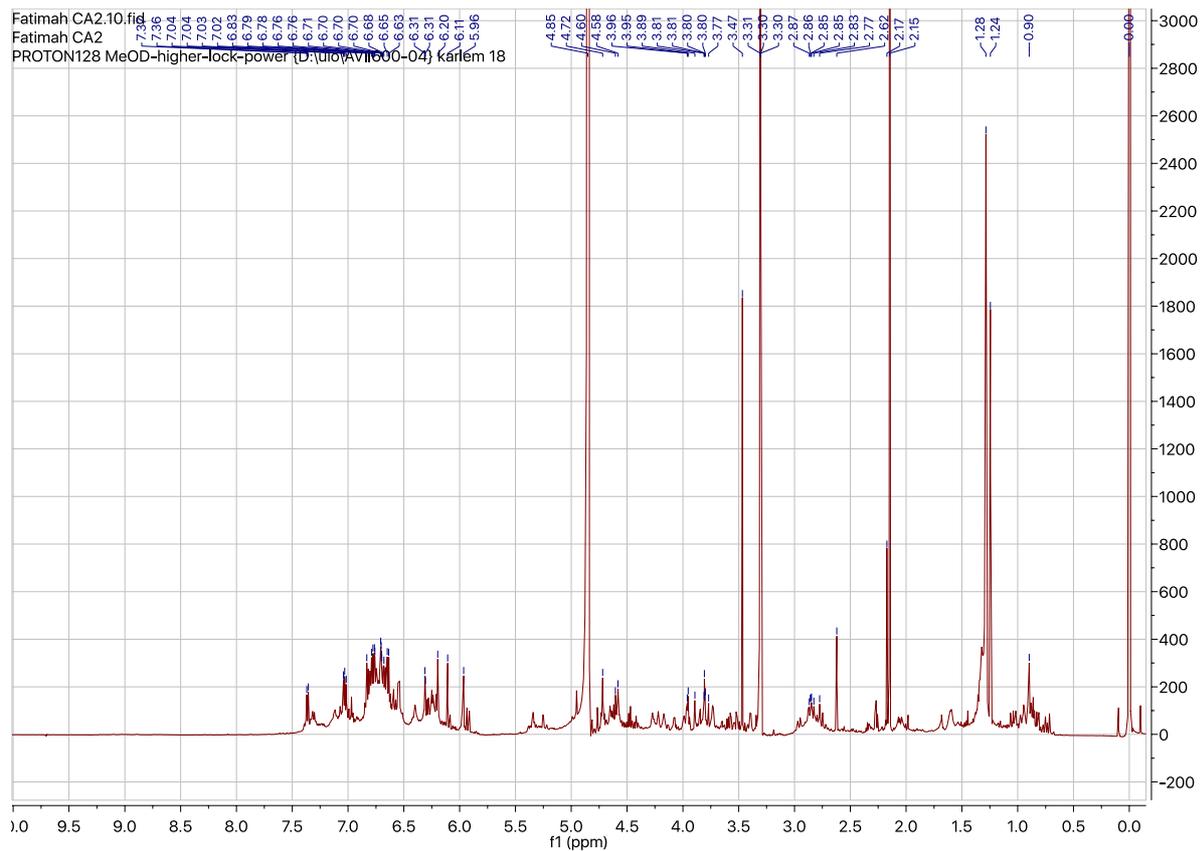


Figure S2: *Cassia abbreviata*  $^1\text{H}$  NMR spectrum

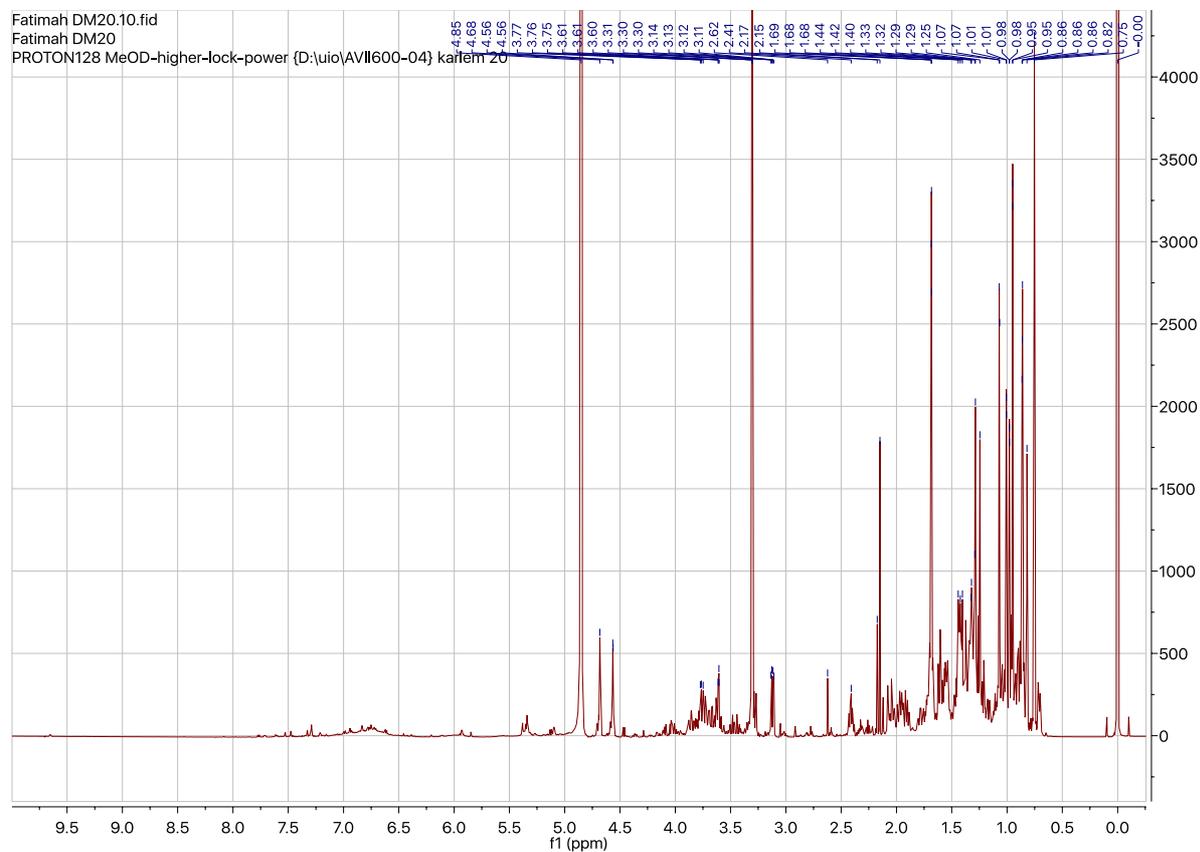


Figure S3: *Diospyros mespiliformis*  $^1\text{H}$  NMR spectrum



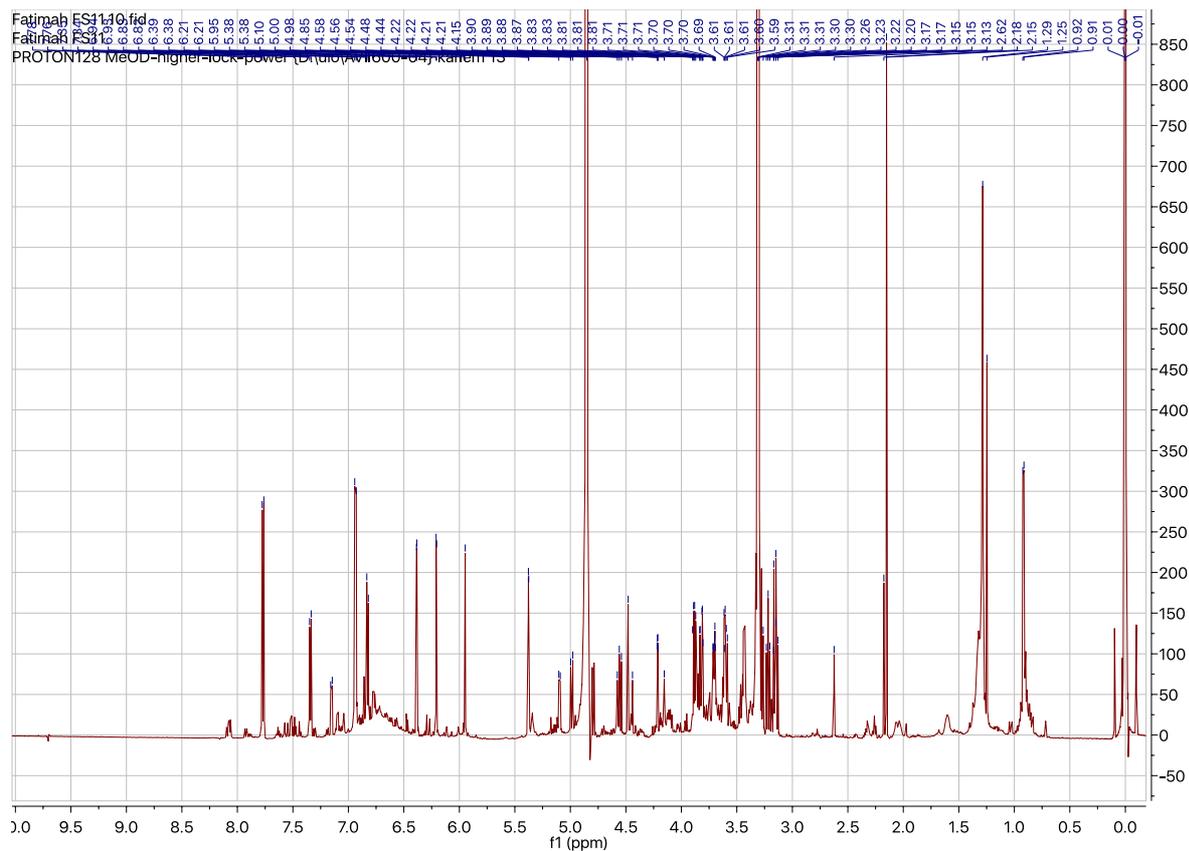


Figure S6: *Faurea saligna*  $^1\text{H}$  NMR spectrum

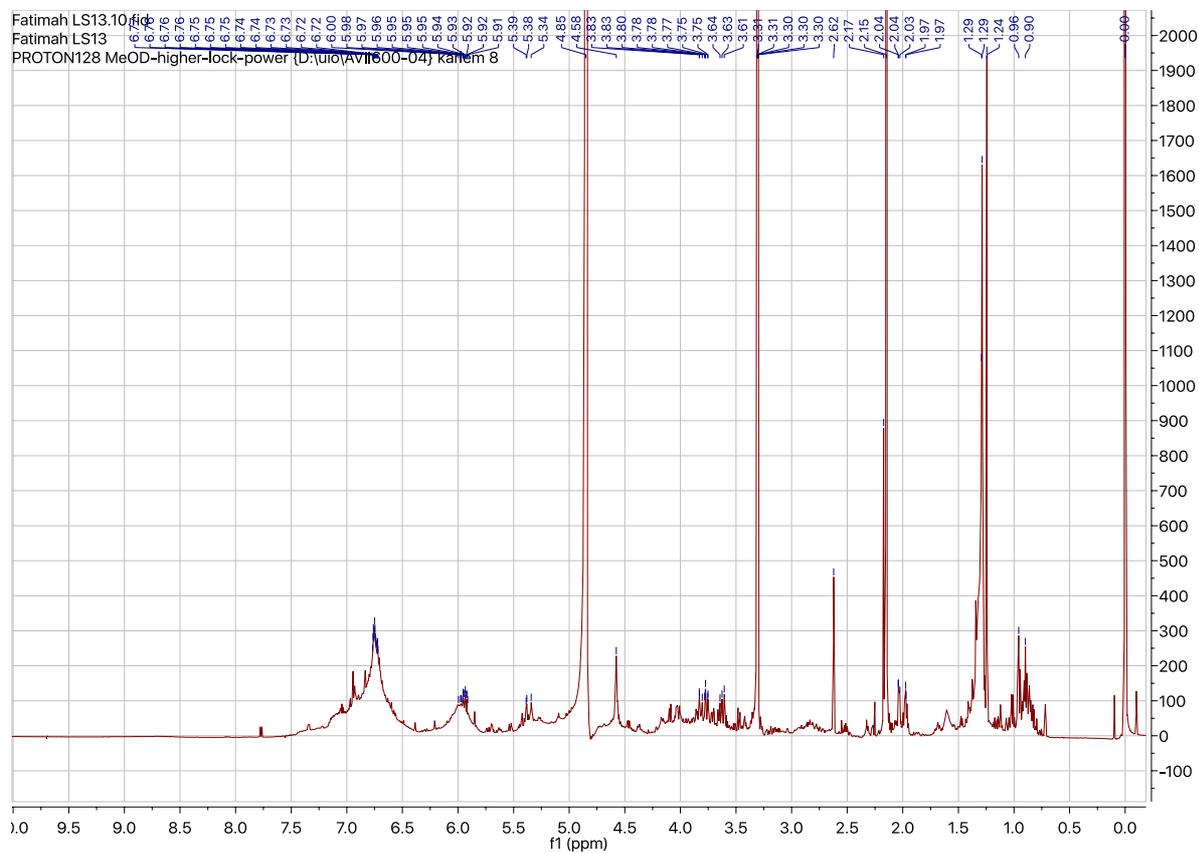


Figure S7: *Lanea schweinfurthii*  $^1\text{H}$  NMR spectrum



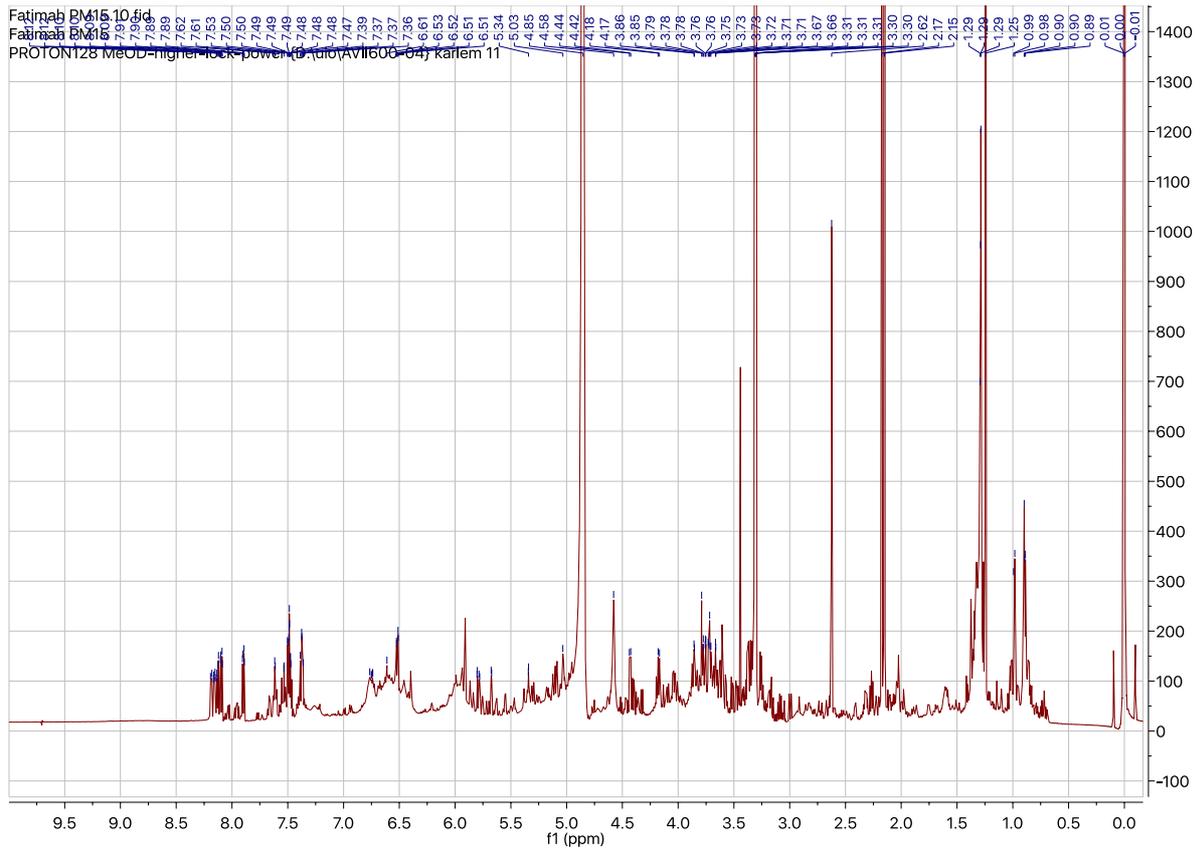


Figure S10: *Pseudolachnostylis maprouneifolia*  $^1\text{H}$  NMR spectrum

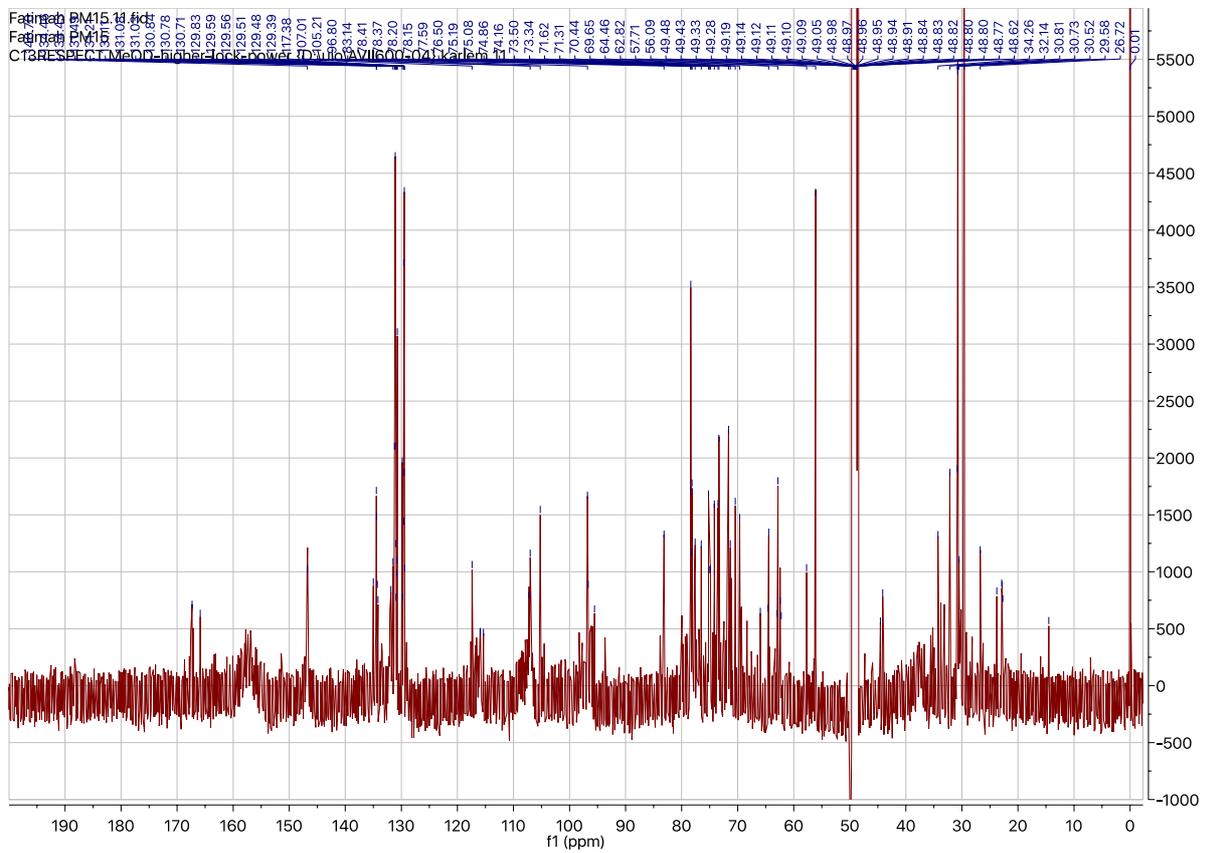


Figure S11: *Pseudolachnostylis maprouneifolia*  $^{13}\text{C}$  NMR spectrum



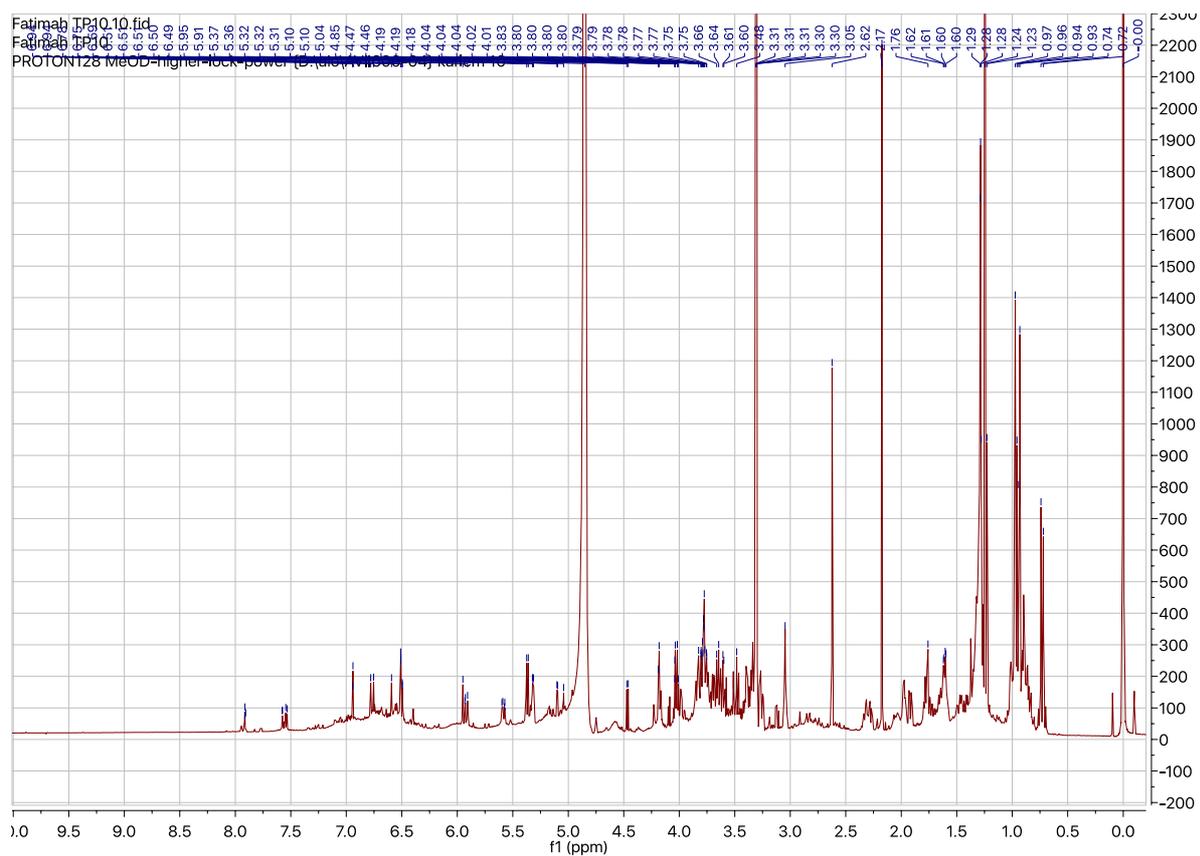


Figure S14: *Terminalia prunioides*  $^1\text{H}$  NMR spectrum

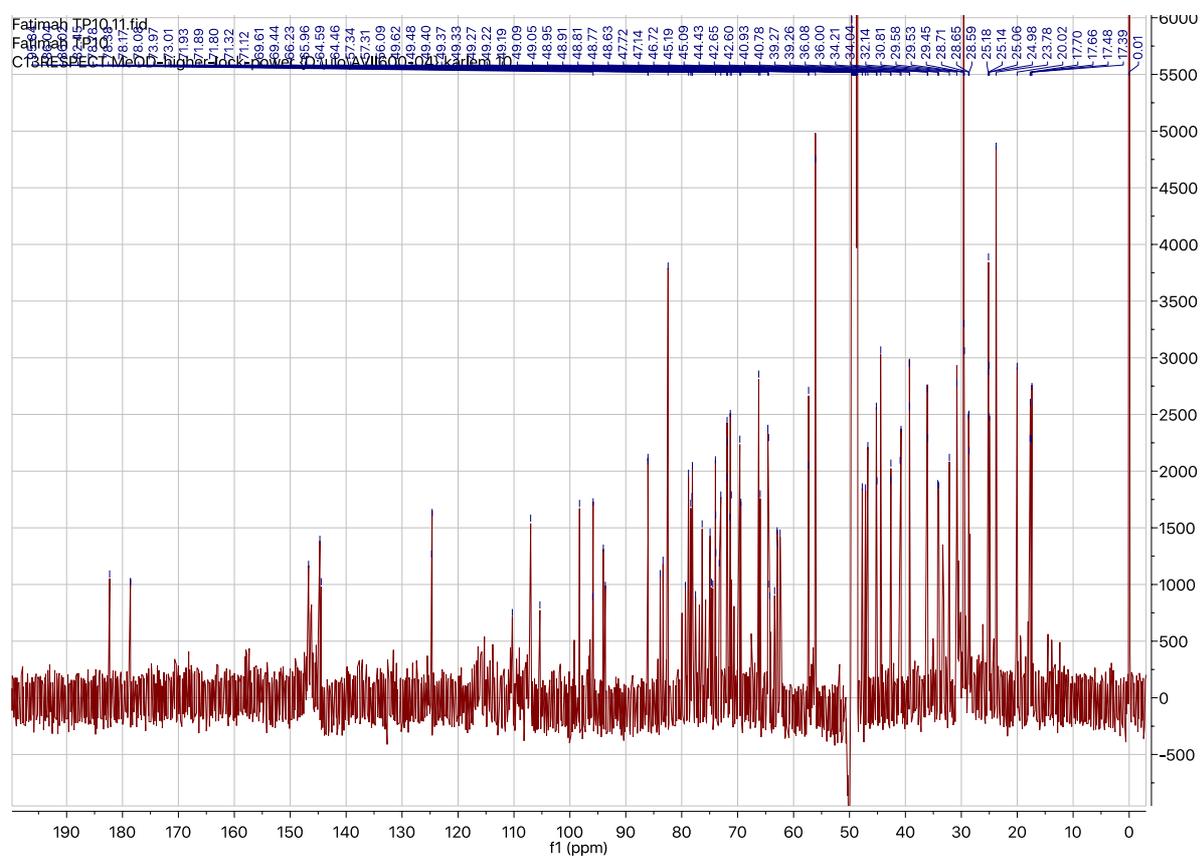


Figure S15: *Terminalia prunioides*  $^{13}\text{C}$  NMR spectrum



Table S1: Compounds identified in acetone extract of twelve selected medicinal plants using GC-MS technique

Peak#	R.Time	Compound	PM	LS	CA	FA	FS	BM	TP	ZC	OT	DM	SS	SP	Class of compound
1	4.186	hydroxy-methyl-Pentanone	**+	*+	-	*+	**+	**+	***+	-	*+	*+	*+	-	Alcohol
2	6.690	Dimethyl-dihydro-dioxepine	-	-	-	-	*+	-	-	-	-	-	-	-	Ketone
3	6.973	d-Mannitol-anhydro	-	-	-	-	*+	-	-	-	-	-	-	-	sugar
4	7.385	Monomethylene-l-rhamnitol	-	-	-	-	*+	-	-	-	-	-	-	-	sugar
5	8.178	Benzoic acid	**+	-	-	-	-	-	-	-	-	-	-	-	acid
6	8.743	Benzofuranone (Coumaranone)	-	-	-	-	-	*+	-	-	-	-	-	-	phenolics
7	9.117	Benzenediol	-	-	*+	-	-	-	-	-	-	-	-	-	phenolics
8	9.978	Phenol-propyl	-	-	*+	-	-	-	-	-	-	-	-	-	phenolics
9	10.109	D-allose	-	-	-	-	*+	-	-	-	-	-	-	-	sugar
10	10.497	Tetrahydrofuran	-	-	-	-	**+	-	-	-	-	-	-	-	Furan
11	10.589	Cytidine (Guanosine)	-	-	-	-	-	**+	*+	-	-	-	*+	-	sugar
12	10.982	anhydro-beta-glucopyranose	-	-	-	-	-	-	**+	-	-	-	-	-	sugar
13	11.040	Tridecanone	-	-	-	-	-	-	-	**+	-	-	-	-	ketone
14	11.191	bis(-dimethylethyl)-Phenol	-	-	-	-	-	-	*+	-	-	-	-	*+	phenolics
15	11.495	Polygalitol	-	-	-	-	**+	-	-	-	-	-	-	-	sugar
16	12.198	N,N-Dimethyloctanamide	-	-	-	-	-	-	*+	-	-	-	-	-	Alkaloid
17	12.335	Benzenecetic acid, -hydroxy--methoxy (Homovalinic acid)	-	-	-	-	-	-	*+	-	-	-	-	-	acid
18	12.410	dimethylphenyl ester (Carbamic acid)	*+	-	-	-	-	-	-	-	-	-	-	-	ester
19	12.783	Ethylene glycol	-	-	-	-	-	*+	-	-	-	-	-	-	Alcohol
20	12.980	O-Methylmannose	-	-	**+	-	-	*+	-	-	-	-	-	-	sugar
21	13.298	Octadecene	-	-	-	-	-	-	*+	-	-	-	-	-	Hydrocarbon
22	13.410	Furane-3-carboxylic acid, 5-tert-butyl-2-(4-tert-butylphenoxyethyl)	-	-	-	-	-	-	-	-	-	-	**+	-	acid
23	13.958	Pentanone (Benzyl isobutyl ketone)	*+	-	-	-	-	*+	-	-	-	-	-	-	Ketone

Table S1. continued

Peak#	R.Time	Compound	PM	LS	CA	FA	FS	BM	TP	ZC	OT	DM	SS	SP	Class of compound
24	14.398	Pellitorine	-	-	-	-	-	-	-	***+	-	-	-	-	Alkaloid
25	14.446	Pentadecanoic acid	-	-	*+	-	-	*+	*+	*+	*+	-	-	-	Acid
26	14.540	Phthalic acid, butyl undecyl ester	-	-	-	-	-	*+	-	-	-	-	-	-	fatty acid ester/Ester
27	14.660	Octadecanethiol	-	-	-	-	-	-	*+	-	-	-	-	-	Alcohol
28	15.246	Pentadecanol	-	-	-	-	-	*+	-	-	-	-	-	-	Alcohol
29	15.592	Heptadecene-Carbonic acid	-	-	-	-	-	-	-	-	-	-	*+	-	Acid
30	15.777	Decanedioic acid, dibutyl ester (Sebacic acid)	-	-	-	-	-	*+	-	***+	-	-	-	-	fatty acid ester
31	16.320	Tributyl acetylcitrate (Citric acid)	-	-	-	-	-	*+	-	-	-	-	-	-	acid
32	16.505	Benzoyloxyacetophenone	*+	-	-	-	-	-	-	-	-	-	-	-	Ketone
33	16.931	Hexadecanoic acid (Palmitic acid)	-	-	-	-	*+	-	*+	-	-	-	-	-	Acid
34	17.092	Hexanedioic acid ethyl ester (Adipic acid)	-	-	-	-	-	*+	-	-	**+	-	*+	-	fatty acid Ester
35	17.103	Hexanedioic acid dicotyl ester	-	-	-	-	-	-	-	*+	-	-	-	-	fatty acid Ester
36	17.142	Phenylheptene	-	*+	-	-	-	-	-	-	-	-	-	-	phenolic
37	17.614	Phenol-Octyl	-	*+	-	-	-	-	*+	-	-	-	-	*+	phenolics
38	17.643	Phenol-undecyl	-	*+	-	-	-	-	-	-	-	-	-	-	phenolics
39	17.929	Benzenedicarboxylic acid-ester	-	-	*+	-	-	***+	*+	*+	***+	-	***+	***+	ester
40	18.135	Cyclohexane methanol	-	*+	-	-	-	-	-	-	*+	-	-	-	Alcohol
41	18.235	Heptenylbenzene	-	*+	-	-	-	-	-	-	-	-	-	-	Alcohol
42	18.470	Octadecadienal	-	*+	-	-	-	-	-	-	-	-	-	-	Aldehyde
43	18.613	Celidoniol, deoxy	-	-	-	-	-	-	*+	-	-	-	-	-	Alcohol
44	18.618	Hexanoic acid, octadecyl ester (Octadecyl hexanoate)	-	-	**+	*+	*+	*+	-	-	*+	-	-	-	fatty acid ester
45	18.628	Unknown	-	*+	-	-	-	-	-	-	-	-	-	-	
46	18.683	Phenol, 3-pentadecyl-	-	**+	-	-	-	-	*+	-	*+	-	-	-	Phenolics

Table S1. continued

Peak#	R.Time	Compound	PM	LS1	CA	FA	FS	BM	TP	ZC	OT	DM	SS	SP	Class of compound
47	18.760	Octadecanoic acid-dihydroxypropyl ester (Stearin)	**+	*+	**+	*+	**+	*+	**+	*+	*+	*+	*+	-	fatty acid ester
48	19.094	9-Octadecenamide	-	-	-	-	-	*+	*+	-	-	-	-	-	Amide
49	19.208	Cyclohexanedicarboxylic acid	-	*+	-	-	*+	*+	-	-	-	-	-	-	Acid
50	19.665	Heneicosane	-	-	-	-	-	-	*+	-	-	-	-	*+	Hydrocarbon
51	19.812	Unknown	-	*+	-	-	-	-	-	-	-	-	-	-	
52	20.113	hexadecadien-1-ol acetate	-	*+	-	-	-	-	-	-	-	-	***+	-	fatty acid ester
53	20.435	Methyl-bicyclo-heptanol	-	*+	-	-	-	-	-	-	-	-	-	-	alcohol
54	21.687	Ergost-5-en-3-ol	-	-	*+	-	-	-	-	-	-	-	-	-	Steroid
55	22.004	Isosesamin	-	-	-	-	-	-	-	*+	-	-	-	-	phenolics
56	22.429	Ethoxychelerythrine	-	-	-	-	-	-	-	*+	-	-	-	-	Alkaloid
57	23.016	Stigmasterol	-	-	*+	-	-	**+	-	-	-	*+	-	*+	steroid
58	23.680	Stigmast-5-en-3-ol (beta sitosterol)	-	**+	*+	*+	*+	*+	**+	-	**+	-	-	*+	steroid
59	24.069	Lupeyl acetate	-	**+	*+	-	-	-	-	-	-	*+	-	-	terpene
60	24.692	9,19-Cyclolanost-24-en-3-ol	-	-	-	*+	-	-	-	-	-	-	-	-	terpene
61	24.880	Lupeol	-	-	-	*+	-	-	*+	*+	*+	****+	-	-	terpene
62	25.194	Norchelerythrine	-	-	-	-	-	-	-	*+	-	-	-	-	Alkaloid
63	25.432	Lanosta-8,24-dien-3-ol	-	-	-	*+	-	-	-	-	-	-	-	-	terpene
64	25.622	alpha.-Amyrenol	-	-	-	**+	-	-	-	-	-	-	-	-	phenolics
65	26.284	5H-3,5a-Epoxynaphth[2,1-c]oxepin,	-	*+	-	-	-	-	-	-	-	-	-	-	phenolics
66	26.375	Methyl COM D	-	-	-	****+	-	-	-	-	-	-	-	-	terpene
67	26.572	Friedelanol	-	-	-	-	-	*+	-	-	-	-	-	-	terpene
68	27.040	Friedelan-3-one	-	-	-	-	-	***+	-	-	-	-	-	-	terpene
69	31.318	Betulin	-	-	-	-	-	-	-	-	-	**+	-	-	terpene

+ = Presence, - = absence, \* = 1-10%, \*\* = 11-30%, \*\*\* = 31-40%, \*\*\*\* = more than 40%. BM = *Bridelia mollis*, CA = *Cassia abbreviata*, DM = *Diospyros mespiliiformis*, FA = *Ficus abutilifolia*, FS = *Faurea saligna*, LS = *Lansea schweinfurthii*, OT = *Obetia tenax*, PM = *Pseudolachnostylis maprouneifolia*, TP = *Terminalia prunioides*, SP = *Solanum panduriforme*, SS = *Strychnos spinosa*, ZC = *Zanthoxylum capense*.