Supplementary Information

Chemical Profile and Cytotoxic Activity of Leaf Extracts from *Senna* spp. from Northeast of Brazil

Juliana G. A. Silva,^a Alexander A. Silva,^b Isabel D. Coutinho,^b Claudia O. Pessoa,^c Alberto J. Cavalheiro^b and Maria G. V. Silva^{**a}

^aDepartamento de Química Orgânica e Inorgânica and ^cDepartamento de Fisiologia e Farmacologia, Universidade Federal do Ceará, 60440-900 Fortaleza-CE, Brazil

^bInstituto de Química, Universidade Estadual de São Paulo, 14800-060 Araraquara-SP, Brazil



Experimental and data base (NIST) MS spectra comparison by similarity

Figure S1. GC-MS chromatogram of succinic acid TMS; similarity: 97%; Rt = 6.080 min.

milar	Regi	Compound N	ame	Mol Wt	Formula	Library						
91	1	Propanoic acid, 2,3-bis[trim	ethylsilyl)oxy]-, trim	322	C12 H30 O4	WILEY229.LI						
90	Γ	Propanoic acid, 2,3-bis[(trim	ethylsilyl)oxy]-, trim	322	C12H30O4S	NIST107.LIB						
90		Propanoic acid, 2,3-bis[(trim	ethylsilyl)oxy]-, trim	322	C12H30O4S	NIST08.LIB						
90	Г	Propanoic acid, 2,3-bis[(trim	ethylsilyl)oxy]-, trim	322	C12H30O4S	NIST21.LIB						
90		Propanoic acid, 2,3-bis[(trim	ethylsilyl)oxy]-, trim	322	C12H30O4S	NIST08s.LIB						
90	Г	Propanoic acid, 2,3-bis[(trim	ethylsilyl)oxy]-, trim	322	C12H30O4S	NIST08s.LIB						
89		Propanoic acid, 2,3-bis[(trim	ethylsilyl)oxy]-, trim	322	C12H30O4S	NIST21.LIB						
02	1	Toparoic acia, 2,5-bistipini	ou ly any loxy F. un	JEE	012113004	WILL I 22.J.LI						
10.0	(00											Base Peak: 73/ 10,0
	1	73										
						14						
16			1	03			16	9				202
4	5	59	89 .1	100	117	133	175	205	221			3
	50.0	75.0	100.0		125.0	1	175.0	200.0	225.0	250.0	275.0	300.0
oano	ic acid	2.3-bis[[trimethylsily]loxy]-, tri	methylsilvl ester (C	AS11-0X0-	1.2.3-TRIS(T)	RIMETHYLSILO	PANE \$\$ GLYCERINSAEUR	E. BIS-O-ITRIMETH	YLSILYLI. TRIMETHY	SILYLESTER \$\$		
40.0	201											Rase Beak 72/10.0
CTU, UI	00)	78										Dase Feak. 75/ 10,0
												1.000 2
												mit till fo balke
						14						• 1k 115 6 511ke
							18	9				• 18 118 5 5218e
4	5		1	93	117	14	18	9 205				292
4	5	59	11 89	03	117	14	18	9 205	217			292

Figure S2. GC-MS chromatogram of glyceric acid TMS; similarity: 91%; Rt = 6.268 min.

*e-mail: mgvsilva@ufc.br



Figure S3. GC-MS chromatogram of pentanedioic acid TMS; similarity: 92%; Rt = 8.615 min.



Figure S4. GC-MS chromatogram of β -caryophyllene; similarity: 93%; Rt = 8.989 min.



Figure S5. GC-MS chromatogram of malic acid TMS; similarity: 96%; Rt = 10.980 min.



Figure S6. GC-MS chromatogram of pyroglutamic acid TMS; similarity: 96%; Rt = 11.731 min.

82 (7) Pertanedici acid, 3methyl-3/thmethylakylox 378 C15H3405 WiLEY223.LI	
81 Pertametrica ca d. 3 metrix-14 (metrix) (s) (s) (s) (s) (s) (s) (s) (s) (s) (s	
I renaledide deu, sheuty-stanleutyatte sto eta har o anticitzes.ci	
91 E Pentapadiaia acid 2 method 2 / Arimethodo Jav 270 C15U24OEG NICT21 LIP	
01 Perkanedulo add, Sheethy Standard Ave. 370 C16 H2 (OG WI 522) 11	
00 Pertailed out of site and signature strategy of C15H24055 NICT10710	
00 Perkareuto acia, sine nyo-grane nyoaka a si a cinawo si misi to cinawo si misi to cina	
90 Pertametere adu, shiretin siyumetin siyumet	
(~10.000)	Base Peak: 73/ 10 000
1.0 78	00001000.10110,000
	1
103	
0.5-	
115 100 219 231 247 272	363
	7 321
50.0 75.0 100.0 125.0 150.0 175.0 200.0 225.0 250.0 275.0 300.0	325.0 350.0
2: Pentanedioic acid, 3-methyl-3-{[trimethylsilv]]oxy]-, bis[trimethylsilv]] ester \$\$, beta. Hydroxy-beta. methylglutaric acid [tms] \$\$ 3-Trimethylsiloxy-3-methyl-bis[trimethylsilv]]glutarate \$\$ 3-Hydroxy-3-methylglutaric acid	, tris(trimethylsilyl) deriv. \$\$ Bis(trimethylsilyl)
4-10.000	Base Beak: 72/ 10 000
1.0(X10,000) 78	Dase Feak. 757 10,000
	· ·
147	1 Mille
0.5	4
115 2247	
45 74 99 1 133 163 183 199 431 213	7 363
50.0 75.0 100.0 125.0 150.0 175.0 200.0 225.0 250.0 275.0 300.0	325.0 350.0

Figure S7. GC-MS chromatogram of 3-hydroxy-3-methylglutaric acid TMS; similarity: 82%; Rt = 14.946 min.



Figure S8. GC-MS chromatogram of benzoic acid TMS; similarity: 90%; Rt = 21.879 min.

Simil	r Regi	Cor	pound !	Name	Mol Wt	Formula	Library										
9	2 🔽	CITRIC ACID-TE	TRATMS	\$\$ 1,2,3-Propanetri	480	C18 H40 O7	WILEY229.LI										
9	2 [1,2,3-Propanetric	arboxylic a	acid, 2-[(trimethylsily	480	C18H4007Si	NIST107.LIB										
9	2 1	CITRIC ACID-TE	TRATMS	\$\$ 1,2,3-Propanetri	480	C18 H40 O7	WILEY229.LI										
8	3 [1.2.3-Propanetric	arboxylic a	acid, 2-[(trimethylsily	480	C18H4007Si	NIST21.LIB										
- 8		1.2,3-Propanetric	arboxylic a	acid, 2-[(trimethylsily	480	C18H4007Si	NIST08s.LIB										
- 0		122 Propagatio	IRAIMS	SS 1,2,3-Propanetri	480	C18 H40 07	WILET 229.LI										
- 0		CITRIC ACID.TE	TRATMS	ss 1 2 3 Propagetri	400	C18 H40.07	WII EY229 11										
1 0	· .		The may	aa 1,2,01 lopanoo	400	010114007	WILL I LLU.LI										
E.																	
1.0 ^{(x10}	(000)															Base	e Peak: 73/ 10,000
-		13															0
-										273							
0.5					147												
1	c .				1	100			1	1			347	375			465
0.0	ľ	الب	99	117	149	103	2	221	257	1 28	5 305			- 4			
	50.0	75.0	100.0	125.0	150.0	175.0	200.0	225.0	250.0	275.0	300.0	325.0	350.0	375.0	400.0	425.0	450.0
): CITRI	CACID-T	TETRATMS \$\$ 1,2	3-Propane	etricarboxylic acid,	2-[(trimethy	lsilyl)oxy]-, tris(tri	methylsilyl) este	r (CAS) TETF	AKISTRIMETH	LSILYL CITI	RIC ACID \$\$						
1 a(x10	(000)															Base	Peak: 73/ 10,000
1.0		73	:														10.184-1
-																	(age)
0.5					-147					273							
					1												465
	5	i i	99	117	149	183	21	1	257	N.	305		1	363 375			
								the second s									the second secon

Figure S9. GC-MS chromatogram of citric acid TMS; similarity: 92%; Rt = 21.987 min.



Figure S10. GC-MS chromatogram of neophytadiene; similarity: 94%; Rt = 22.788 min.



Figure S11. GC-MS chromatogram of galactonic acid TMS; similarity: 91%; Rt = 27.789 min.



Figure S12. GC-MS chromatogram of gluconic acid TMS; similarity: 92%; Rt = 27.963 min.



Figure S13. GC-MS chromatogram of hexadecanoic acid TMS; similarity: 97%; Rt = 29.571 min.



Figure S14. GC-MS chromatogram of linolenic acid methyl ester; similarity: 93%; Rt = 31.199 min.



Figure S15. GC-MS chromatogram of linolenic acid ethyl ester; similarity: 93%; Rt = 33.242 min.



Figure S16. GC-MS chromatogram of phytol TMS; similarity: 94%; Rt = 33.393 min.



Figure S17. GC-MS chromatogram of linoleic acid TMS; similarity: 97%; Rt = 34.403 min.



Figure S18. GC-MS chromatogram of α-linolenic acid TMS; similarity: 96%; Rt = 34.574 min.



Figure S19. GC-MS chromatogram of stearic acid TMS; similarity: 96%; Rt = 35.459 min.



Figure S20. GC-MS chromatogram of eicosanoic acid TMS; similarity: 92%; Rt = 40.831 min.



Figure S21. GC-MS chromatogram of docosanoic acid TMS; similarity: 92%; Rt = 45.898 min.



Figure S22. GC-MS chromatogram of chrysin TMS; similarity: 73%; Rt = 46.710 min.



Figure S23. GC-MS chromatogram of squalene; similarity: 98%; Rt = 49.998 min.



Figure S24. GC-MS chromatogram of tetracosanoic acid TMS; similarity: 90%; Rt = 50.716 min.



Figure S25. GC-MS chromatogram of *trans*-catechine TMS; similarity: 75%; Rt = 53.176 min.



Figure S26. GC-MS chromatogram of β -tocoferol TMS; similarity: 76%; Rt = 54.152 min.



Figure S27. GC-MS chromatogram of α-tocoferol TMS; similarity: 76%; Rt = 56.925 min.



Figure S28. GC-MS chromatogram of quercetin TMS; similarity: 87%; Rt = 57.501 min.



Figure S29. GC-MS chromatogram of stigmasterol TMS; similarity: 90%; Rt = 59.460 min.



Figure S30. GC-MS chromatogram of β -sitosterol TMS; similarity: 90%; Rt = 60.668 min.



Figure S31. GC-MS chromatogram of β -amyrin TMS; similarity: 86%; Rt = 60.895 min.



Figure S32. GC-MS chromatogram of 1-triacontanol TMS; similarity: 96%; Rt = 61.418 min.



Figure S33. GC-MS chromatogram of α-amyrin TMS; similarity: 82%; Rt = 61.885 min.



Figure S34. GC-MS chromatogram of triacontanoic acid TMS; Rt = 63.136 min.