

Supporting Information

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**Chemical Composition, Antioxidant, and Cytotoxic
Properties of the Essential Oil from the Leaves of
Murraya alata Drake**

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Table S1. Chemical types of components identified in the essential oil of *M. alata*.

No.	Constituent	Area [%]
Monoterpene (1^a)		
1	<i>Iso</i> -dihydro carveol acetate	t ^b
Sesquiterpene (62)		
Acorene		
2	α -Acoradiene	t
Aristolene		
3	β -Gurjunene	1.2
Barbalene		
4	Cumacrene	t
Bicyclogermacrene		
5	Bicyclogermacrene	1.5
Bourbonene		
6	β -Bourbonene	t
Cadinene		
7	<i>cis</i> -Muurolo-3,5-diene	1.2
8	<i>cis</i> -Muurolo-4(14),5-diene	t
9	γ -Muurolole	0.1
10	α -Amorphene	t
11	γ -Amorphene	t
12	δ -Amorphene	3.0
13	γ -Cadinene	1.1
14	δ -Cadinene	t
15	Zonarene	t
16	<i>trans</i> -Cadina-1,4-diene	1.0
17	α -Calacrene	2.1
18	β -Calacrene	t
19	1 α ,10 α -Epoxy-amorph-4-ene	t
20	1,10-Di-epi-cubenol	0.2
21	<i>cis</i> -Cadin-4-en-7-ol	0.3
22	α -Muurolol	10.0
23	α -Cadinol	18.9
Caryophyllene		
24	(<i>E</i>)-caryophyllene	t
25	Caryophyllene oxide	2.1
26	Caryophylla-4(12),8(13)-dien-5 α / β -ol	0.4
27	14-Hydroxy-9-epi-(<i>E</i>)-caryophyllene	2.1
Cedrene		
28	β -Funebrene	t
29	Cedryl acetate	5.4
Clemene		

30	δ -Elemene	0.3
31	β -Elemene	1.1
32	γ -Elemene	t
33	Elenol	t
Copaen		
34	β -Copaen-4- α -ol	2.1
Cubebene		
35	α -Cubebene	0.2
Eremophilene		
36	β -Vetivenene	t
37	Nootkatol	4.3
Eudesmene		
38	δ -Selinene	t
39	Rosifoliol	t
40	Neo-intermedeol	t
41	Eudesm-7(11)-en-4-ol	4.4
Farnesene		
42	(<i>E</i>)-nerolidol	t
Germacrene		
43	Germacrene D	t
44	Germacra-4(15),5,10(14)-trien-1- α -ol	6.0
Guaiene		
45	α -Guaiene	t
46	4,9-Guaiadiene	1.9
47	Spathulenol	0.2
48	Guaiol	1.3
49	9,11-Epoxy-guaia-3,10(14)-diene	0.5
50	Bulnesol	t
51	Guaiazulene	1.5
Humulene		
52	Humulene epoxide II	1.4
Limonene		
53	<i>trans</i> -Prenyl limonene	7.7
Neoclovane		
54	α -Neoclovene	1.2
Panasinsene		
55	β -Panasinsene	t
Patchoulene		
56	Cyperotundone	t
Phytoalexene		
57	β -Vetivone	2.2
β -Santalene		

58	α -Santalene	0.2
	Silphiperfolene	
59	Silphiperfol-4,7(14)-diene	0.7
	Thujopsene	
60	<i>cis</i> -Thujopsene	1.6
	Ylangene	
61	α -Ylangene	0.5
62	Mustakone	1.2
	Zizaene	
63	Epi-Zizanone	0.1
Diterpene (1)		
64	Sandara copimara-8(14),15-diene	0.5
Others (6) (alkane or alkanoic acid or ketone or ester)		
65	Allyl hexanoate	1.0
66	Tridecane	t
67	2-Methyl-undecanal	t
68	(5 <i>E</i> ,9 <i>E</i>)-farnesyl acetone	t
69	<i>n</i> -Hexadecanoic acid	0.7
70	Eicosane	0.3
Total identified (%)		93.7

^a Number of each type compound. ^b t: trace (<0.05%)