Table S1. Major chemical compounds identified from essential oils of *Alpinia* spp.

Scientific name	Origin	Part	Major Components	Ref.
A. allughas	Tarai, India	Rhizome	β-pinene (55.3%), α-pinene (9.7%), 7-*epi*-α-eudesmol (4.1%)	1
A. allughas	Tarai, India	Leaf	β-pinene (25.5%), 1,8-cineole (23.3%), α-humulene (9.7%)	1
A. aquatica	Kuching, Malaysia	Rhizome	β-pinene (11.7%), α-humulene (8.9%), aromadendrene (8.7%)	2
A. aquatica	Kuching, Malaysia	Leaf	Germacrene D (21.3%), β-pinene (15.6%), sabinene (12.1%)	2
A. aquatica	Kuching, Malaysia	Pseudostem	α-humulene (19.8%), germacrene D (15.2%), β-caryophyllene (8.7%)	2
A. blepharocalyx	Pù Hoat Natural Reserve, Vietnam	Leaf	δ-cadinene (24.1%), β-Pinene (12.0%), γ-cadinene (8.2%),	3
A. blepharocalyx	Pù Hoat Natural Reserve, Vietnam	Pseudostem	*(E,E)*-α-farnesene (28.6%), β-Pinene (10.4%), τ-muurolol (9.5%), α-cadinol (9.5%)	3
A. blepharocalyx	Pù Hoat Natural Reserve, Vietnam	Rhizome	δ-cadinene (28.4%), τ-muurolol (11.2%), α-cadinol (11.2%)	3
A. blepharocalyx	Xishuangbanna, China	Rhizome	Camphor (23.13%), sabinene (11.27%), α-pinene (9.81%)	4
A. breviligulata	Hue, Vietnam	Seed	*(E,E)*-farnesol (65.0%), geranyl acetate (8.8%), α-humulene (6.1%)	5
A. breviligulata	Hue, Vietnam	Fruit peel	β-pinene (22.9%), α-terpineol (7.3%), and caryophyllene oxide	5

			(11.2%)	
A. breviligulata	Hue, Vietnam	Flower	β-pinene (20.2%), β-caryophyllene (14.0%), α-pinene (12.7%)	6
A. breviligulafa	Hue, Vietnam	Leaf	Caryophyllene oxide (23.1%), α-pinene (17.7%), α-copaene (5.4%)	7
A. calcarata	Kerala, India	Rhizome	β-fenchyl acetate (12.9%), cubenol (15.0 %), α-fenchyl acetates (9.7%)	8
A. calcarata	Tamilnadu, India	Leaf	1,8-cineole (17.72%), camphor (11.71%), α-myrcene (10.38%)	9
A. calcarata	Karnataka, India	Whole plant	α-fenchyl acetate (38.7%), 1,8-cineole (30.2%), (E)-methyl cinnamate (6.0%)	9
A. calcarata	Kerala, India	Rhizome	1,8-cineole (35.9%), β-fenchyl acetate (12.9%), β-pinene (9.1%),	10
A. calcarata	Pantnagar, India	Leaf	1,8-cineole (42.0%), camphor (15.5%), β-pinene (13.7%)	11
A. calcarata	Pantnagar, India	Rhizome	1,8-cineole (42.2%), α-fenchyl acetate (14.7%), camphene (7.6%)	11
A. calcarata	South India	Rhizome	α-fenchyl acetate (38.7%), 1,8-cineole (30.2%), α-terpineol (8.0%)	12
A. calcarata	South India	Root	α-fenchyl acetate (61.6%), 1,8-cineole (16.6%), camphene (9.8%)	12
A. calcarata	South India	Shoot	1,8-cineole (30.7%), α-fenchyl acetate (16.9%), camphor (16.1%)	12
A. calcarata	Bhubaneswar, India	Leaf	β-pinene (29.1%), 1,8-cineole (21.9%), α-pinene (6.3%)	13
A. calcarata	Bangalore, India	Leaf	1,8-cineole (24.7%), β-pinene (16.8%), camphor (8.0%)	13

A. calcarata	Bhubaneswar, India	Rhizome	α-fenchyl acetate (29.2%),1,8-cineole (25.7%), camphene (5.5%)	13
A. calcarata	Bangalore, India	Rhizome	Geraniol (34.3%), 1,8-cineole (21.2%), α-fenchyl acetate (10.2%)	13
A. calcarata	Bhubaneswar, India	Root	α-fenchyl acetate (45.2%), 1,8-cineole (15.1%), camphene (9.0%)	13
A. calcarata	Bangalore, India	Roots	α-fenchyl acetate (39.1%), 1,8-cineole (15.5%), camphene (12.3%)	13
A. calcarata	Eyangoda, Sri Lanka	Root	α-fenchyl acetate (39.8%), camphene (13.3%), 1,8-cineole (11.1%)	14
A. calcarata	Eyangoda, Sri Lanka	Rhizome	1,8-cineole (33.3%), α-fenchyl acetate (14.4%), β-pinene (9.3%)	14
A. calcarata	Eyangoda, Sri Lanka	Leaf	1,8-cineole (24.7%), β-pinene (20.5%), camphor (13.4%)	14
A. calcarata	Western province, Sri Lanka	Rhizome	1,8-cineole (31.08%), α-terpineol (10.31%), fenchyl acetate (10.73%)	15
A. calcarata	Western province, Sri Lanka	Leaf	1,8-cineole (38.45%), α-terpineol (11.62%), camphor (10%)	15
A. carinata	Gorakhpur, India	Leaf	β-Pinene (31.9%), terpinen-4-ol (13.7%), p-cymene (9.3%)	16
A. chinensis	Hue, Vietnam	Root	Caryophyllene oxide (13.2%), γ-selinene (8.6%), α-humulene (6.2%)	17
A. chinensis	Hue, Vietnam	Leaf	β-bisabolene (47.9%), *(E,E)*-farnesylacetate (6.6%), β-pinene (5.1%)	18
A. chinensis	Hue, Vietnam	Flower	*(E,E)*-α-farnesene (26.5%), α-umulene (22.3%), β-bisabolene (17.1%)	19

A. conchigera	Penang, Malaysia	Rhizome	β-bisabolene (28.9%), 1,8-cineole (15.3%), β-caryophyllene (10.0%)	20
A. conchigera	Pagoh, Malaysia	Rhizome	β-sesquiphellandrene (20.5%), β-bisabolene (12.1%), 1,8-cineole (11.6%)	21
A. conchigera	Chittagong, Bangladesh	Leaf	1,8-cineole (25.85%), chavicol (25.08%), β-pinene (6.71%)	22
A. galanga	Tamil Nadu, India	Whole plant	1,8-cineole (61.7%), β-farnesene (14.6%), β-sesquiphellandrene (10.8%)	9
A. galanga	Thailand	Rhizome	1,8-cineole (21.6%), chavicol (17.7%), α-bisabolene (15.6%)	23
A. galanga	Alabama, United States	Rhizome	β-myrcene (94.51%), β-ocimene (2.05)	24
A. galanga	Alabama, United States	Leaf	β-myrcene (52.34%), β-ocimene (17.06), β-pinene (9.0%)	24
A. galanga	Kerala, India	Rhizome	1,8-cineole (32.9 %), α-terpineol (12.7%), germacrene D (6.1 %)	8
A. galanga	Kerala, India	Leaf	1,8-cineole (28.3%), camphor (15.6%), β-pinene (5.0%)	25
A. galanga	Kerala, India	Stem	1,8-cineole (31.1%), camphor (11.0%), (*E*)-methyl cinnamate (7.4%),	25
A. galanga	Kerala, India	Rhizome	1,8-cineole (28.4%), α-fenchyl acetate (18.4%), camphor (7.7%),	25
A. galanga	Kerala, India	Root	α-fenchyl acetate (40.9%), 1,8-cineole (9.4%)	25
A. galanga	Kerala, India	Rhizome	1,8-cineole (52.9%), chavibetol acetate (5.59%)	10
A. galanga	New Delhi, India	Rhizome	1,8-cineole (57%), geranyl acetate (10.2%), β-caryophyllene (5.4%)	26

A. galanga	Imphal, India	Rhizome	1,8-cineole (53.4%), β-sesquiphellandrene (5.9%), chavicol (5.0%)	27
A. galanga	Imphal, India	Rhizome	1,8-cineole (63.4%), *(E)*-β-farnesene (8.4%), eugenol acetate (3.3%)	28
A. galanga	Samut Sakhon, Thailand	Rhizome	1,8-cineole (53.5%), 5-t-Butyl-hexa-3 (13.5%), D-limonene (4.9%)	29
A. galanga	Phu Tho, Vietnam	Whole plant	Limonene (8.32%), borneol (7.09%), geranyllinelol (6.37%)	30
A. galanga	Ha Noi, Vietnam	Rhizome	1,8-cineole (23.3%), neral (12.51%), geranial (9.83%)	31
A. galanga	Bogor, Indonesia	Whole plant	β-bisabolene (11.78%), trans-caryophyllene (9.10%)	32
A. galanga	Java, Indonesia	Rhizome	1,8-cineole (45.2%), 4-allylphenyl acetate (13.2%), α-farnesene (5.5%)	33
A. galanga	Yunnan, China	Rhizome	1,8-Cineole (22.63%), β-pinene (14.36%), α-pinene (10.89%)	34
A. galanga	Nawinna, Sri Lanka	Rhizome	Zerumbone (44.8%), p-cymene (6.5%), camphene (6.4%)	35
A. galanga	Sabah, Malaysia	Rhizome	1,8-cineole (40.5%), β-bisabolene (8.4%), (Z,E)-farnesol (3.8%)	36
A. galanga	Sabah, Malaysia	Seed	β-bisabolene (37.6%), (E)-β-farnesene (22.7%), (E,E)-farnesyl acetate (7.9%)	36
A. globosa	Ben En National Park, Vietnam	Leaf	β-pinene (12.1 %), α-gurjunene (10.5 %) and (*Z*)-13-docosenamide (9.0 %)	37

A. hainanensis	Hainan Island, China	Leaf	Ocimene (27.4%), β-pinene (10.1%), 9-octadecenoic acid (6.5%),	38
A. hainanensis	Hainan Island, China	Flower	Ocimene (39.8%), β-pinene (17.7%), terpinene (5.5%)	38
A. henryi	Vinh Phuc, Vietnam	Rhizome	1,8-cineole (45.1%), α-terpineol (4.9%), β-pinene (4.1%)	39
A. katsumadae	Vietnam	Leaf	Geraniol (25.0%), fenchone (23.0%), 1,8-cineole (14.4%)	40
A. katsumadae	Vietnam	Stem	fenchone (25.1%), geraniol (13.5%), 1,8-cineole (13.4%)	40
A. katsumadae	Vietnam	Seed	Geraniol (31.2%), linalool (11.4%), decanol (6.8%)	40
A. katsumadae	Guangxi, China	Seed	Methyl cinnamate (64.2 %), *cis*-4-decen-1-ol (7.3 %), octahydro-*cis*-2H-Inden-2-one (6.7 %)	41
A. katsumadae	Hainan Island, China	Leaf	*p*-menth-1-en-ol (22.0%), terpinen (19.0%), 4-carene (9.1%),	38
A. katsumadae	Hainan Island, China	Flower	*p*-menth-1-en-ol (21.3%), 1,8-cineole (20.2%), terpinen (12.6%)	38
A. kwangsiensis	Xishuangbanna, China	Rhizome	Camphor (17.59%), 1,8-cineole (15.16%), β-pinene (11.15%),	42
A. laosensis	North Vietnam	Rhizome	1,8-cineole (43.9%), caryophyllene oxide (4.6%), methyl eugenol (3.8%)	43
A. latilabris	Peninsular, Malaysia	Rhizome	(*E*)-cinnamate (89.5%), a-Phellandrene (3.2%)	20
A. latilabris	Peninsular, Malaysia	Unripe fruit	1,8-cineole (34.2%), β-pinene (20.2%), α-pinene (8.2%)	44
A. latilabris	Peninsular, Malaysia	Ripe fruit	1,8-cineole (35.9%), β-pinene (19.0%), α-pinene (8.8%)	44
A. latilabris	Janda Baik,	Leaf	Phytol (30.63%), carvone (6.88%), β-sesquiphellandrene (5.51%)	45

	Malaysia			
A. latilabris	Pu Mat National Park, Vietnam	Leaf	α-cadinol (26.49%), γ-terpinen (8.8%), β-pinen (4.0%)	46
A. latilabris	Pu Mat National Park, Vietnam	Stem	α-cadinol (31.4%), γ-terpinen (10,7%), β-pinen (6.9%)	46
A. latilabris	Pu Mat National Park, Vietnam	Root	α-cadinol (38.9%), γ-terpinen (10,7%), β-pinen (7,9%)	46
A. malaccensis	Thailand	Rhizome	1,8-cineole (11.9%), linalool (9%), fenchyl acetate (8.6%)	23
A. malaccensis	Chittagong, Bangladesh	Leaf	α-phellandrene (31.80%), 1,8-cineole (13.76%), *O*-cymene (11.45%),	22
A. malaccencis	Orissa, India	Leaf	α-phellandrene (43.9%), β-cymene (31.7%), β-pinene (4.6%).	47
A. malaccencis	Kerala, South India	Rhizome	α-phellandrene (36.4%), *p*-cymene (14.9%), β-pinene (4.5%)	10
A. malaccencis	Nghe An, Vietnam	Leaf	β-pinene (56.0%), α-pinene (10.3%), δ-3-carene (3.3%),	48
A. malaccencis	Nghe An, Vietnam	Stem	β-pinene (46.0%), β-phellandrene (12.1%), α-pinene (9.8%)	48
A. malaccencis	Nghe An, Vietnam	Root	β-pinene (18.5%), β-phellandrene (12.9%), α-pinene (6.3%)	48
A. malaccencis	Nghe An, Vietnam	Fruit	(*E*)-methyl cinnamate (27.8%), β-pinene (31.7%), β-phellandrene (12.9%)	48
A. malaccencis var.	Terengganu, Malaysia	Leaf	(*E*)-methyl cinnamate (88.8%), 1,8-cineole (1.8%), *p*-cymene (1.5%)	49

nobilis				
A. malaccencis var. *nobilis*	Terengganu, Malaysia	Rhizome	(*E*)-methyl cinnamate (85.7%), *p*-cymene (1.6%), β-pinene (1.6%)	49
A. malaccencis var. *nobilis*	Terengganu, Malaysia	Stem	(*E*)-methyl cinnamate (64.4%), β-phellandrene (6.3%), β-pinene (6.0%)	49
A. malaccencis var. *nobilis*	Janda Baik, Malaysia	Leaf	Methyl cinnamate (63.0%), α-terpineol (6.18%), 1,8-cineole (5.95%)	45
A. macroura	Nghe An, Vietnam	Leaf	1,8-cineole (17.7%), γ-terpinene (13.3%), β-pinene (11.4%)	50
A. macroura	Nghe An, Vietnam	Stem	γ-terpinene (16.9%), β-pinene (16.4%), 1,8-cineole (11.2%)	50
A. macroura	Nghe An, Vietnam	Root	γ-terpinene (13.9%), β-pinene (12.5%), 1,8-cineole (8.7%)	50
A. macroura	Nghe An, Vietnam	Fruit	β-caryophyllene (18.6%), β-pinene (11.1%), 1,8-cineole (11.1%)	50
A. macroura	Nghe An, Vietnam	Flower	β-caryophyllene (12.6%), sabinene (9.0%), β-pinene (8.8%)	50
A. maclurei	Bach Ma National Park, Vitenam	Leaf	β-pinene (53.0%), α-pinene (13.9%), *cis*-Sabinyl acetate (3.9%)	51
A. maclurei	Bach Ma National Park, Vitenam	Stem	β-pinene (47.1%), α-pinene (5.7%), caryophyllene oxide (5.7%)	51
A. maclurei	Bach Ma National Park,	Root	β-pinene (22.1%), β-phellandrene (12.0%), fenchyl acetate	51

	Vitenam		(6.7%),	
A. menghaiensis	Pu Mat, National Park, Vitenam	Leaf	β-pinene (62.4%), α-pinene (15.8%), benzyl benzoate (4.0%)	51
A. menghaiensis	Pu Mat, National Park, Vitenam	Stem	β-pinene (46.4%), α-pinene (12.7%), *p*-cymene (5.4%),	51
A. menghaiensis	Pu Mat, National Park, Vitenam	Root	β-pinene (41.8%), α-pinene (11.1%), β-phellandrene (5.4%)	51
A. menghaiensis	Nghe An, Vietnam	Fruit	β-pinene (40.4%), α-pinene (11.3%), 1,8-cineole (8.2%)	52
A. murdochii	Pahang, Malaysia	Leaf	β-pinene (23.83 %), sabinene (23.76%), terpinene-4-ol (10.49%)	53
A. murdochii	Pahang, Malaysia	Rhizome	γ-selinene (15.51%), (*E,E*)-farnesyl acetate (6.56%), terpinen 4-ol (5.58%)	53
A. mutica	Peninsular Malaysia	Unripe fruit	Camphor (21.0%), camphene (16.6%), β-pinene (8.6%)	44
A. mutica	Peninsular Malaysia	Ripe fruit	Camphor (15.8%), camphene (10.2%), β-pinene (13.5%)	44
A. mutica	*Johor, Malaysia*	rhizome	Camphor (35.6%), 1,8-cineole (9.4%), borneol (8.3%)	54
A. mutica	Johor, Malaysia	Young fruit	*(E,E)*-farnesol (43.3%), α-farnesene (7.0%), α-humulene (4.6%)	55
A. mutica	Johor, Malaysia	Mature Fruit	*(E,E)*-farnesol (51.2%), α-farnesene (8.2%), 1,8-cineole (4.5%)	55

A. mutica	Kerala, India	Rhizome	β-pinene (20.2%), camphor (13.3%), 1,8-cineole (8.9%),	56
A. mutica	Kerala, India	Fruit rind	1,8-cineole (14.8%), camphor (11.7%), β-pinene (7.6%)	56
A. mutica	Phong Nha-Ke Ban National Park, Vietnam	Leaf	β-pinene (21.3%), 1,8-cineole (20.9%), α-pinene (12.5%)	57
A. mutica	Phong Nha-Ke Ban National Park, Vietnam	Pseudostem	1,8-cineole (19.9%), β-pinene (17.4%), α-pinene (11.3%)	57
A. mutica	Phong Nha-Ke Ban National Park, Vietnam	Root	β-pinene (23.2%), 1,8-cineole (18.6%), α-pinene (12.8%)	57
A. mutica	Phong Nha-Ke Ban National Park, Vietnam	Fruit	β-caryophyllene (22.6%), β-cadinol (8.9%), camphor (7.8%)	57
A. nantoensis	Nantou County, Taiwan	Leaf	Camphor (21.31%), camphene (11.41%), β-pinene (8.28)	58
A. nantoensis	Nantou County, Taiwan	Rhizome	Camphor (29.58%), camphene (10.45%), β-pinene (9.13)	58
A. nantoensis	Pu Mat National Park, Vietnam	Leaf	γ-terpinene (23.2%), 1,8-cineole (21.8%), α-terpinene (11.7%)	59
A. nantoensis	Pu Mat National Park, Vietnam	Stem	γ-terpinene (20.5%), 1,8-cineole (17.6%), α-terpinene (12.5%)	59
A. nantoensis	Pu Mat National Park,	Root	γ-terpinene (19.3%), α-terpinene (13.2%), 1,8-cineole (10.7%)	59

	Vietnam			
A. nigra	Guwahati, India	Leaf	β-caryophyllene (47.7%), β-pinene (13.8%), α-humulene (7.5%)	60
A. nigra	Guwahati, India	Flower	β-caryophyllene (48.6%), β-pinene (14.4%), α-humulene (7.7%)	60
A. nigra	Guwahati, India	Seed	β-caryophyllene (48.7%), β-pinene (14.1%), α-humulene (7.7%)	60
A. nigra	Guwahati, India	Rhizome	β-caryophyllene (49.0%), β-pinene (13.1%), α-humulene (7.8%)	60
A. nigra	Kalimpong, India	Rhizome	β-pinene (38.03%), myrtenol (9.35%), α-humulene (7.82%)	61
A. nigra	Kalimpong, India	Leaf	β-pinene (56.27%), α-humulene (13.7%), α-farnesene (7.92%)	61
A. nigra	Westbengal, India	Leaf	β-pinene (56.27%), α-caryophyllene (13.70%), α-farnesene (7.92%)	62
A. nutans	*Uttarakhand, India*	Aerial part	sabinene (27.8%), 1,8-cineole (17.4%), terpinen-4-ol (14.9%)	63
A. nutans	*Uttarakhand, India*	Flower	Terpinen-4-ol (25.1%), γ-terpinene (19.4%), sabinene (14.2%)	63
A. officinarum	Thailand	Rhizome	α-bisabolene (10.6%), α-*trans*-bergamotene (7.9%), β-sesquiphellandrene (6.9%)	23
A. officinarum	Hainan Island	Rhizome	1,8-cineole (72.7%), *trans*-carveol (6.4%), piperitol (1.3%)	64
A. officinarum	Sanming, China	Rhizome	1,8-cineole (9.71%), γ-cadinene (6.16%), α-farnesene (4.33%)	65
A. officinarum	Guilin, China	Rhizome	1,8-cineole (9.06%), α-farnesene (7.09%), γ-cadinene (6.39%)	65
A. officinarum	Yulin, China	Rhizome	1,8-cineole (13.77%), γ-cadinene (7.02%), α-terpineol (5.67%)	65
A. officinarum	Guigang, China	Rhizome	1,8-cineole (9.28%), α-farnesene (7.93%), γ-cadinene (6.79%)	65

A. officinarum	Qiandongnan, China	Rhizome	1,8-cineole (9.17%), γ-cadinene (6.83%), α-farnesene (4.37%)	65
A. officinarum	Panzhihua, China	Rhizome	1,8-cineole (8.68%), γ-cadinene (6.77%), α-farnesene (5.07%)	65
A. officinarum	Xishuangbanna, China	Rhizome	1,8-cineole (9.39%), γ-cadinene (5.95%), α-terpineol (3.99%)	65
A. officinarum	Gaozhou, China	Rhizome	*trans*-β-farnesene (20.71%), α-bergamoten (15.69%), linalool (4.32%)	65
A. officinarum	Xuwen, China	Rhizome	α-farnesene (14.58%), γ-cadinene (5.82%), δ-cadinene (4.9%)	65
A. officinarum	Bozhou, China	Rhizome	1,8-cineole (9.74%), α-farnesene (7.14%), γ-cadinene (6.95%)	65
A. officinarum	China	Rhizome	α-terpineol (11.11%), β-pinene (3.85%), α-pinene (3.56%),	66
A. officinarum	Ha Noi, Vietnam	Rhizome	1,8-cineole (50.0%), exo-2-hydroxy-1,8-cineole acetate (11.2%), β-caryophyllene (6.4%)	67
A. officinarum	Imphal, India	Rhizome	1,8-cineole (28.3%), α-fenchyl acetate (15.2%), carotol (8.9%),	27
A. officinarum	Imphal, India	Rhizome	1,8-cineole (44.2%), α-fenchyl acetate (8.9%), β-Pinene (5.7%),	28
A. pinnanensis	Vu Quang National Park, Vietnam	Leaf	1,8-cineole (20.5%), 4-phenyl-2-butanol (19.5%), α-phellandrene (10.8%)	68
A. pinnanensis	Vu Quang National Park, Vietnam	Stem	1,8-cineole (10.0%), β-elemene (8.7%), α-gurjunene (7.6%)	68
A. pinnanensis	Vu Quang National Park,	Root bark	(*E,E*)-farnesol (8.4%), α-gurjunene (6.2%), camphene (5.6%)	68

	Vietnam			
A. pinnanensis	Vu Quang National Park, Vietnam	Fruit	α-cadinol (18.1%), β-caryophyllene (11.4%), (*E, E*)-farnesol (6.3%)	68
A. polyantha	Nghe An, Vietnam	Leaf	Camphor (16.1%), α-pinene (15.2%) and β-agarofuran (12.9%)	69
A. polyantha	Nghe An, Vietnam	Stem	α-pinene (12.4%), β-cubebene (10.6%), β-agarofuran (10.3%)	69
A. polyantha	Nghe An, Vietnam	Root	β-cubebene (12.6%), fenchyl acetate (10.8%), β-maaliene (9.0%)	69
A. polyantha	Nghe An, Vietnam	Fruit	δ-cadinene (10.9%), β-caryophyllene (9.1%), β-pinene (8.7%)	69
A. purpurata	Northeastern Brazil	Inflorescence (red variant)	β-pinene (35.76%), α-pinene (20.57%), β-caryophyllene (13.23%)	70
A. purpurata	Paulista, Brazil	Inflorescence (red variant)	β-caryophyllene (18.26%), β-pinene (13.93%), linalool (9.64%)	71
A. purpurata	Paulista, Brazil	Inflorescence (pink variant)	β-pinene (26.56%), β-caryophyllene (15.58%), α-pinene (13.58%)	71
A. purpurata	Fiji	Rhizome	β-pinene (71.3%), α-pinene (24.9%),	72

		(red variant)		
A. purpurata	Fiji	Rhizome (pink variant)	β-pinene (65.8%), α-pinene (36.1%)	72
A. purpurata	Fiji	Leaf (red variant)	β-pinene (81.0%)	72
A. purpurata	Fiji	Leaf (pink variant)	β-pinene (79.6%)	72
A. purpurata	Fiji	Flower (red variant)	β-pinene (29.4%), β-caryophyllene (24.2%)	72
A. purpurata	Fiji	Flower (pink variant)	β-pinene (43.0%), camphene (6.9%)	72
A. purpurata	Rio de Janeiro, Brazil	Leaf	β-pinene (34.7%), α -pinene (11.8%), *trans*- α-guaiene (6.0%)	73
A. rafflesiana	Selangor Darul Ehsan, Malaysia	Leaf	β-caryophyllene (32.61%), caryophyllene oxide (8.67%), *(2E,6Z)*-farnesol (4.91%)	74
A. rafflesiana	Selangor Darul Ehsan, Malaysia	Pseudostem	1,8-cineole (32.25%), β-myrcene (13.63%), α-terpineol (9.90%)	74

A. rafflesiana	Selangor Darul Ehsan, Malaysia	Rhizome	Tetracosane (42.61%), τ-cadinol (7.46%), α-terpineol (6.71%)	74
A. rafflesiana	Selangor Darul Ehsan, Malaysia	Fruit	Tetracosane (13.39%), (2*E*,6*E*)-farnesol (7.31%), α-terpineol (8.51%)	74
A. scabra	Pahang, Malaysia	Leaf	β-pinene (63.37%), α-pinene (6.58%), borneol (3.20%)	53
A. scabra	Pahang, Malaysia	Rhizome	γ-selinene (33.45%), α-selinene (3.64%), α-terpineol (3.55%)	53
A. smithiae	Kerala, India	Rhizome	α-terpineol (15.1%), α-fenchyl acetate (12.5%), β-caryophyllene (9.8%)	10
A. smithiae	Kerala, India	Leaf	β-caryophyllene (27.22%), sabinene (7.35%), β-myrcene (8.64%),	75
A. smithiae	Kerala, India	Rhizome	β-caryophyllene (29.98%), β-pinene (5.22%), sabinene (9.28%),	75
A. speciosa	Chu-Tung, Taiwan	Seed	Camphor (19.3%), sabinene (15.1%), β-ocimene (7.9%)	76
A. speciosa	Chu-Tung, Taiwan	Leaf	Camphor (31.6%), sabinene (9.4%), 1,8-cineole (5.6%)	76
A. speciosa	Amazonas, Brazil	Leaf	Terpene-4-ol (20.4%), 1,8-cineole (14.87%), *p*-cymene (9.38%)	77
A. speciosa	Dehradun, India,	Rhizome	Terpinen-4-ol (15.4%), 1,8-cineole (11.1%), T-cadinol (8.8%)	78
A. speciosa	*Martinique*, Franch	Leaf	terpinen-4-ol (29.8%), 1,8-cineole (17.0%), p-cymene (11.1%)	79
A. speciosa	*Río Grande,* Mexico	Leaf	β-pinene (37.25%), 1,8-cineole (24.87%), α-pinene (19.05%)	80
A. speciosa	Egypt	Leaf	β-pinene (19.0%), 1,8-cineole (17.0%), γ-terpinene (16.7%)	81

A. speciosa	*Japan*	Leaf	*(E)*-methyl cinnamate (24.1%), camphor (14.3%), camphene (9.2%)	82
A. tonkinensis	Ben En National Park, Vietnam	Leaf	β-pinene (33.5%), (*E*)-β-ocimene (9.6%), γ-terpinene (9.2%)	37
A. strobiliformis	Pù Hoat Natural Reserve, Vietnam	Leaf	1,8-cineole (25.5%), γ-terpinene (12.5%), β-Pinene (10.7%)	3
A. strobiliformis	Pù Hoat Natural Reserve, Vietnam	Pseudostem	β-pinene (15.0%), 1,8-cineole (14.1%), γ-terpinene (11.0%)	3
A. strobiliformis	Pù Hoat Natural Reserve, Vietnam	Rhizom	1,8-cineole (16.5%), γ-terpinene (13.6%), β-pinene (12.5%)	3
A. vittata	Rio de Janeiro, Brazil	Leaf	β-pinene (35.3%), *epi*-cubebol (5.0%), α-pinene (10.1%)	83
A. zerumbet	São Cristóvão, Brazil	Petal	Terpinen-4-ol (60.66%), α-terpineol (9.06%), linalool (5.11%)	84
A. zerumbet	Fiji	Rhizome	Terpinen-4-ol (41.4%), 1,8-cineole (28.1%), γ-terpinen (7.9%)	72
A. zerumbet	São Cristóvão, Brazil	Rhizome	terpinen-4-ol (52.26%), α-terpineol (12.83%), caryophyllene oxide (5.04%)	84
A. zerumbet	Morne Rouge, France	Flower	1,8-cineole (25.2 %), terpinen-4-ol (22.6 %), sabinene (14.3%)	85
A. zerumbet	Sainte-Marie, France	Flower	1,8-cineole (22.3 %), terpinen-4-ol (20.2 %), sabinene (13.6 %)	85

A. zerumbet	François, France	Flower	1,8-cineole (19.3 %), terpinen-4-ol (14.7%), sabinene (16.5 %)	85
A. zerumbet	Rio de Janeiro, Brazil	Leaf	Terpinen-4-ol (19.7%), 1,8-cineol (15.3%), sabinene (13.8%)	83
A. zerumbet	Rio de Janeiro, Brazil	Leaf	Terpene-4-ol (22%), 1,8-cineole (18%), γ-terpinene (14%).	86
A. zerumbet	Ceara, Brazil	Leaf	Terpinen-4-ol (32.9%), 1,8-cineole (21.4%), γ-terpinolene (10.0%)	87
A. zerumbet	Rio de Janeiro, Brazil (In April)	Leaf	Terpinen-7-al (40.5%), sabinene hydrate (15.4%), p-mentha-1,3,8-triene (9.97%)	73
A. zerumbet	Rio de Janeiro, Brazil (In August)	Leaf	Terpinen-4-ol (29.4%), 1,8-cineole (23.1%), γ-terpinene (16.1%)	73
A. zerumbet	São Cristóvão, Brazil	Leaf	Terpinen-4-ol (55.72%), 1,8 cineol (10.84%), γ-terpinene (5.71%)	84
A. zerumbet	Fiji	Leaf	Terpinen-4-ol (40.9%), 1,8-cineole (13.2%), β-pinene (10.0%)	72
A. zerumbet	Okinawa, Japan	Leaf	*p*-cymene (31.15%), 1,8-cineole (12.84%), camphor (10.69%)	88
A. zerumbet	Nishieue, Japan	Leaf	3,4-dimethyl-3-cyclohexen-1-carboxaldehyde (18.97%), α-humulene (12.17%)	89
A. zerumbet	Higashieue, Japan	Leaf	Linalool (16.99%), *p*-cymene (12.54%), 3,4-dimethyl-3-cyclohexen-1-carboxaldehyde (11.49%)	89
A. zerumbet	Maja, Japan	Leaf	3,4-dimethyl-3-cyclohexen-1-carboxaldehyde (11.64%), camphor (9.06%), methyl cinnamate (8.94%)	89

A. zerumbet	Futami, Japan	Leaf	Terpinen-4-ol (25.6%), 1,8-Cineole (17.46%), Sabinene (12.08%)	89
A. zerumbet	Nago, Japan	Leaf	Linalool (17.22%), camphor (12.90%), α-humulene (9.34%)	89
A. zerumbet	Toyohara, Japan	Leaf	3,4-dimethyl-3-cyclohexen-1-carboxaldehyde (13.06%), camphor (8.17%), α-humulene (6.49%)	89
A. zerumbet	Kushi, Japan	Leaf	Caryophyllene oxide (12.07%), 3,4-dimethyl-3-cyclohexen-1-carboxaldehyde (6.8%), *p*-cymene (6.23%)	89
A. zerumbet	Okinawa, Japan (Dec 2002)	Leaf	p-cymene (27.6%), 1,8-cineole (20.9%), terpinen-4-ol (19.8%)	90
A. zerumbet	Okinawa, Japan (Oct 2003)	Leaf	p-cymene (20.7%), 1,8-cineole (18.6%), terpinen-4-ol (13.4%)	90
A. zerumbet	Okinawa, Japan (Mar 2004)	Leaf	1,8-cineole (18.6%), *p*-cymene (17.4%), sabinene (16.6%)	90
A. zerumbet	Okinawa, Japan (Jun 2004)	Leaf	*p*-cymene (25.3%), 1,8-cineole (18.2%), terpinen-4-ol (10.3%)	90
A. zerumbet	Okinawa, Japan (Dec 2004)	Leaf	1,8-cineole (29.6%), p-cymene (27.9%), terpinen-4-ol (11.0%)	90
A. zerumbet	Okinawa, Japan (Jun	Leaf	*p*-cymene (25.7%), 1,8-cineole (20.0%), terpinen-4-ol (7.3%)	90

	2005)			
A. zerumbet	Okinawa, Japan (Nov 2005)	Leaf	*p*-cymene (27.0%), 1,8-cineole (15.2%), terpinen-4-ol (14.1%)	90
A. zerumbet	Okinawa, Japan (Jun 2006)	Leaf	p-cymene (29.3%), 1,8-cineole (15.9%), α-pinene (10.6%)	90
A. zerumbet	Okinawa, Japan (Feb 2007)	Leaf	Terpinen-4-ol (24.1%), 1,8-cineole (19.5%), p-cymene (14.7%)	90
A. zerumbet	Okinawa, Japan (Aug 2007)	Leaf	*p*-cymene (28.5%), 1,8-cineole (14.9%), limonene (8.7%)	90
A. zerumbet var. *variegata*	Rio de Janeiro, Brazil	Leaf	1,8-cineole (39%), β-pinene (11%), β-caryophyllene (10%)	86

Table S2. Biological activities of essential oils of *Alpinia* spp.

Scientific name	Part	Biological Activity	Ref.
A. blepharocalyx	Rhizome	Insecticidal: *Lasioderma serricorne,* contact toxicity (LD_{50}=15.02 μg/adult); fumigant toxicity (LC_{50}=3.83 mg/L)	4
A. calcarata	Rhizome	Insecticidal: *Rhodnius nasutus,* fumigant toxicity (LC_{50}=0.685 g/L); contact and fumigant (LC_{50}=0.141 g/L)	91
A. calcarata	Rhizome	Antifungal: *Rhizoctonia solani*	92
A. calcarata	Root	Antifungal: *Rhizoctonia solani*	92
A. calcarata	Leaf	Anti-inflammatory: 75.78% and 78.15% at 200 mg/kg and 300 mg/kg, respectively	9
A. calcarata	Whole plant	Anti-inflammatory	15
A. calcarata	Whole plants	Cytotoxic: RAW 264.7, IEC-6, HepG2 cells (less than 80% viability at dose of 100 μg/mL)	15
A. galanga	Whole plant	Antioxidant (DPPH assay, percentage inhibition: 47.15)	30
A. galanga	Whole plant	Antibacterial: *Staphylococcus aureus* (26.25), *Escherichia coli* (27.12)*, Salmonella typhi* (29.17)*, Bacillus cereus* (31.42). Note: numbers above present the inhibition zone diameter (mm)	30
A. galanga	Whole plant	Aromatherapy effect	32
A. galanga	Whole	Anti asthmatic	93

	plant		
A. galanga	Rhizome	Insecticidal: *Lasioderma serricorne,* contact toxicity (LD_{50}=12.2 μg/adult), fumigant toxicity (LC_{50}=3.5 mg/L)	34
A. galanga	Rhizome	Antibacterial: *Escherichia coli* (MIC=0.78 µL/mL); *Staphylococcus aureus* (MIC=1.56 µL/mL); *Salmonella typhimurium* (MIC=0.78 µL/mL)	29
A. galanga	Rhizome	Antifungal (*Rhizoctonia solani*)	92
A. galanga	Rhizomes	Antibacterial: *Bacillus subtilis* (MIC=62.5 µL/mL); *Escherichia coli* (MIC>1000 µL/mL); *Staphylococcus aureus* (MIC=1000 µL/mL); *Salmonella typhimurium* (MIC=1000 µL/mL); *Vibrio cholera* (MIC=1000 µL/mL)	33
A. galanga	Rhizome	Antibacterial: *Staphylococcus aureus* (2.5, 10); *Bacillus subtilis* (2.5, >40); *Streptococcus feacalis* (5.0, 5.0); *Escherichia coli* (15, 20); *Proteus vulgaris* (20,20); *Samonella enteritidis* (10, 15). Note: numbers above present MIC and MBC values (µL/mL)	31
A. galanga	Rhizome	Antibacterial: *Sacharomyces cerevisiae* (MIC and MBC values of 15 µL/mL)	31
A. galanga	Roots	Antifungal (*Rhizoctonia solani*)	92
A. globosa	Leaf	Antibacterial: *Escherichia coli, Staphylococcus aureus* subsp. *aureus* (MICs=50µg/mL)	37
A. globosa	Leaf	Antifungal: *Fusarium oxysporum* (MIC=50µg/mL)	37
A. katsumadae	Seed	Insecticidal: *Tribolium castaneum*, *Liposcelis*	41

		bostrychophila and *Lasioderma serricorne* (LD_{50} = 52.6 μg/adult, 35.6 μg/adult and 17.4 μg/cm^2)	
A. kwangsiensis	Rhizome	Insecticidal: *Lasioderma serricorne,* fumigant toxicity (LC_{50}=9.91 μg/mL air), contact toxicity (LC_{50}=24.59 μg/adult)	42
A. latilabris	Unripe fruit	Antibacterial: *Staphylococcus aureus* (MIC=2.5 mg/mL); *Escherichia coli* (MIC=5 mg/mL); *Bacillus subtilis* (MIC>5 mg/mL); *Pseudomonas aeruginosa* (MIC>5 mg/mL)	44
A. latilabris	Unripe fruit	Antifungal: *Candida glabrata* (MIC>5 mg/mL); *Microsporum canis* (MIC=5 mg/mL); *Trichophyton mentagrophytes* (MIC=2.5 mg/mL); *Trichophyton rubrum* (MIC=5 mg/mL)	44
A. latilabris	Ripe fruit	Antibacterial: *Staphylococcus aureus* (MIC=5 mg/mL); *Escherichia coli* (MIC=5 mg/mL); *Bacillus subtilis* (MIC=5 mg/mL); *Pseudomonas aeruginosa* (MIC=5 mg/mL)	44
A. latilabris	Ripe fruit	Antifungal: *Candida glabrata* (MIC=2.5 mg/mL); *Microsporum canis* (MIC=5 mg/mL); *Trichophyton mentagrophytes* (MIC=5 mg/mL); *Trichophyton rubrum* (MIC=5 mg/mL)	44
A. latilabris	Leaf	Antibacterial: *Bacillus subtilis* (75.67), *Staphylococcus aureus* (39.5), *Acinetobacter baumanii* (49), *Klebsiella pneumonia* (18.83), *Pseudomonas aeruginosa* (46.33), *Salmonella*	45

		typhii (40.83). Note: numbers above present IC_{50} values (mg/mL).	
A. latilabris	Leaf	Antioxidant: DPPH (IC_{50}=54.33 mg/mL), ABTS (GAE=14.47 mg GAE/g), FRAP (TE=17.51M TE/g)	45
A. malaccensis	Leaf	Antioxidant (DPPH assay, IC_{50} = 18.26 µg/ml; ABTS assay, IC_{50} = 20 µg/ml,)	47
A. malaccensis	Leaf	Antibacterial (*Staphylococcus aureus,* MIC = 1.95 µl/ml; *Pseudomonas aeruginosa,* MIC = 7.81 µl/ml)	47
A. malaccensis	Leaf	Antifungal (*Candida albicans,* MIC = 5.5 µl/ml *and Aspergillus niger,* MIC = 6.7 µl/ml)	47
A. malaccensis var. *nobilis*	Leaf	Antibacterial: *Bacillus subtilis* (85.67), *Staphylococcus aureus* (32), *Escherichia coli* (87.33), *Klebsiella pneumonia* (21.33), *Pseudomonas aeruginosa* (13.67), *Salmonella typhii* (43.17). Note: numbers above present IC_{50} values (mg/mL).	45
A. malaccensis var. *nobilis*	Leaf	Antifungal: *Cryptococcus neoformans* (IC_{50}=1.97 mg/mL), *Candida tropicalis* (IC_{50}=1.75 mg/mL)	45
A. malaccensis var. *nobilis*	Leaf	Antioxidant: DPPH (IC_{50}=32.67 mg/mL), ABTS (GAE=26.59 mg GAE/g), FRAP (TE=24.56M TE/g)	45
A. mutica	Unripe fruit	Antibacterial: *Staphylococcus aureus* (MIC=2.5 mg/mL); *Escherichia coli* (MIC=2.5 mg/mL); *Bacillus subtilis* (MIC>5 mg/mL); *Pseudomonas aeruginosa* (MIC>5 mg/mL)	44
A. mutica	Unripe fruit	Antifungal: *Candida glabrata* MIC>5 mg/mL;	44

		Microsporum canis (MIC=5 mg/mL); *Trichophyton mentagrophytes* (MIC=2.5 mg/mL); *Trichophyton rubrum* (MIC=2.5 mg/mL)	
A. mutica	Ripe fruit	Antibacterial *Staphylococcus aureus* (MIC=2.5 mg/mL); *Escherichia coli* (MIC=1.25 mg/mL); *Bacillus subtilis* (MIC>5 mg/mL); *Pseudomonas aeruginosa* (MIC>5 mg/mL)	44
A. mutica	Ripe fruit	Antifungal: *Candida glabrata* (MIC>5 mg/mL; *Microsporum canis* (MIC=2.5 mg/mL; *Trichophyton mentagrophytes* (MIC=2.5 mg/mL; *Trichophyton rubrum* (MIC=2.5 mg/mL)	44
A. mutica	Rhizome	Antibacterial: *Bacillus subtilis* (10), *Staphylococcus aureus* (12), *Staphylococcus epidermis* (16), *Staphylococcus simulans* (15), *Escherichia coli* (11), *Pseudomonas aeruginosa* (15), *Proteus mirabilis* (12), *Vibrio cholerae* (10), *Klebsiella pneumoniae* (13), *Salmonella typhi* (16). Note: numbers above present the inhibition zone diameter (mm)	56
A. mutica	Fruit rind	Antibacterial: *B. subtilis* (8), *S. aureus* (7), S. *epidermis* (11), *S. simulans* (14), *E. coli* (5), *P. aeruginosa* (10), *P. mirabilis* (8), *V. cholerae* (9), *K. pneumoniae* (12), *S. typhi* (12). Note: numbers above present the inhibition zone diameter (mm)	56
A. mutica	Rhizome	Cytotoxic: dalton's lymphoma ascites (DLA) cells (99% cell death at dose 25.0 µg/mL, CD_{50}=13 µg/mL)	56

A. mutica	Fruit rind	Cytotoxic: dalton's lymphoma ascites (DLA) cells (100% cell death at dose 1 µg/mL, CD_{50}=0.06 µg/mL)	56
A. mutica	Rhizome	Antioxidant: DPPH (8.9% inhibition at dose of 20 µg/mL)	56
A. mutica	Fruit rind	Antioxidant: DPPH (56.5% inhibition at dose of 20 µg/mL, IC_{50}=15.17 µg/mL)	56
A. murdochii	Leaf	Antibacterial: *Staphylococcus aureus* ATCC 29213, ATCC 33591, ATCC 700699 (MICs=2.5 µg/mL); *S. aureus* VISA24 (MIC=1.25 µg/mL); *S. aureus* VRSA156 (MIC = 0.31 µg/mL)	53
A. murdochii	Leaf	Antifungal: *Candida albicans, C. glabrata, Microsporum canis, Trycophyton rubrum* (MICs=2.5 µg/mL)	53
A. murdochii	Rhizome	Antibacterial: *Staphylococcus aureus* ATCC 29213, ATCC 700699 (MICs=0.63 µg/mL); *S. aureus* ATCC 33591 (MIC=2.5 µg/mL); *S. aureus* VISA24, (MIC=0.08 µg/mL); *S. aureus* VRSA156 (MIC=0.04 µg/mL)	53
A. murdochii	Rhizome	Antifungal: *Candida albicans, C. glabrata, Microsporum canis, Trycophyton rubrum* (MICs=2.5 µg/mL)	53
A. nigra	Seed	Larvicidal: *Aedes aegypti* (100% mortality at the dose of 125 ppm)	60
A. nigra	Leaf	Larvicidal: *Aedes aegypti* (100% mortality at the dose of	60

		125 ppm)	
A. nigra	Rhizome	Larvicidal: *Aedes aegypti* (100% mortality at the dose of 125 ppm)	60
A. nigra	Rhizome	Antioxidant: DPPH assay (IC50 = 38.62 g/mL)	60
A. nigra	Seed	Antibacterial: *Staphylococcus aureus* (6.25, 6.25); *Bacillus cereus* (3.12, 3.12); *Listeria monocytogenes* (3.12, 3.12); *Escherichia coli* (6.25, 6.25); *Salmonella paratyphi* (6.25, 6.25); *E. coli* enterotoxic (3.12, 3.12); *Yersinia enterocolitica* (6.25, 6.25). Note: numbers above present MIC and MBC values (µg/mL).	60
A. nigra	Leaf	Antibacterial: *S. aureus* (6.25, 6.25); *B. cereus* (3.12, 6.25); *L. monocytogenes* (3.12, 3.12); *E. coli* (3.12, 6.25); *S. paratyphi* (6.25, 6.25); *E. coli* enterotoxic (3.12, 3.12); *Y. enterocolitica* (3.12, 3.12). Note: numbers above present MIC and MBC values (µg/mL).	60
A. nigra	Flower	Antibacterial: *S. aureus* (6.25, 6.25); *B. cereus* (6.25, 6.25); *L. monocytogenes* (6.25, 6.25); *E. coli* (6.25, 6.25); *S. paratyphi* (6.25, 6.25); *E. coli* enterotoxic (6.25, 6.25); *Y. enterocolitica* (6.25, 6.25). Note: numbers above present MIC and MBC values (µg/mL).	60
A. nigra	Rhizome	Antibacterial: *S. aureus* (3.12, 6.25); *B. cereus* (3.12, 6.25); *L. monocytogenes* (3.12, 3.12); *E. coli* (3.12, 3.12); *S. paratyphi* (6.25, 6.25), *E. coli* enterotoxic (3.12, 3.12); *Y. enterocolitica* (1.56, 3.12). Note: numbers	60

		above present MIC and MBC values (μg/mL).	
A. nigra	Rhizome	Antibacterial: *S. aureus* (MIC=5.9 μL/mL), *P. aeruginosa* (MIC=1.7 μL/mL), *E. coli* (MIC=4.6 μL/mL)	62
A. nigra	Rhizome	Antifungal: *C. albicans* (MIC=4.5 μL/mL), *A. niger* (MIC=7.0 μL/mL)	62
A. nigra	Rhizome	Cytotoxic: MTT assay, MCF-7 cell (70.9 % inhibition at dose 20 μg/ml); HeLa cell (79% inhibition at dose 20 μg/ml	61
A. nigra	Leaf	Cytotoxic: MTT assay, MCF-7 cell (50% inhibition at dose 20 μg/ml); HeLa cell (60% inhibition at dose 20 μg/ml	61
A. nigra	Leaf	Antioxidant: DPPH (IC_{50}=4.05 μg/ml), ABTS (IC_{50}=15.55 μg/ml)	62
A. nutans	Aerial part	Antibacterial: *Staphylococcus aureus* (0.97); *Shigella flexneri* (15.62); *Pasturela multocida* (0.97); *Escherichia coli* (31.25); *Salmonella enterica enterica* (0.97). Note: numbers above present MIC values (μL/mL).	63
A. nutans	Flower	Antibacterial: *S. aureus* (0.97); *S. flexneri* (15.62); *P. multocida* (0.97); E. coli (7.81); *S. enterica enterica* (0.97). Note: numbers above present MIC values (μL/mL).	63
A. officinarum	Rhizome	Antioxidant (ABTS and FRAP assay)	66
A. officinarum	Rhizome	Cytotoxic (MTT assay, BV2 cells)	65
A. officinarum	Rhizome	Anti-inflammatory	65

A. officinarum	Rhizome	Antibacterial: *Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus, Bacillus subtilis*	65
A. officinarum	Rhizome	Antifungal: *Candida albicans*	65
A. purpurata	Red variant	Larvicidal: *Aedes aegypti* (LC_{50} = 80.7 ppm)	71
A. purpurata	Pink variant	Larvicidal: *Aedes aegypti* (LC_{50} = 71.5 ppm)	71
A. purpurata	Red variant	Antibacterial: *Staphylococcus aureus* ATCC6538, *S. aureus* UFPEDA 02, *S. aureus* ORSA A5555, *S. aureus* ORSA A5107, *S. aureus* ORSA A57, *S. aureus* ORSA A5563, *S. aureus* ORSA A68, *S. epidermis* (MICs<10 µg/mL), *S. aureus* ORSA A64 (MIC=30 µg/mL*), S. aureus* ORSA A5409, *S. aureus* ORSA A55 (MICs=1000 µg/mL), *S. aureus* ORSA A71, *S. aureus* ORSA A5201 (MIC=500 µg/mL), *Pseudomonas aeruginosa, Escherichia coli, Salmonella* sp*., Shigella* sp*., Klebsiella* sp*., Proteus* sp. (MICs=1000 µg/mL)	71
A. rafflesiana	Leaf	Antibacterial: *Staphylococcus aureus* (MIC=7.81 µg/mL), *E. coli* (MIC=15.6 µg/mL); Pseudomonas putida (MIC=125 µg/mL)	74
A. rafflesiana	Leaf	Antifungal: *Candida albicans* (MIC=125 µg/mL)	74
A. rafflesiana	Pseudostem	Antibacterial: *Bacillus subtilis, Staphylococcus aureus* (MICs=31.25 µg/mL), *Escherichia coli* (MIC=62.5), *Pseudomonas aeruginosa, P. putida*	74

		(MICs=125)	
A. rafflesiana	Pseudostem	Antifungal: *Candida albicans, Aspergillus niger* (MICs=125 μg/mL)	74
A. rafflesiana	Fruit	Antibacterial: *Staphylococcus aureus* (MIC=31.25 μg/mL), *Bacillus subtilis, Escherichia coli, Pseudomonas aeruginosa, P. putida* (MICs=125)	74
A. rafflesiana	Fruit	Antifungal: *Candida albicans, Aspergillus niger* (MICs=125 μg/mL)	74
A. rafflesiana	Rhizome	Antifungal: *Aspergillus niger* (MIC=125 μg/mL)	74
A. scabra	Leaf	Antibacterial: *Staphylococcus aureus* ATCC 29213, ATCC 33591, ATCC 700699, VISA24 (MICs=2.5 μg/mL; *S. aureus* VRSA156 (MICs=0.63 μg/mL)	53
A. scabra	Leaf	Antifungal: *Candida albicans, C. glabrata, Microsporum canis, Trycophyton rubrum* (MICs=2.5 μg/mL)	53
A. scabra	Rhizome	Antibacterial: *Staphylococcus aureus* ATCC 29213, ATCC 700699 (MICs=0.63 μg/mL); *S. aureus* ATCC 33591 (MIC=1.25 μg/mL); *S. aureus* VISA24 (MIC=0.16 μg/mL); *S. aureus* VRSA156 (MIC=0.08 μg/mL)	53
A. scabra	Rhizome	Antifungal: *Candida albicans, C. glabrata, Microsporum canis, Trycophyton rubrum* (MICs=2.5 μg/mL)	53

A. speciosa	Seed	Larvicidal: *Aedes aegypti* (LC_{50} value of 125 and 87 ppm at 2 h and 24 h)	76
A. speciosa	Seed	Antioxidant: DPPH assay (0.25, 0.5, 1.0 mg/mL: 58.0, 59.9%, 63.1% inhibition, respectively)	76
A. speciosa	Leaf	Larvicidal: *Aedes aegypti* (LC_{50} value of 64 and 32 ppm at 2 h and 24 h)	76
A. speciosa	Leaf	Antioxidant: DPPH assay (0.25, 0.5, 1.0 mg/mL: 50.0, 56.4%, 67.0% inhibition, respectively)	76
A. speciosa	Seed	Antibacterial: 4 mg/disk: *Staphylococcus aureus* (27), *Escherichia coli* (15); 2 mg/disk: *S. aureus* (19), *E. coli* (10); 1 mg/disk: *S. aureus* (13). Note: number above present the diameter of zone of inhibition (mm); na: not active	76
A. speciosa	Seed	Antifungal: 4 mg/disk: *Malassezia pachydermatis* (20); *Candida albicans* (25); 2 mg/disk: *M. pachydermatis* (19); *C. albicans* (21); 1 mg/disk: *M. pachydermatis* (12); *C. albicans* (12). Note: number above present the diameter of zone of inhibition (mm)	76
A. speciosa	Leaf	Antibacterial: 4 mg/disk: *Staphylococcus aureus* (20); *Escherichia coli* (13); 2 mg/disk: *S. aureus* (19); *E. coli* (10); 1 mg/disk: *S. aureus* (12). Note: number above present the diameter of zone of inhibition (mm); na: not active	76
A. speciosa	Leaf	Antifungal: 4 mg/disk: *Malassezia pachydermatis* (18); *Candida albicans* (26); 2 mg/disk: *M. pachydermatis*	76

		(15); *C. albicans* (20); 1 mg/disk: *M. pachydermatis* (11); *C. albicans* (15). Note: number above present the diameter of zone of inhibition (mm)	
A. speciosa	Rhizome	Antibacterial: *Micrococcus luteus* (18); *Streptococcus mutans* (19); *Bacillus subtilis* (21); *Staphylococcus aureus* (16); *Salmonella typhi* (20); *Pseudomonas aeruginosa* (23). Note: number above present the diameter of zone of inhibition (mm)	77
A. speciosa	Leaf	Antibacterial: *Staphylococcus aureus* (1-2); *Escherichia coli* (2-4); *Mycobacterium smegmatis* (1-2); *Streptococcus faecalis* (>8); *Pseudomonas aeruginosa* (>8). Note: numbers above present MIC values (mg/mL)	79
A. speciosa	Leaf	Antifungal: *Candida albicans* (1-2); *Aspergillus niger* (2-4), *Cylindrocarpon mali* (1-2); *SotIyfis cinerea* (1-2); *Stereum purpureum* (1-2); *Sclerotinia sclerotiorum* (1-2). Note: numbers above present MIC values (mg/mL)	79
A. tonkinensis	Leaf	Antibacterial: *Escherichia coli, Staphylococcus aureus* subsp. *aureus* (MICs=50 μg/mL)	37
A. tonkinensis	Leaf	Antifungal: *Fusarium oxysporum* (MIC=50 μg/mL), *Saccharomyces cerevisiae* (MIC=25 μg/mL)	37
A. vittata	Leaf	Insecticidal: *Rhodnius nasutus* (73.3% of mortality at 125 μg/mL concentration of essential oil)	83
A. zerumbet	Leaf	Insecticidal: *Rhodnius nasutus* (83.3% of mortality at 125 μg/mL concentration of essential oil)	83

A. zerumbet	Leaf	Antioxidant (DPPH assay)	89
A. zerumbet	Leaf	Antibacterial: *Escherichia coli, Staphylococcus aureus, S. epidermidis*	94
A. zerumbet	Leaf	Antifungal: *Cryptococcus neoformans, Candida albicans*	94
A. zerumbet	Flower	Larvicidal: *Aedes aegypti* (at dose of 0.1%: 51.8% repellent and 64.9% irritant; at dose of 1%: 66.8% toxic)	85
A. zerumbet	Flower	Antibacterial: *Pseudomonas aeruginosa, Staphylococcus aureus, Bacillus cereus, Escherichia coli, Salmonella enteritidis, Listeria innocua*	85
A. zerumbet	Flower	Antifungal: *Aspergillus niger, Candida albicans*	85
A. zerumbet	Leaf and branch	Kinesiotherapeutic treatment	95

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