

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Artemisia annua*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
67	1,8-CINEOLE	Shoot	1	6600	-0.0019339060453946566	
67	1,8-CINEOLE	Leaf	2360	6600	0.3187048852429541	
10	ALPHA-AMYRIN	Plant	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
20	ALPHA-BISABOLOL	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
3	ALPHA-CADINOL	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
2	ALPHA-HUMULENE	Leaf	1	285	0.016038059526224918	
28	ALPHA-PINENE	Shoot	12	3760	0.6344499235339521	
28	ALPHA-PINENE	Leaf	1345	3760	0.019571775376842463	
13	ALPHA-TERPINENE	Leaf	4	11715	5.741186992571873	
23	ALPHA-TERPINEOL	Plant	2	1215	0.45987844614126255	
101	APIGENIN	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
3	ARTEANNUIN-B	Plant	800	5960		
7	ARTEMETIN	Tissue Culture	--	740		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ARTEMISIC-ACID	Plant	--	--		
15	ARTEMISININ	Flower	100	5000		Father Nature's Farmacy: The aggregate of all these three-letter citations.
15	ARTEMISININ	Leaf	10	5000		
15	ASCARIDOLE	Shoot	10	400		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
7	ASTRAGALIN	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
7	AXILLARIN	Plant	--	--		
9	BETA-AMYRIN	Plant	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
4	BETA-AMYRIN-ACETATE	Plant	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
5	BETA-ELEMENE	Plant	3	80	-0.17954660749211812	
13	BETA-PINENE	Shoot	3	840	-0.06226005738154163	
13	BETA-PINENE	Plant	--	--		
3	BETA-SELINENE	Plant	--	--		
47	BETA-SITOSTEROL	Shoot	--	--		
47	BETA-SITOSTEROL	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
47	BETA-SITOSTEROL	Root	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
35	BORNEOL	Plant	6	520	-0.20102331887336136	
12	BORNYL-ACETATE	Plant	--	40	-0.44342333019067204	
9	CAMPHENE	Plant	12	920	0.9679096269856168	
41	CAMPHOR	Leaf	100	6460	-0.0534217853770054	
37	CARVACROL	Shoot	40	1640	-0.4292748573282448	
19	CARVONE	Shoot	3	120	-0.23911192134150755	
8	CARYOPHYLLENE-OXIDE	Plant	--	--		
8	CARYOPHYLLENE-OXIDE	Leaf	30	700	2.5915887501581745	
8	CARYOPHYLLENE-OXIDE	Shoot	75	2920	6.004003488123152	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
6	CASTICIN	Plant	--	40		
7	CHRYSOEROL	Plant	--	--		
8	CHRYSOSPENETIN	Plant	--	350		
8	CHRYSOSPENETIN	Tissue Culture	--	650		
9	CHRYSOSPENOL-D	Tissue Culture	--	625		
9	CHRYSOSPENOL-D	Plant	--	1000		
10	CIRSILINEOL	Plant	--	60		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
10	CIRSILINEOL	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
10	CIRSILINEOL	Tissue Culture	--	500		
3	CIRSILIOL	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
57	COUMARIN	Plant	--	--		Father Nature's Farmacy: The aggregate of all these three-letter citations.
57	COUMARIN	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
10	CUMINALDEHYDE	Leaf	--	--		Father Nature's Farmacy: The aggregate of all these three-letter citations.
10	CUMINALDEHYDE	Shoot	4	160	0.5953580799824844	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
9	DELTA-CADINENE	Plant	--	--		
2	DEOXYARTEMISININ	Plant	--	--		
8	EUPATORIN	Plant	--	190		
2	FRIEDELAN-3-BETA-OL	Leaf	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
2	FRIEDELIN	Leaf	--	--		

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2	FRIEDELIN	Root	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
11	GAMMA-TERPINENE	Plant	1	830	-0.19640892696882867	
35	GERANIOL	Plant	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
2	GERMACRENE-D	Plant	24	7320	5.747275659742257	
2	HUMULENE	Plant	1	120	1	
16	ISOEUGENOL	Leaf	1	45		
4	ISOPINOCAMPHONE	Plant	--	40		
22	ISOQUERCITRIN	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
11	ISORHAMNETIN	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
75	KAEMPFEROL	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
75	KAEMPFEROL	Plant	--	--		
4	KAEMPFEROL-3-O-GLUCOSIDE	Plant	--	--		

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60	LIMONENE	Plant	--	1200	0.2517004840277634	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
60	LIMONENE	Shoot	2	80	-0.28771498042117827	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
53	LINALOOL	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
78	LUTEOLIN	Plant	--	--		
2	LUTEOLIN-7-O-GLUCOSIDE	Plant	--	--		
63	MENTHOL	Plant	--	--		
3	METHYL-ACETATE	Plant	--	--		
22	MYRCENE	Plant	12	2040	1.7651559766358145	
5	MYRTENAL	Shoot	5	200	-0.04147148010417455	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
5	MYRTENAL	Leaf	6	200	3.685440790449997	
2	MYRTENOL	Shoot	6	240	0.14877125069093244	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
2	MYRTENOL	Leaf	3	40	-0.10816745819583165	
5	NERYL-ACETATE	Plant	12	160	-0.32203126186907166	
2	OCIMENE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	OCTACOSANOL	Plant	--	--		Abid Ali Khan, M.M., Jain, D.C., Bhakuni, R.S., Zaim, M., and Thakur, R.S. 1991. Occurrence of some antiviral sterols in Artemisia annua. Plant Science, 75: 161-165, 1991.
64	OLEANOLIC-ACID	Plant	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
16	P-CYMENE	Plant	--	--		
16	P-CYMENE	Shoot	10	400	-0.1843115107377468	
2	PATULETIN	Plant	--	--		
4	PENDULETIN	Plant	--	--		
1	PHYTOL	Plant	--	--		
3	PONTICAPOXIDE	Shoot	--	--		
2	QUERCETAGETIN-6,7,3',4'-TETRAMETHYLETHER	Plant	--	--		
176	QUERCETIN	Plant	--	--		
6	QUERCIMERITRIN	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
18	RHAMNETIN	Plant	--	--		
7	RHAMNOCITRIN	Plant	--	--		
5	SABINENE	Leaf	--	1520	0.7072433248792381	
5	SABINOL	Leaf	50	680	1.0356295255642778	
22	SCOPARONE	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.

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44	SCOPOLETIN	Plant	--	--		
3	SCOPOLIN	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
12	STIGMASTEROL	Shoot	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
12	STIGMASTEROL	Plant	--	--		
12	STIGMASTEROL	Root	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
23	TERPINEN-4-OL	Plant	15	1135	0.21296450672015324	
71	THYMOL	Plant	--	--		Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
2	TRANS-BETA-FARNESENE	Plant	15	1520	2.4368963000117096	
2	TRANS-PINOCARVEOL	Plant	1	40	-1	
5	VERBENONE	Plant	20	625	0.6025658340962582	
1	YLANGENE	Plant	--	--		Father Nature's Pharmacy: The aggregate of all these three-letter citations.