

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**Chemicals found in *Melaleuca alternifolia***

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
53	LINALOOL	Root Essent. Oil				--
28	ALPHA-PINENE	Resin, Exudate, Sap				--
0	(-)-ALPHA-PHELLANDRENE	Essential Oil				--
16	P-CYMENE	Resin, Exudate, Sap				--
0	ALPHA-TERPINEOL ACETATE	Essential Oil				--
18	TERPINEOL	Leaf Essent. Oil				--
5	EUGENOL-METHYL-ETHER	Essential Oil				--
0	(+)-ALPHA-PHELLANDRENE	Essential Oil				--
0	CIS-MENTH-2-EN-1-OL	Leaf				--
67	1,8-CINEOLE	Resin, Exudate, Sap				--
0	(-)-LIMONENE	Essential Oil				--
23	ALPHA-TERPINEOL	Resin, Exudate, Sap				--
0	BETA-MAALIENE	Essential Oil				--
23	TERPINEN-4-OL	Resin, Exudate, Sap				--
0	BETA-GURJUNENE	Essential Oil				--
0	EO	Leaf Essent. Oil				--
0	P-CYMEN-8-OL	Essential Oil				--
0	GLOBULOL	Leaf				--
1	VIRIDIFLOROL	Leaf				--
0	1,4-CINEOLE	Essential Oil				--
13	ALPHA-TERPINENE	Resin, Exudate, Sap				--
11	GAMMA-TERPINENE	Resin, Exudate, Sap				--
0	TRANS-MENTH-2-EN-1-OL	Leaf				--
0	SABINENE-HYDRATE	Essential Oil				--
0	MENTH-TRANS-2-EN-1-OL	Root Essent. Oil				--
9	TERPINOLENE	Resin, Exudate, Sap				--
5	SABINENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	DELTA-CADINENE	Leaf				--
6	ALPHA-THUJONE	Leaf				--
10	NEROL	Leaf		0.001	-0.2992998552857443	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
41	CAMPHOR	Leaf		0.001	-0.24890202349105242	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BETA-ELEMENE	Leaf		0.001	-0.4199714835192588	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	CAMPHENE	Leaf		0.001	-0.19269250009719266	--
0	MENTHATRIENES	Leaf		0.001		--
3	HEXANOL	Leaf		0.001	-0.8082143664707829	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALLYL-HEXANOATE	Leaf		0.001		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	1,4-CINEOLE	Leaf		0.001	-1.0000000000000002	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-CUBEBENE	Leaf	4.0	11.0	-0.33767336771702017	--
2	HUMULENE	Leaf	0.001	12.0	-0.41827085091213445	--
0	CYMENENE	Leaf		12.0		--
0	PIPERITOL	Leaf	7.0	18.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-P-DIMETHYL-STYRENE	Leaf	7.0	18.0	0.8209501528352008	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	PIPERITONE	Leaf	8.0	20.0	-0.34645324761107676	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-COPAENE	Leaf	10.0	25.0	-0.20757155613371883	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LINALOL	Leaf	10.0	25.0	-0.4277914563027185	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Leaf	10.0	25.0	-0.6301316521369809	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CALAMENENE	Leaf	10.0	25.0	-0.111319970411964	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-MUUROLENE	Leaf	0.001	30.0	0.829713596299792	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Leaf	12.0	30.0	-0.2420946764640284	--
0	P-CYMEN-8-OL	Leaf	13.0	32.0	0.5643126655863213	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-BULNESENE	Leaf		36.0	0.07322484800969471	--
11	ALPHA-PHELLANDRENE	Leaf	10.0	50.0	-0.27886249891189346	--
0	ALPHA-GURJUNENE	Leaf	23.0	58.0	-0.15077995129517616	--
3	BETA-TERPINEOL	Leaf	24.0	60.0	-0.8297067996547693	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Leaf		75.0	-0.2851944616556111	--
0	ALPHA-THUJENE	Leaf		76.0	0.14353236368545716	--
0	TERPINEN-1-OL	Leaf	40.0	100.0		--
0	ALLO-AROMADENDRENE	Leaf	45.0	112.0	-0.17653245666091683	--
22	MYRCENE	Leaf	52.0	130.0	-0.1257647130754704	--
31	CARYOPHYLLENE	Leaf	0.001	154.0	-0.5815524234681825	--
60	LIMONENE	Leaf	100.0	250.0	-0.18478404667687756	--
0	VIRIDIFLORENE	Leaf	103.0	257.0	0.8589791738058528	--
0	ALPHA-CADININE	Leaf	143.0	358.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ALPHA-TERPINOLENE	Leaf		364.0	2.0000000000000004	--
0	GAMMA-ELEMENE	Root Essent. Oil		400.0	-1.0	--
0	ALLO-AROMADENDRENE	Root Essent. Oil		500.0	-1.0	--
0	PALUSTROL	Essential Oil		600.0		--
0	CYCLOHEXANONE	Root Essent. Oil		600.0		--
3	AROMADENDRENE	Leaf	235.0	675.0	-0.21124659009947788	--
28	ALPHA-PINENE	Leaf	200.0	700.0	-0.17909734011546727	--
0	BETA-CUBEBENE	Root Essent. Oil		900.0	-1.0	--
0	ALPHA-CUBEBENE	Essential Oil		900.0	-0.7496353203164464	--
0	BETA-CARYOPHYLLENE	Root Essent. Oil		900.0	-1.351320209582369	--
23	ALPHA-TERPINEOL	Leaf	180.0	902.0	0.9931170779349295	--
13	BETA-PINENE	Leaf	59.0	950.0	0.9721123440273721	--
0	HEX-CIS-3-EN-1-OL-ACETATE	Root Essent. Oil		1100.0		--
0	BICYCLOGERMACRENE	Essential Oil		1300.0	-1.0	--
0	GAMMA-GURJUNENE	Essential Oil		1500.0		--
0	SPATHULENOL	Essential Oil		1500.0	-1.0	--
0	DIMETHYL-STYRENE	Essential Oil		1700.0		--
0	ALPHA-COPAENE	Essential Oil		1700.0	-0.549784304993286	--
0	EPIGLOBULOL	Essential Oil		1800.0		--
9	DELTA-CADINENE	Root Essent. Oil		1800.0	-1.0	--
0	(-)-ALPHA-PINENE	Essential Oil		1800.0		--
0	ALPHA-BULNESENE	Essential Oil		1900.0		--
0	CIS-SABINENE-HYDRATE	Root Essent. Oil		2000.0		--
23	ALPHA-TERPINEOL	Root Essent. Oil		2600.0	-1.0	--
0	ALPHA-MUUROLENE	Essential Oil		2600.0		--
0	CALAMENENE	Essential Oil		2700.0	-1.0	--
16	P-CYMENE	Leaf	300.0	2855.0	1.971811409853858	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ALPHA-AMORPHENE	Essential Oil		2900.0		--
2	BETA-MYRCENE	Leaf Essent. Oil		3000.0	-1.0	--
0	CADINA-1,4-DIENE	Essential Oil		3000.0		--
11	GAMMA-TERPINENE	Leaf	1154.0	3000.0	5.412420563741664	--
53	LINALOOL	Essential Oil		3000.0	-0.5696931497516874	--
13	ALPHA-TERPINENE	Leaf Essent. Oil		4000.0	-0.40119306019054174	--
0	TRANS-SABINENE-HYDRATE	Root Essent. Oil		4200.0		--
13	ALPHA-TERPINENE	Leaf	190.0	4375.0	1.9483528403779093	--
0	BETA-CARYOPHYLLENE	Essential Oil		4400.0	-0.6585545633164767	--
0	ALPHA-GURJUNENE	Essential Oil		4500.0		--
2	BETA-MYRCENE	Essential Oil		4600.0	-0.7384455661051742	--
0	EPIBICYCLOSQUIPHELLANDRENE	Essential Oil		5100.0		--
0	(+)-LIMONENE	Essential Oil		5100.0	-1.0	--
0	CUBENOL	Essential Oil		5200.0		--
3	BETA-PHELLANDRENE	Essential Oil		5800.0	-0.713882215037173	--
1	VIRIDIFLOROL	Essential Oil		5800.0		--
9	TERPINOLENE	Leaf	236.0	6125.0	7.570382304488845	--
3	BETA-PHELLANDRENE	Root Essent. Oil		6300.0	-1.0	--
0	ALLO-AROMADENDRENE	Essential Oil		6900.0	1.0	--
23	TERPINEN-4-OL	Root Essent. Oil		6900.0		--
0	(-)-ALPHA-TERPINEOL	Essential Oil		6900.0		--
13	BETA-PINENE	Essential Oil	300.0	7000.0	-0.5749553308101988	--
0	GLOBULOL	Essential Oil		8000.0	-1.0	--
16	P-CYMENE	Root Essent. Oil		8430.0	-0.4599999223758389	--
60	LIMONENE	Leaf Essent. Oil		9000.0	-0.63844114380332	--
28	ALPHA-PINENE	Root Essent. Oil		9800.0	-1.1278541471754733	--
13	BETA-PINENE	Root Essent. Oil		10500.0	-1.0863317981096507	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	TERPINEN-4-OL	Leaf	2941.0	11225.0	6.06904915922846	--
22	MYRCENE	Essential Oil	8000.0	14000.0	-0.26049993773662816	--
0	ALPHA-THUJENE	Essential Oil	4400.0	15000.0	-0.303780787236796	--
67	1,8-CINEOLE	Leaf	260.0	16000.0	1.5277861196026847	--
13	BETA-PINENE	Leaf Essent. Oil		16000.0	-0.2532672759131343	--
3	AROMADENDRENE	Essential Oil		16100.0	-1.0	--
0	(+)-ALPHA-PINENE	Essential Oil		16800.0		--
0	VIRIDIFLORENE	Essential Oil		17500.0		--
9	DELTA-CADINENE	Essential Oil		18600.0	-1.0	--
60	LIMONENE	Root Essent. Oil		18700.0	-0.8519056002007065	--
11	ALPHA-PHELLANDRENE	Essential Oil		19000.0	-0.22528390900924156	--
9	TERPINOLENE	Root Essent. Oil		19200.0	-0.729853559357455	--
0	(+)-ALPHA-TERPINEOL	Essential Oil		20300.0		--
16	P-CYMENE	Leaf Essent. Oil		21000.0	-0.46661329399275026	--
22	MYRCENE	Root Essent. Oil		22000.0	-0.3578739589461676	--
28	ALPHA-PINENE	Essential Oil	23000.0	24000.0	-0.34888246838447257	--
28	ALPHA-PINENE	Leaf Essent. Oil		25000.0	-0.61562400418455	--
0	EO	Leaf	10000.0	25000.0	1.1843761113015423	--
67	1,8-CINEOLE	Root Essent. Oil		25700.0		--
23	ALPHA-TERPINEOL	Leaf Essent. Oil		29000.0	-0.278711890942207	--
23	ALPHA-TERPINEOL	Essential Oil	25000.0	31000.0	0.5997972191734514	--
0	ALPHA-TERPINOLENE	Essential Oil		31800.0		--
9	TERPINOLENE	Leaf Essent. Oil		33000.0	2.3936050236563244	--
60	LIMONENE	Essential Oil	9000.0	43000.0	-0.48956283691487124	--
16	P-CYMENE	Essential Oil	2000.0	49600.0	-0.22389544060464844	--
67	1,8-CINEOLE	Leaf Essent. Oil	29000.0	56000.0	-0.6361233586223465	--
13	ALPHA-TERPINENE	Root Essent. Oil		92400.0	1.4125007138341448	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
13	ALPHA-TERPINENE	Essential Oil	13000.0	99000.0	1.9993554266154203	--
1	(-)-TERPINEN-4-OL	Essential Oil		131300.0		--
0	ALPHA-THUJENE	Root Essent. Oil		133000.0	1.4120805090287523	--
11	GAMMA-TERPINENE	Root Essent. Oil		135400.0	1.0	--
11	GAMMA-TERPINENE	Leaf Essent. Oil		204000.0	1.941434009810004	--
11	GAMMA-TERPINENE	Essential Oil	32000.0	211500.0	2.0658889836995122	--
1	(+)-TERPINEN-4-OL	Essential Oil		247300.0		--
67	1,8-CINEOLE	Essential Oil	30400.0	368000.0	0.697655500183284	--
23	TERPINEN-4-OL	Essential Oil	6000.0	374000.0	3.016973516825227	--
23	TERPINEN-4-OL	Leaf Essent. Oil	364000.0	385000.0	2.7176167658294537	--
9	TERPINOLENE	Essential Oil		429000.0	2.8243865215973427	--
5	SABINENE	Root Essent. Oil		491400.0	1.0	--