

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

**Chemicals Found in Tagetes lucida**

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(E)(E)-FARNESOL	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	(E)-ALPHA-BERGAMOTENE	Shoot	--	12		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	(E)-ANETHOLE	Shoot	--	1425		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	(E)-BETA-FARNESENE	Shoot	--	42		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	(E)-BETA-OCIMENE	Shoot	--	175	1.5454740059471903	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	(E)-NEROLIDOL	Shoot	--	12	1.4121888103638975	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	(E,E)-ALPHA-FARNESENE	Shoot	--	12	1	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	(Z)-BETA-OCIMENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(Z)-JASMONE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
67	1,8-CINEOLE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	4-METHOXYCINNAMALDEHYDE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	6,7,8-TRIMETHOXYSYCOUMARIN	Plant	--	--		Tramil
0	7-(3-METHYL-2-BUTENYLOXY)-COUMARIN	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	7-HYDROXYCOUMARIN-DIMETHYLALLYL-ETHER	Plant	--	--		Tramil
3	7-METHOXYSYCOUMARIN	Plant	--	--		Tramil
0	ALLYLANISOL	Leaf	--	--		Tramil
0	ALPHA-CADINENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
3	ALPHA-CADINOL	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	ALPHA-CALACORENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-COPAENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	ALPHA-CUBEBENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
2	ALPHA-HUMULENE	Shoot	--	12	-0.3074894239105738	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	ALPHA-MUUROLENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
3	ALPHA-SELINENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	ALPHA-TERPINYL-ACETATE	Shoot	--	30	-0.2677037361969252	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
36	ANETHOLE	Leaf	--	--		Tramil
7	ANISALDEHYDE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	ANISE-KETONE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
6	BETA-BISABOLENE	Shoot	--	30	-0.5055589966974394	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-CARYOPHYLLENE	Shoot	--	80	-0.24778384050600555	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	BETA-CARYOPHYLLENE	Leaf	--	280	-0.19773626527356686	Tramil
5	BETA-ELEMENE	Shoot	--	18	-0.27895733922858784	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	BETA-OCIMENE	Leaf	--	140	1	Tramil
3	BETA-SELINENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	BICYCLOGERMACRENE	Shoot	--	35	-0.7209320708276478	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
8	CARYOPHYLLENE-OXIDE	Shoot	--	12	-0.37295117856903687	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
3	CHAVICOL	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	COUMARINS	Plant	--	--		Tramil
0	CUBENENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
9	DELTA-CADINENE	Shoot	--	18	-0.27894019715305146	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DIHYDRO-TAGETONE	Leaf	--	--		Tramil
0	DIHYDROACTINIDIOLIDE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
2	ELEMOL	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	EO	Shoot	--	6000	-0.3976779917753276	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
12	ESTRAGOLE	Shoot	--	2035	-0.39045670208324623	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
12	ESTRAGOLE	Leaf	--	--		Tramil
5	EUGENOL-METHYL-ETHER	Leaf	--	--		Tramil
62	GALLIC-ACID	Leaf	--	--		Tramil
0	GAMMA-CADINENE	Shoot	--	30	-0.16642711546501981	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	GAMMA-ELEMENE	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
2	GERMACRENE-D	Shoot	--	160	-0.2807920652150918	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GLOBULOL	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
12	HERNIARIN	Shoot	--	30		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	LEUCOANTHOCYANINS	Plant	--	--		Tramil
60	LIMONENE	Leaf	--	165	-0.27420410544311447	Tramil
53	LINALOOL	Leaf	--	--		Tramil
53	LINALOOL	Shoot	--	65	-0.2184175000153399	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	MELLEIN	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
20	METHYL-EUGENOL	Shoot	--	1460	-0.15199819444423854	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
15	METHYL-ISOEUGENOL	Shoot	--	120		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
22	MYRCENE	Shoot	--	75	-0.2567361653897198	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
22	MYRCENE	Leaf	40	50	-0.15463291765039833	Tramil

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0	NEOPHYTADIENE	Shoot	--	48		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
2	PATULETIN	Plant	--	--		Tramil
1	PHYTOL	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	POLYACETYLENES	Plant	--	--		Tramil
8	QUERCETAGETIN	Plant	--	--		Tramil
5	SAPONINS	Plant	--	--		Tramil
0	SAPTHULENOL	Shoot	--	12		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
0	T-CADINOL	Shoot	--	6	-0.6925760353079873	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
2	TAGETONE	Leaf	--	--		Tramil
0	TANNINS	Plant	--	--		Tramil
0	TERTHIENYL-AA	Plant	--	--		Tramil
0	TETRAHYDROTAGETONE	Leaf	--	--		Tramil
7	THIOPHENE	Plant	--	--		Tramil
2	TORREYOL	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.

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1	VIRIDIFLOROL	Shoot	--	--		Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.