

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Tagetes minuta*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DIHYDRO-TAGETONE	Essential Oil	77300.0	990000.0		--
3	CIS-OCIMENE	Essential Oil		513200.0		--
0	DIHYDRO-TAGETONE	Flower Essent. Oil	90700.0	480900.0		--
0	TRANS-BETA-OCIMENE	Fruit Essent. Oil		394400.0		--
0	TRANS-OCIMENONE	Leaf Essent. Oil		356000.0		Zygadlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of <i>Tagetes Minuta</i> L. and <i>T. filifolia</i> Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
60	LIMONENE	Fruit Essent. Oil	213100.0	353200.0	-0.32654836924013236	--
60	LIMONENE	Flower Essent. Oil	166300.0	353200.0	0.7456036872623704	--
0	CIS-OCIMENONE	Leaf Essent. Oil		321000.0		Zygadlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of <i>Tagetes Minuta</i> L. and <i>T. filifolia</i> Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	DIHYDRO-TAGETONE	Shoot Essent. Oil		300000.0		--
3	CIS-OCIMENE	Flower Essent. Oil		283500.0		--
0	TRANS-TAGETONE	Flower Essent. Oil	34300.0	272700.0		--
0	CIS-TAGETONE	Flower Essent. Oil	70000.0	271500.0		--
0	CIS-TAGETONE	Fruit Essent. Oil	87800.0	246200.0		--
13	PALMITIC-ACID	Seed Oil		216400.0	0.22973165000663703	--
60	LIMONENE	Leaf Essent. Oil		200000.0	0.20584956866150136	Zygadlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of <i>Tagetes Minuta</i> L. and <i>T. filifolia</i> Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	DIHYDRO-TAGETONE	Fruit Essent. Oil	154300.0	166200.0		--
0	TRANS-OCIMENONE	Fruit Essent. Oil		148300.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-TAGETONE	Shoot Essent. Oil		141000.0		--
0	CIS-TAGETENONE	Fruit Essent. Oil	132200.0	137600.0		--
0	TRANS-TAGETENONE	Fruit Essent. Oil	132200.0	137600.0		--
0	CIS-TAGETENONE	Flower Essent. Oil	1300.0	132200.0		--
0	TRANS-TAGETENONE	Flower Essent. Oil	5000.0	132200.0		--
0	TRANS-OCIMENONE	Flower Essent. Oil		100000.0		--
0	CIS-OCIMENONE	Flower Essent. Oil		100000.0		--
0	CIS-OCIMENONE	Fruit Essent. Oil		91500.0		--
60	LIMONENE	Shoot Essent. Oil		83000.0	-0.06856978436527997	--
0	TRANS-OCIMENE	Essential Oil		78000.0	1.3422809192685805	--
0	TRANS-TAGETONE	Shoot Essent. Oil		63000.0		--
0	CIS-OCIMENONE	Essential Oil		61700.0		--
0	TRANS-TAGETONE	Leaf Essent. Oil		60000.0		Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	TRANS-OCIMENONE	Essential Oil		57800.0		--
0	TRANS-TAGETONE	Fruit Essent. Oil	4900.0	44900.0		--
0	DIHYDROTAGETENONE	Flower Essent. Oil		44000.0		--
0	CIS-TAGETONE	Essential Oil		41700.0		--
0	SPATHULENOL	Essential Oil		20900.0	1.0	--
0	CIS-TAGETONE	Leaf Essent. Oil		20000.0		Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	2,3,5-TRIMETHYLFURAN	Fruit Essent. Oil		18900.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BUTYRIC-ACID-2-METHYL-ETHYL-ESTER	Fruit Essent. Oil		16500.0		--
13	BETA-PINENE	Essential Oil		14800.0	-0.4017613642678912	--
0	GERMACRENE-B	Flower Essent. Oil		11200.0		--
28	ALPHA-PINENE	Essential Oil		10300.0	-0.4694352163298297	--
13	BETA-EUDESOL	Leaf Essent. Oil		10000.0	-1.0	Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	DIHYDROCARVONE	Essential Oil		9100.0	-0.482867976917054	--
19	CARVONE	Essential Oil		8800.0	-0.8252268577968479	--
1	CARVEOL	Essential Oil		8500.0		--
19	CARVONE	Fruit Essent. Oil		7700.0	-0.6921983533349608	--
0	TRANS-BETA-OCIMENE	Leaf Essent. Oil		7000.0	-0.08149887373862419	Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
3	ELEMENE	Fruit Essent. Oil		6900.0		--
35	BORNEOL	Essential Oil		6500.0	-0.8514325616391961	--
0	OCTAN-1-AL	Fruit Essent. Oil		6200.0		--
0	BETA-CARYOPHYLLENE	Fruit Essent. Oil		5800.0	-0.6397785658600676	--
31	CARYOPHYLLENE	Flower Essent. Oil		5200.0		--
0	EO	Plant	1870.0	5000.0	-0.36013745523464397	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
11	GAMMA-TERPINENE	Essential Oil		4300.0	-0.7634064999488264	--
7	PIPERITONE	Fruit Essent. Oil		4100.0	1.0	--
2	ALPHA-HUMULENE	Flower Essent. Oil		4000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
10	ALPHA-TERTHIENYL	Flower Essent. Oil		3600.0		--
71	THYMOL	Fruit Essent. Oil		3600.0		--
0	TRANS-OCIMENE	Flower Essent. Oil		3300.0		--
0	PROPIONIC-ACID-2-METHYL-ETHYL-ESTER	Fruit Essent. Oil		3300.0		--
2	TAGETONE	Plant	288.0	3000.0	1.4127994891069109	--
1	DECAN-1-AL	Fruit Essent. Oil		2800.0		--
0	OCTAN-1-OL	Fruit Essent. Oil		2600.0	1.0	--
0	ACETIC-ACID-2-METHYL-BUTYL-ESTER	Fruit Essent. Oil		2300.0		--
5	SABINENE	Fruit Essent. Oil		2200.0	-0.7067721445459115	--
0	5-METHYL-ALPHA-TERTHIENYL	Flower Essent. Oil		2000.0		--
0	OCTAN-1-OL	Flower Essent. Oil		1900.0		--
2	GERMACRENE-D	Flower Essent. Oil		1900.0		--
5	SABINENE	Flower Essent. Oil		1800.0		--
4	PHELLANDRENE	Flower Essent. Oil		1700.0		--
2	OCIMENE	Plant	280.0	1500.0	0.3961170617858969	--
0	TRANS-TAGETONE	Essential Oil		1300.0		--
0	GLOBULOL	Flower Essent. Oil		1200.0		--
9	TERPINOLENE	Essential Oil		1200.0	-0.38665617795621554	--
2	BETA-MYRCENE	Plant	374.0	1000.0	1.0	--
0	ALPHA-COPAENE	Essential Oil		1000.0	-0.5679033734252681	--
0	5-ISOBUTYL-3-METHYLFURAN-2-CARBALDEHYDE	Essential Oil		1000.0		--
3	AROMADENDRENE	Ge	324.0	925.0		--
3	AROMADENDRENE	Plant	324.0	925.0	1.7318445510029972	--
0	DECAN-1-OL-ACETATE	Flower Essent. Oil		800.0		--
0	DECAN-1-OL	Flower Essent. Oil		800.0	-1.0	--
0	ALPHA-THUJENE	Essential Oil		800.0	-0.3954227110609452	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	PHENYL-ETHYL-ALCOHOL	Plant	288.0	770.0	1.39670970884395	--
0	GAMMA-ELEMENE	Essential Oil		700.0		--
0	DELTA-ELEMENE	Flower Essent. Oil		700.0		--
1	VIRIDIFLOROL	Flower Essent. Oil		500.0		--
0	2,6-DIMETHYL-7-OCTEN-4-ONE	Plant	93.0	500.0		Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
23	TERPINEN-4-OL	Flower Essent. Oil		500.0		--
19	D-LIMONENE	Plant	56.0	425.0	-0.4885256071430556	--
5	SALICYLALDEHYDE	Plant	47.0	395.0		--
7	D-CARVONE	Plant	122.0	325.0		--
0	LINALOL-MONOXIDE	Plant	93.0	250.0		--
0	LINALOOL-MONOXIDE	Plant	93.0	250.0		--
0	D-CADINENE	Flower Essent. Oil		200.0		--
0	L-LINALOL	Plant	1.0	175.0	-0.17946446333066804	--
0	L-LINALOOL	Plant	1.0	175.0	-0.38254777872090373	--
2	PHENYL-ACETALDEHYDE	Plant	65.0	175.0		--
0	2-HEXEN-1-AL	Plant	65.0	175.0		--
7	LINALYL-ACETATE	Plant	34.0	125.0	-0.5179577333431766	--
67	1,8-CINEOLE	Plant	47.0	125.0	-0.526576510085783	--
0	EUDESMOL	Plant	41.0	110.0	-1.0	--
16	P-CYMENE	Flower Essent. Oil		100.0		--
0	SPATHULENOL	Flower Essent. Oil		100.0		--
28	ALPHA-PINENE	Flower Essent. Oil		100.0	-1.0	--
11	GAMMA-TERPINENE	Flower Essent. Oil		100.0		--
18	OLEIC-ACID	Seed Oil		16.0	-1.6780330457687065	--
0	3,7-DIMETHYL-OCTA-1,7-DIEN-6-ONE	Flower Essent. Oil		7.0		--
0	3,7-DIMETHYL-OCT-1-EN-6-ONE	Flower Essent. Oil		5.6		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	5-HYDROXY-3,7-DIETHYL-OCT-1-EN-6-ONE	Flower Essent. Oil				--
60	LIMONENE	Essential Oil				--
53	CITRAL	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	TAGETONE	Essential Oil				--
2	(5E)-OCIMENONE	Plant				Abstract (See species file)
0	QUERCETAGETRIN	Shoot				--
2	PYRETHRIN-I	Tissue Culture				--
18	TERPINEOL	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	BETA-PINENE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	SYRINGIC-ACID	Shoot				--
0	JASMOLIN-II	Tissue Culture				--
3	BETA-PHELLANDRENE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	STEARIC-ACID	Seed Oil				--
0	BETA-TAGETONE	Shoot Essent. Oil				--
0	SYRINGIC-ACID-MONOMETHYLESTER	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
13	FORMIC-ACID	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	ALPHA-PINENE	Leaf Essent. Oil				Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	JASMOLIN-I	Tissue Culture				--
13	BETA-PINENE	Leaf Essent. Oil				Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	PHENYLETHANOL	Essential Oil				--
1	EUGENOL-ACETATE	Leaf Essent. Oil				Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
35	GERANIOL	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
16	P-CYMENE	Plant				--
11	ISORHAMNETIN	Leaf				--
0	CIS-TAGETENONE	Shoot Essent. Oil				--
0	CINERIN-II	Tissue Culture				--
0	QUERCETAGETRIN	Tissue Culture				--
5	SABINENE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EO	Shoot Essent. Oil				--
0	TRANS-TAGETENONE	Shoot Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FUMARIC-ACID-MONOMETHYLESTER	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TRANS-BETA-OCIMENE	Shoot Essent. Oil				--
23	ALPHA-TERPINEOL	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	HEXAN-1-AL	Leaf Essent. Oil				Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
28	ALPHA-PINENE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	SALICYLALDEHYDE	Essential Oil				--
0	CINERIN-I	Tissue Culture				--
0	QUERCETAGETIN-7-O-BETA-GLUCOSIDE	Leaf				--
3	BETA-PHELLANDRENE	Leaf Essent. Oil				Zygodlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of Tagetes Minuta L. and T. filifolia Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	PATULITRIN	Tissue Culture				--
0	QUERCETAGETRIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	5-(3-BUTEN-1-YNYL)-2,2'-BITHIENYL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEPTAN-1-AL	Leaf Essent. Oil				Zygadlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of <i>Tagetes Minuta</i> L. and <i>T. filifolia</i> Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	5-METHYL-2,2',2'',5'-TERTHIOPHENE	Flower Essent. Oil				--
0	5-(BUT-3-EN-1-YNYL-2,2'-BITHIENYL	Plant				--
0	QUERCETAGETIN-3-ARABINOSYL-GALACTOSIDE	Leaf				--
3	BETA-PHELLANDRENE	Shoot Essent. Oil				--
0	PATULETRIN	Shoot				--
0	MONOMETHYLFUMARATE	Shoot				--
7	THIOPHENE	Root				--
0	2,2',2'',5'-TERTHIOPHENE	Flower Essent. Oil				--
0	5-(4-CHLORO-3-HYDROXYBUT-1-YNYL)-2,2-BITHIENYL	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	SABINENE	Leaf Essent. Oil				Zygadlo, J. S., Guzman, C. A., Grosso, N. R. 1994. Antifungal Properties of the Leaf Oils of <i>Tagetes Minuta</i> L. and <i>T. filifolia</i> Lag. J. Essent. Oil Res. 6 6: 617-621. Cat Quim Org Fac Cien Exact Univ Nacion Cordoba Cordoba 5000 Argentina.
0	QUERCETAGETIN-3-ARABINO-GALACTOSIDE	Shoot				--
0	PATULETIN-7-O-BETA-D-GLUCOSIDE	Leaf				--
16	ACETIC-ACID	Essential Oil				--
53	CITRAL	Essential Oil				--
7	THIOPHENE	Leaf				--
0	VALEREANIC-ACID	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	QUERCETAGETIN	Leaf				--
0	PATULETIN-7-O-BETA-D-GLUCOSIDE	Shoot				--
0	PATULETRIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	QUERCETIN-5-O-BETA-D-GLUCOSIDE	Shoot				--
8	QUERCETAGETIN	Shoot				--
2	PATULETIN	Leaf				--
0	OCIMENONE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CYMENE	Plant				--
176	QUERCETIN	Shoot				--
9	CAMPHENE	Essential Oil				--
2	PYRETHRIN-II	Tissue Culture				--
9	VALERIC-ACID	Plant				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
10	ALPHA-TERTHIENYL	Root				Downum, K. R., Towers, G. H. N. 1983. Analysis of Thiophenes in the Tageteae (Asteraceae) by HPLC. J. Nat. Prod. 46 1: 98-103. Dept. Botany Univ. British Columbia Vancouver BC V6T 1W5 Canada
2	PATULETIN	Shoot				--
0	DIHYDRO-TAGETONE	Leaf Essent. Oil				--
0	TRANS-OCIMENONE	Shoot Essent. Oil				--