Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in Thymus vulgaris

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	4'5-DIHYDROXY-3',6,7-TRIMETHOXYFLAVONE	Leaf	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
8	4-TERPINEOL	Plant	73	8320	1	
2	5,4'-DIHYDROXY-6,7,8,3'-TETRAMETHOXYFLAVONE	Plant	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
2	6-HYDROXY-LUTEOLIN	Leaf	--	--		
2	8-METHOXY-CIRSILINEOL	Leaf	7.4	7.4		
3	ALANINE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
15	ALPHA-LINOLENIC-ACID	Plant	6900	7452	0.18376314105806602	USDA's Ag Handbook 8 and sequelae)
11	ALPHA-PHELLANDRENE	Essential Oil	--	12500	-0.35109578631088695	
11	ALPHA-PHELLANDRENE	Plant	50	425	1.7924573974319133	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
28	ALPHA-PINENE	Plant	15	1598	0.6494097697745248	
28	ALPHA-PINENE	Essential Oil	--	8000	-0.489673998831605	
13	ALPHA-TERPINENE	Plant	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	ALPHA-TERPINENE	Essential Oil	--	--		
23	ALPHA-TERPINEOL	Plant	36	6500	4.5501166473010075	
23	ALPHA-TERPINEOL	Essential Oil	--	--		
5	ALUMINUM	Leaf	155	920	0.20677516470176702	
1	AMYL-ALCOHOL	Essential Oil	13900	13900		
36	ANETHOLE	Essential Oil	--	--		
101	APIGENIN	Plant	--	--		
112	ASCORBIC-ACID	Leaf	--	--	-0.4439200969762572	
53	BETA-CAROTENE	Leaf	4	25	-1.0290654853904624	
53	BETA-CAROTENE	Plant	24	25	-0.5917819689568318	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	BETA-PHELLANDRENE	Plant	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	BETA-PHELLANDRENE	Essential Oil	--	--		
13	BETA-PINENE	Plant	15	420	0.018001776257486977	
13	BETA-PINENE	Essential Oil	--	3400	-0.6548910076758792	
47	BETA-SITOSTEROL	Leaf	1520	1600	-0.21356853970640116	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	BETA-TERPINEOL	Plant	79	673		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	BETA-TERPINEOL	Essential Oil	--	19800	-1	
35	BORNEOL	Essential Oil	--	--		
35	BORNEOL	Leaf	15	1462	1.3342119455552743	
12	BORNYL-ACETATE	Leaf	16	795	0.024849263231709388	
4	BORON	Plant	34	48	-0.3285060001497114	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
102	CAFFEIC-ACID	Leaf	16900	16900	1.6286156543306036	
28	CALCIUM	Leaf	2806	16700	-0.11869746309625637	
28	CALCIUM	Plant	16935	22534	0.9567743716867843	USDA's Ag Handbook 8 and sequelae)
2	CAMPESTEROL	Plant	--	30	-0.5969128791852656	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
9	CAMPHENE	Plant	15	375	0.03564329014217928	
9	CAMPHENE	Essential Oil	--	4100	-0.5707424955262961	
41	CAMPHOR	Plant	5	45	-0.6310839661679942	J. Ethnopharmacology, 39: 167.
3	CAPRIC-ACID	Plant	1200	1296	1.339345677770498	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	CAPRYLIC-ACID	Plant	2400	2592	-1	USDA's Ag Handbook 8 and sequelae)
37	CARVACROL	Shoot	--	--		
37	CARVACROL	Essential Oil	16700	80200	-0.7047683392180678	
37	CARVACROL	Plant	8	18720	1.7231339758690776	
19	CARVONE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
31	CARYOPHYLLENE	Essential Oil	--	13600	-0.5131215564619739	
77	CHLOROGENIC-ACID	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	CHLOROGENIC-ACID	Shoot	--	--		
24	CHROMIUM	Leaf	0.3	2	-0.47584894253972093	
7	CHRYSOERIOL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
18	CINNAMIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
10	CIRSILINEOL	Leaf	--	--		
9	CIRSIMARITIN	Leaf	20	20		
53	CITRAL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
2	COBALT	Leaf	2	11.3	-0.23172123703899697	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	COPPER	Plant	8	9	-0.5555522679388898	USDA's Ag Handbook 8 and sequelae)
4	COSMOSIIN	Leaf	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
4	COSMOSIIN	Plant	--	--		
57	COUMARIN	Essential Oil	--	3000		
3	CYNAROSIDE	Plant	--	--		
2	CYSTINE	Plant	1370	1980	-0.14920906466229109	
8	DELTA-3-CARENE	Plant	510	510	1.4050753285540967	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	DELTA-CADINENE	Essential Oil	--	--		
13	DIOSMETIN	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
10	ERIODICTYOL	Plant	--	--		
76	EUGENOL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
61	FERULIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
15	FIBER	Plant	179294	693000	3.476313110187907	
62	GALLIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	GAMMA-TERPINENE	Plant	36	5460	1.6865623237463772	
11	GAMMA-TERPINENE	Essential Oil	17800	49500	-0.14620497552360953	
3	GENKWANIN	Leaf	--	43		
35	GERANIOL	Plant	--	10660	1.3821598262581827	
35	GERANIOL	Essential Oil	--	--		
5	GERANYL-ACETATE	Plant	--	3380	3.505632505880159	
7	GERMACRONE	Essential Oil	--	--		
12	GLYCINE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
6	IRON	Plant	1075	1508	1.0375715013534672	USDA's Ag Handbook 8 and sequelae)
6	IRON	Leaf	25	147	-0.5479717246880129	
7	ISOBORNEOL	Essential Oil	--	--		
4	ISOCHLOROGENIC-ACID	Shoot	--	--		
4	ISOCHLOROGENIC-ACID	Leaf	--	--		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
16	ISOEUGENOL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
3	ISOLEUCINE	Plant	4680	5054	-0.6194658766918496	USDA's Ag Handbook 8 and sequelae)
4	ISOTHYMONIN	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
75	KAEMPFEROL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
1	LABIATIC-ACID	Leaf	--	--		
7	LAURIC-ACID	Plant	2300	2484	-0.35586324954160825	USDA's Ag Handbook 8 and sequelae)
2	LEUCINE	Plant	4300	4644	-0.9358077276861205	USDA's Ag Handbook 8 and sequelae)
60	LIMONENE	Essential Oil	--	5300	-0.7065592764801447	
60	LIMONENE	Plant	15	5200	2.7100484195210193	
53	LINALOOL	Plant	20	17420	1.6923500644491847	
53	LINALOOL	Essential Oil	28200	42800	-0.3912382959429395	
7	LINALYL-ACETATE	Plant	15	4680	1.672465199772225	
27	LINOLEIC-ACID	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
27	LINOLEIC-ACID	Plant	5000	5400	-0.498228841183293	USDA's Ag Handbook 8 and sequelae)
11	LITHIUM	Plant	4	4	1	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	LITHOSPERMIC-ACID	Shoot	--	--		
78	LUTEOLIN	Leaf	--	--		
78	LUTEOLIN	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	LYSINE	Plant	2070	2236	-0.977693978133575	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Plant	1630	2992	-0.3334971399346445	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Leaf	733	4360	0.09045438563126122	
14	MANGANESE	Leaf	1	6.4	-0.44924615028330334	
30	MENTHONE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
15	METHIONINE	Plant	1370	1980	-0.0006446701756579119	USDA's Ag Handbook 8 and sequelae)
22	MYRCENE	Essential Oil	--	17500	-0.21460744003259294	
22	MYRCENE	Plant	36	676	0.2665889258585754	
6	MYRISTIC-ACID	Plant	1500	1620	0.7382551297828841	USDA's Ag Handbook 8 and sequelae)
56	NARINGENIN	Plant	--	--		
11	NEROLIDOL	Plant	80	80	0.6116455838839169	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
39	NIACIN	Plant	54	54	-0.3183355989371754	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
39	NIACIN	Leaf	9	54	-0.5291254900954042	
2	OCIMENE	Essential Oil	--	--		
64	OLEANOLIC-ACID	Plant	6300	6300	0.6651424785159418	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	OLEIC-ACID	Plant	4700	5076	0.1061240929953362	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Seed	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
25	P-COUMARIC-ACID	Leaf	420	420	-0.2397011509117522	
16	P-CYMENE	Plant	146	20800	4.994249412924975	
16	P-CYMENE	Essential Oil	78300	441300	3.0099759781102042	
13	P-HYDROXY-BENZOIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
13	PALMITIC-ACID	Plant	17200	18576	0.13135300956566015	USDA's Ag Handbook 8 and sequelae)
7	PHENYLALANINE	Plant	2410	2603	-1.1092448563718826	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Leaf	160	950	-0.7398952649396242	
4	PHOSPHORUS	Plant	1703	2502	-0.5221788524630546	USDA's Ag Handbook 8 and sequelae)
2	PHYTOSTEROLS	Plant	1520	1760	1.0113053738948798	
14	POTASSIUM	Leaf	1626	9680	-0.9124794391445947	
14	POTASSIUM	Plant	7667	9302	-0.8714063817322808	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Plant	4	53	2.898116175774351	
15	RIBOFLAVIN	Leaf	0.7	4.3	-0.15770533507217988	
57	ROSMARINIC-ACID	Plant	26000	26000	-0.1440410263169351	Fitoterapia No.62: 166.
57	ROSMARINIC-ACID	Shoot	5000	13500	-0.2218024185144439	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
57	ROSMARINIC-ACID	Inflorescence	--	26000	-0.44370755261684197	
7	SALICYLATES	Leaf	180	1830	3.405792573475138	J. Amer. Diet. Ass. 85{8}:950.
5	SAPONINS	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
5	SCLAREOL	Essential Oil	--	--		
60	SELENIUM	Leaf	--	16	0.8468059442367126	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	SILICON	Leaf	3.4	20.2	-0.35311039000946726	
1	SODIUM	Leaf	250	1490	-0.3826506505861957	
1	SODIUM	Plant	430	1341	-0.22984526918694634	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
12	STIGMASTEROL	Leaf	80	85	0.08060609155923636	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
35	TANNIN	Leaf	16800	100000	-0.12855505340498594	
35	TANNIN	Plant	80000	100000	0.23890746627510662	
23	TERPINEN-4-OL	Essential Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	THIAMIN	Plant	5	6	-0.13599687437442232	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	THREONINE	Plant	2520	2722	-1.0265192446716156	USDA's Ag Handbook 8 and sequelae)
71	THYMOL	Shoot	--	--		
71	THYMOL	Plant	15	24100	2.403959600133059	
71	THYMOL	Essential Oil	231000	600500	1.251897456651706	
3	THYMONIN	Plant	--	--		
3	THYMONIN	Leaf	--	--		
6	THYMYL-ACETATE	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
4	TIN	Leaf	3	17	0.16583896593447706	
29	TRYPTOPHAN	Plant	1860	2009	-0.9423278904561724	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Plant	2410	2603	-0.79834365352232	USDA's Ag Handbook 8 and sequelae)
89	URSOLIC-ACID	Plant	15000	18800	0.1020852373558865	
3	VALINE	Plant	5020	5422	-0.5699263899456222	USDA's Ag Handbook 8 and sequelae)
24	VANILLIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
77	ZINC	Leaf	0.3	1.5	-0.517562565370557	
77	ZINC	Plant	55	74	0.2155665551284883	USDA's Ag Handbook 8 and sequelae)