

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Thymus vulgaris*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	1,8-CINEOL	Essential Oil		32900.0	-0.7499692191261143	--
0	2,6,6-TRIMETHYL-BICYCLO(3,1,1)-HEPTA-2-ENE	Essential Oil				--
0	3,3',4,4'-TETRAHYDROXY-5,5'-DI-ISO-PROPYL-2,2'-DIMETHYL-BIPHENYL	Leaf		35.0		--
0	3,3',4,4'-TETRAONE-5,5'-DI-ISO-PROPYL-2,2'-DIMETHYL-BIPHENYL	Leaf		3.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	3,4,4'-TRIHYDROXY-5,5'-DI-ISO-PROPYL-2,2'-DIMETHYL-BIPHENYL	Leaf		1.0		--
0	4'-HYDROXY-5,5'-DI-ISO-PROPYL-2,2'-DIMETHYL-BIPHENYL-3,4-DIONE	Leaf		9.0		--
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.
0	4'5-DIHYDROXY-6,7,8-TRIMETHOXYFLAVONE	Leaf		5.5		--
0	4'5-DIHYDROXY-7-METHOXYFLAVONE	Leaf		43.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	4,4'-DIHYDROXY-5,5'-DI-ISO-PROPYL-2,2'-DIMETHYL-BIPHENYL-3,6-DIONE	Leaf				--
0	4-BETA-D-GLUCOSIDE-HYDROXYBENZOIC-ACID	Leaf				--
0	4-HYDROXYBENZOYL-GLUCOSE	Leaf				--
0	4-O-BETA-D-GLUCOSIDE-PROTOCATECHUIC-ACID	Leaf				--
8	4-TERPINEOL	Plant	73.0	8320.0	1.0	--
2	5,4'-DIHYDROXY-6,7,8,3'-TETRAMETHOXYFLAVONE	Plant				Chemical Constituents of Oriental Herbs (3 diff. books)
0	5,5'-DI-ISO-PROPYL-2,2'-DIMETHYL-BIPHENYL-3,3',4,4'-TETRAONE	Leaf		3.0		--
0	5-HYDROXY-4',7-DIMETHOXYFLAVONE	Leaf		1.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	6-HYDROXY-LUTEIN	Plant				Chemical Constituents of Oriental Herbs (3 diff. books)
2	6-HYDROXY-LUTEOLIN	Leaf				--
0	8-DEMETHYL-THYMONIN	Plant				--
2	8-METHOXY-CIRSILINEOL	Leaf		7.4		--
3	ALANINE	Plant				Stitt, Paul. Why George should eat broccoli.
0	ALPHA-HYDROXY-LINOLENIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	ALPHA-LINOLENIC-ACID	Plant	6900.0	7452.0	0.18376314105806602	USDA's Ag Handbook 8 and sequelae)
11	ALPHA-PHELLANDRENE	Plant	50.0	425.0	1.7924573974319133	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
11	ALPHA-PHELLANDRENE	Essential Oil		12500.0	-0.35109578631088695	--
28	ALPHA-PINENE	Essential Oil		8000.0	-0.489673998831605	--
28	ALPHA-PINENE	Plant	15.0	1598.0	0.6494097697745248	--
13	ALPHA-TERPINENE	Essential Oil				--
13	ALPHA-TERPINENE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
23	ALPHA-TERPINEOL	Plant	36.0	6500.0	4.5501166473010075	--
23	ALPHA-TERPINEOL	Essential Oil				--
0	ALPHA-THUJENE	Essential Oil		9200.0	-0.3412119955593358	--
5	ALUMINUM	Leaf	155.0	920.0	0.20677516470176702	--
1	AMYL-ALCOHOL	Essential Oil		13900.0		--
36	ANETHOLE	Essential Oil				--
101	APIGENIN	Plant				--
112	ASCORBIC-ACID	Leaf		0.0	-0.4439200969762572	--
0	ASH	Plant	113681.0	130809.0	0.17698194315659818	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ASH	Leaf	21504.0	128000.0	0.16118195052151324	--
0	BETA-CADINENE	Essential Oil				--
53	BETA-CAROTENE	Leaf	4.0	25.0	-1.0290654853904624	--
53	BETA-CAROTENE	Plant	24.0	25.0	-0.5917819689568318	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BETA-CARYOPHYLLENE	Essential Oil		17800.0	-0.5639001479089814	--
0	BETA-CARYOPHYLLENE	Plant	15.0	605.0	-0.05576734192343301	--
3	BETA-PHELLANDRENE	Essential Oil				--
3	BETA-PHELLANDRENE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
13	BETA-PINENE	Essential Oil		3400.0	-0.6548910076758792	--
13	BETA-PINENE	Plant	15.0	420.0	0.018001776257486977	--
47	BETA-SITOSTEROL	Leaf	1520.0	1600.0	-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.)
3	BETA-TERPINEOL	Plant	79.0	673.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	BETA-TERPINEOL	Essential Oil		19800.0	-1.0	--
35	BORNEOL	Essential Oil				--
35	BORNEOL	Leaf	15.0	1462.0	1.3342119455552743	--
0	BORNEOL-ACETATE	Essential Oil				--
12	BORNYL-ACETATE	Leaf	16.0	795.0	0.024849263231709388	--
4	BORON	Plant	34.0	48.0	-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		16900.0	1.6286156543306036	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	CALCIUM	Plant	16935.0	22534.0	0.9567743716867843	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Leaf	2806.0	16700.0	-0.11869746309625637	--
2	CAMPESTEROL	Plant		30.0	-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	Essential Oil		4100.0	-0.5707424955262961	--
9	CAMPHENE	Plant	15.0	375.0	0.03564329014217928	--
41	CAMPHOR	Plant	5.0	45.0	-0.6310839661679942	J. Ethnopharmacology, 39: 167.
3	CAPRIC-ACID	Plant	1200.0	1296.0	1.339345677770498	USDA's Ag Handbook 8 and sequelae)
5	CAPRYLIC-ACID	Plant	2400.0	2592.0	-1.0	USDA's Ag Handbook 8 and sequelae)
0	CAR-3-ENE	Essential Oil		31800.0	1.4059505964468082	--
0	CAR-3-ENE	Plant	127.0	1080.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	CAR-4-ENE	Essential Oil				--
0	CAR-4-ENE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	CARBOHYDRATES	Plant	639400.0	690552.0	0.11689634111281348	USDA's Ag Handbook 8 and sequelae)
0	CARBOHYDRATES	Leaf	116424.0	693000.0	0.6453573657002941	--
37	CARVACROL	Essential Oil	16700.0	80200.0	-0.7047683392180678	--
37	CARVACROL	Shoot				--
37	CARVACROL	Plant	8.0	18720.0	1.7231339758690776	--
19	CARVONE	Plant				Stitt, Paul. Why George should eat broccoli.
31	CARYOPHYLLENE	Essential Oil		13600.0	-0.5131215564619739	--
77	CHLOROGENIC-ACID	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	CHLOROGENIC-ACID	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	CHROMIUM	Leaf	0.3	2.0	-0.47584894253972093	--
7	CHRYSOERIOL	Plant				Stitt, Paul. Why George should eat broccoli.
0	CINEOLE	Plant	10.0	4590.0	0.640375407109873	--
18	CINNAMIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
10	CIRSILINEOL	Leaf				--
9	CIRSIMARITIN	Leaf		20.0		--
0	CIRSIMARITRIN	Leaf		20.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
53	CITRAL	Plant				Stitt, Paul. Why George should eat broccoli.
2	COBALT	Leaf	2.0	11.3	-0.23172123703899697	--
12	COPPER	Plant	8.0	9.0	-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		3000.0		--
0	CUMINYL-ALCOHOL	Essential Oil				--
3	CYNAROSIDE	Plant				--
2	CYSTINE	Plant	1370.0	1980.0	-0.14920906466229109	--
8	DELTA-3-CARENE	Plant		510.0	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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	EO	Leaf	1344.0	26000.0	1.272335920147473	--
0	EO	Plant	4000.0	34000.0	1.843811121608257	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
10	ERIODICTYOL	Plant				--
0	EUDESMOL	Essential Oil				--
76	EUGENOL	Plant				Stitt, Paul. Why George should eat broccoli.
0	FAT	Leaf	13440.0	80000.0	0.4690345316255361	--
0	FAT	Seed	370000.0	389000.0	0.6511107729929847	--
0	FAT	Plant	69480.0	80000.0	0.4123680566892496	--
61	FERULIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
15	FIBER	Plant	179294.0	693000.0	3.476313110187907	--
0	FIBER(CRUDE)	Leaf		202000.0	1.9467346249431954	--
0	FIBER(DIETARY)	Leaf		363000.0	-0.13830099389752015	--
0	FIXED-OIL	Seed				--
62	GALLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
11	GAMMA-TERPINENE	Plant	36.0	5460.0	1.6865623237463772	--
11	GAMMA-TERPINENE	Essential Oil	17800.0	49500.0	-0.14620497552360953	--
0	GAMMA-TERPINEOL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	GAMMA-TERPINEOL	Essential Oil				--
3	GENKWANIN	Leaf		43.0		--
35	GERANIOL	Essential Oil				--
35	GERANIOL	Plant	0.0	10660.0	1.3821598262581827	--
5	GERANYL-ACETATE	Plant	0.0	3380.0	3.505632505880159	--
7	GERMACRONE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	GLYCINE	Plant				Stitt, Paul. Why George should eat broccoli.
0	HEX-5-EN-1-OL	Essential Oil				--
6	IRON	Leaf	25.0	147.0	-0.5479717246880129	--
6	IRON	Plant	1075.0	1508.0	1.0375715013534672	USDA's Ag Handbook 8 and sequelae)
7	ISOBORNEOL	Essential Oil				--
4	ISOCHLOROGENIC-ACID	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
4	ISOCHLOROGENIC-ACID	Shoot				--
16	ISOEUGENOL	Plant				Stitt, Paul. Why George should eat broccoli.
3	ISOLEUCINE	Plant	4680.0	5054.0	-0.6194658766918496	USDA's Ag Handbook 8 and sequelae)
4	ISOTHYMONIN	Plant				--
75	KAEMPFEROL	Plant				Stitt, Paul. Why George should eat broccoli.
0	KILOCALORIES	Leaf		2990.0	-0.04526603713996093	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	L-BORNEOL	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
1	LABIATIC-ACID	Leaf				--
7	LAURIC-ACID	Plant	2300.0	2484.0	-0.35586324954160825	USDA's Ag Handbook 8 and sequelae)
2	LEUCINE	Plant	4300.0	4644.0	-0.9358077276861205	USDA's Ag Handbook 8 and sequelae)
60	LIMONENE	Plant	15.0	5200.0	2.7100484195210193	--
60	LIMONENE	Essential Oil		5300.0	-0.7065592764801447	--
0	LINALOL	Plant	20.0	17420.0	3.5059577384095792	--
53	LINALOOL	Plant	20.0	17420.0	1.6923500644491847	--
53	LINALOOL	Essential Oil	28200.0	42800.0	-0.3912382959429395	--
7	LINALYL-ACETATE	Plant	15.0	4680.0	1.672465199772225	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	5000.0	5400.0	-0.498228841183293	USDA's Ag Handbook 8 and sequelae)
0	LINOLENIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
11	LITHIUM	Plant		4.0	1.0	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				--
0	LUTEOLIN-7-DIGLUCOSIDE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	LUTEOLIN-7-O-BETA-D-D1-GLUCOSIDE	Plant				--
0	LUTEOLIN-7-O-BETA-D-GLUCOSIDE	Plant				Stitt, Paul. Why George should eat broccoli.
4	LYSINE	Plant	2070.0	2236.0	-0.977693978133575	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Leaf	733.0	4360.0	0.09045438563126122	--
65	MAGNESIUM	Plant	1630.0	2992.0	-0.3334971399346445	USDA's Ag Handbook 8 and sequelae)
14	MANGANESE	Leaf	1.0	6.4	-0.44924615028330334	--
30	MENTHONE	Plant				Stitt, Paul. Why George should eat broccoli.
15	METHIONINE	Plant	1370.0	1980.0	-6.446701756579119E-4	USDA's Ag Handbook 8 and sequelae)
0	MONOTERPENES	Plant		17340.0		--
22	MYRCENE	Plant	36.0	676.0	0.2665889258585754	--
22	MYRCENE	Essential Oil		17500.0	-0.21460744003259294	--
0	MYRCENOL-8	Plant	15.0	3900.0		--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	MYRCENOL-8-ACETATE	Plant	15.0	2600.0		--
6	MYRISTIC-ACID	Plant	1500.0	1620.0	0.7382551297828841	USDA's Ag Handbook 8 and sequelae)
0	N-TRIACONTANE	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
56	NARINGENIN	Plant				--
11	NEROLIDOL	Plant		80.0	0.6116455838839169	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
39	NIACIN	Plant		54.0	-0.3183355989371754	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
39	NIACIN	Leaf	9.0	54.0	-0.5291254900954042	--
2	OCIMENE	Essential Oil				--
64	OLEANOLIC-ACID	Plant		6300.0	0.6651424785159418	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
18	OLEIC-ACID	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
18	OLEIC-ACID	Plant	4700.0	5076.0	0.1061240929953362	USDA's Ag Handbook 8 and sequelae)
25	P-COUMARIC-ACID	Leaf		420.0	-0.2397011509117522	--
0	P-CYMEN-8-OL	Essential Oil				--
0	P-CYMEN-8-OL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
16	P-CYMENE	Essential Oil	78300.0	441300.0	3.0099759781102042	--
16	P-CYMENE	Plant	146.0	20800.0	4.994249412924975	--
13	P-HYDROXY-BENZOIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.

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0	P-HYDROXYBENZOIC-ACID-4-BETA-D-GLUCOSIDE	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
13	PALMITIC-ACID	Plant	17200.0	18576.0	0.13135300956566015	USDA's Ag Handbook 8 and sequelae)
0	PHENOLS	Plant	800.0	27200.0	1.6309863122565058	--
7	PHENYLALANINE	Plant	2410.0	2603.0	-1.1092448563718826	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Plant	1703.0	2502.0	-0.5221788524630546	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Leaf	160.0	950.0	-0.7398952649396242	--
2	PHYTOSTEROLS	Plant	1520.0	1760.0	1.0113053738948798	--
0	PLANTEOSE	Seed				--
14	POTASSIUM	Plant	7667.0	9302.0	-0.8714063817322808	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Leaf	1626.0	9680.0	-0.9124794391445947	--
0	PROTEIN	Plant		99000.0	-0.6102395118306475	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Leaf	16632.0	99000.0	-1.1257384013756186	--
0	PROTocatechuic-ACID-4-BETA-D-GLUCOSIDE	Leaf				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	RESIN	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
15	RIBOFLAVIN	Plant	4.0	53.0	2.898116175774351	--
15	RIBOFLAVIN	Leaf	0.7	4.3	-0.15770533507217988	--
57	ROSMARINIC-ACID	Inflorescence		26000.0	-0.44370755261684197	--
57	ROSMARINIC-ACID	Shoot	5000.0	13500.0	-0.2218024185144439	--
57	ROSMARINIC-ACID	Plant		26000.0	-0.1440410263169351	Fitoterapia No.62: 166.
7	SALICYLATES	Leaf	180.0	1830.0	3.405792573475138	J. Amer. Diet. Ass. 85(8):950.
0	SALICYLIC-ACID-2-BETA-D-GLUCOSIDE	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	0.8468059442367126	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	SILICON	Leaf	3.4	20.2	-0.35311039000946726	--
1	SODIUM	Plant	430.0	1341.0	-0.22984526918694634	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SODIUM	Leaf	250.0	1490.0	-0.3826506505861957	--
12	STIGMASTEROL	Leaf	80.0	85.0	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.)
0	SYRINGIC-ACID-4-BETA-D-GLUCOSIDE	Leaf				--
0	SYRINGOYL-GLUCOSE	Leaf				--
35	TANNIN	Plant	80000.0	100000.0	0.23890746627510662	--
35	TANNIN	Leaf	16800.0	100000.0	-0.12855505340498594	--
23	TERPINEN-4-OL	Essential Oil				--
31	THIAMIN	Plant	5.0	6.0	-0.13599687437442232	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	THIAMINE	Leaf	1.0	5.5	0.07312289774690897	--
4	THREONINE	Plant	2520.0	2722.0	-1.0265192446716156	USDA's Ag Handbook 8 and sequelae)
0	THUJAN-4-OL	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
71	THYMOL	Plant	15.0	24100.0	2.403959600133059	--
71	THYMOL	Shoot				--
71	THYMOL	Essential Oil	231000.0	600500.0	1.251897456651706	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	THYMOL-METHYL-ETHER	Plant	1.0	10000.0	2.233549853082993	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	THYMONIN	Leaf				--
3	THYMONIN	Plant				--
0	THYMUNIC-ACID	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	THYMUSAPONIN	Plant				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
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	3.0	17.0	0.16583896593447706	--
0	TRANS-4-THUJANOL	Plant				--
29	TRYPTOPHAN	Plant	1860.0	2009.0	-0.9423278904561724	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Plant	2410.0	2603.0	-0.79834365352232	USDA's Ag Handbook 8 and sequelae)
89	URSOLIC-ACID	Plant	15000.0	18800.0	0.1020852373558865	--
3	VALINE	Plant	5020.0	5422.0	-0.5699263899456222	USDA's Ag Handbook 8 and sequelae)
24	VANILLIC-ACID	Plant				Stitt, Paul. Why George should eat broccoli.
0	VANILLIC-ACID-4-BETA-D-GLUCOSIDE	Leaf				--
0	WATER	Plant	74111.0	81690.0	-2.95067665051006	USDA's Ag Handbook 8 and sequelae)
0	WATER	Leaf		832000.0	0.1215431745492862	--
77	ZINC	Plant	55.0	74.0	0.2155665551284883	USDA's Ag Handbook 8 and sequelae)
77	ZINC	Leaf	0.3	1.5	-0.517562565370557	--