

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Petroselinum crispum*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-LIMONENE	Seed Essent. Oil	--	21000	-0.7302616329582117	
0	(+)-M-MENTHA-1(6),8-DIENE	Fruit Essent. Oil	--	56400		
0	0-METHYLBENZYL-ACETATE	Leaf	--	0.36		
0	1,3,8-P-MENTHATRIENE	Leaf	63	1090		
0	1,3,8-P-MENTHATRIENE	Seed	87	87		
0	1-ALLYL-2,3,4,5-TETRAMETHOXYBENZENE	Seed	5	26600		
0	1-ALLYL-2,3,4,5-TETRAMETHOXYBENZENE	Fruit Essent. Oil	--	380000		
0	1-ALLYL-2,3,4,5-TETRAMETHOXYBENZENE	Seed Essent. Oil	--	8000		
0	1-METHYL-4-ISOPROPENYL-BENZENE	Plant	--	--		
0	1-METHYL-4-ISOPROPENYL-BENZENE	Leaf	30	100	1	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	2,3,4,5-TETRAMETHOXYBENZENE	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2,3-DIOXA-1-METHYL-4-(METHYL-ETHENYL)-BICYCLO-(2,2,2)-OCT-5-ENE	Plant	--	--		
0	2,3-DIOXA-1-METHYL-4-(METHYL-ETHENYL)-BICYCLO-(2,2,2)-OCT-5-ENE	Leaf	--	--		
0	2-(P-TOLUYL)-PROPAN-2-OL	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	2-ALPHA-TOLYL-PROPENE	Leaf	--	--		
0	2-PENTYL-FURAN	Leaf	--	--		
0	3,8-DIOXA-4-METHYL-7-(METHYL-ETHENYL)-TRICYCLO-(5,1,0)-OCTANE	Leaf	--	--		
10	3-N-BUTYL-PHTHALIDE	Seed	--	--		
0	4-(BETA-D-GLUCOPYRANOSYLOXY)-BENZOIC-ACID	Seed	165	165	-0.6951361116182081	
0	4-ISOPROPENYL-1-METHYL-BENZENE	Leaf	27	27		
0	4-ISOPROPENYL-1-METHYL-BENZENE	Seed	87	87		
0	4-ISOPROPYL-CYCLOHEX-2-ENONE	Leaf	0.42	0.42		
0	4-PROPAN-1-AL-2-YL-TOLUENE	Leaf	--	--		
0	4-PROPAN-2-OL-2-YL-TOLUENE	Leaf	--	--		
10	5-METHOXY-PSORALEN	Fruit	--	12	1.671258043593467	
10	5-METHOXY-PSORALEN	Leaf	10	10		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	6''-O-MALONYLAPIIN	Leaf	--	--		
0	6,7-DIHYDRO-8,8-DIMETHYL-2(H),8(H)BENZO-(1,2B,5,4B'-DIPYRAN-2-6-DIONE	Seed	12	12		
0	6-ACETYL-7-HYDROXY-COUMARIN	Seed	5	5		
0	7-OCTADECANOIC-ACID	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
21	8-METHOXY-PSORALEN	Fruit	--	5	1.4142135623730951	Abstract (See species file)
0	ALLYL-TETRAMETHOXYBENZENE	Fruit Essent. Oil	--	231000		
3	ALPHA-CADINOL	Leaf	0.18	0.18	-1.2011328867275084	
0	ALPHA-COPAENE	Leaf	7.92	7.92	-0.30918955280514493	
0	ALPHA-CUBEBENE	Leaf	1.86	1.86	-0.4017173853746015	
0	ALPHA-ELEMENE	Leaf	--	--		
0	ALPHA-GURJUNENE	Leaf	4.92	4.92	-0.5845154749782401	
0	ALPHA-NEROLIDOL	Leaf	0.18	0.18		
11	ALPHA-PHELLANDRENE	Leaf	4.3	4.3	-0.31127192594515707	
11	ALPHA-PHELLANDRENE	Seed	0.6	210	-0.868831985294824	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ALPHA-PHELLANDRENE	Fruit Essent. Oil	3000	7300	-1.3339882069903475	
11	ALPHA-PHELLANDRENE	Seed Essent. Oil	--	1000	-1.1132822700487859	
28	ALPHA-PINENE	Leaf	5	5	-0.22421990066028927	
28	ALPHA-PINENE	Seed	1	31080	2.8922858120503183	
28	ALPHA-PINENE	Fruit Essent. Oil	2000	248500	2.440212578691428	
28	ALPHA-PINENE	Fruit	--	--		
28	ALPHA-PINENE	Root	--	--		
28	ALPHA-PINENE	Seed Essent. Oil	--	444000	2.321492606163716	
13	ALPHA-TERPINENE	Leaf	0.24	0.24	-0.3122383225174671	
13	ALPHA-TERPINENE	Seed Essent. Oil	--	--		
13	ALPHA-TERPINENE	Fruit Essent. Oil	--	18000	1.4059992805239898	
23	ALPHA-TERPINEOL	Leaf	2.7	2.7	-0.5855092882648406	
23	ALPHA-TERPINEOL	Seed	22	22	-0.4966224562065264	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-TERPINOLENE	Leaf	--	--		
0	ALPHA-THUJENE	Leaf	0.1	0.1	-0.6172292566864845	
0	ALPHA-THUJENE	Seed	4	490	1.2676723818974631	
0	ALPHA-THUJENE	Fruit Essent. Oil	1000	2600	-0.7283514630459411	
0	ALPHA-THUJENE	Seed Essent. Oil	--	7000	-1	
32	ALPHA-TOCOPHEROL	Leaf	36	252	-0.27610251738330455	
5	ALUMINUM	Plant	2	22	-0.7133220257495717	
101	APIGENIN	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
101	APIGENIN	Tissue Culture	--	--		
0	APIGENIN-7-0-BETA-D-GLUCOSIDE	Plant	--	--		
0	APIGENIN-7-APIOSYLGLUCOSIDE	Seed	--	--		
0	APIGENIN-7-APIOSYLGLUCOSIDE	Fruit	--	--		
0	APIGENIN-7-GLUCOAPIOSIDE	Plant	--	--		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
0	APIGENIN-7-O-BETA-D-GLUCOSIDE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	APIIN	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
4	APIIN	Leaf	--	--		
4	APIIN	Shoot	--	--		
4	APIIN	Plant	--	--		
4	APIIN	Tissue Culture	--	--		
2	APIOL	Seed	--	34500		
2	APIOL	Fruit Essent. Oil	180000	497300		
2	APIOL	Leaf Essent. Oil	--	--		
2	APIOL	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	APIOL	Essential Oil	--	--		
2	APIOL	Root	--	--		
2	APIOL	Root Essent. Oil	--	--		
2	APIOL	Fruit	--	36580		
2	APIOL	Seed Essent. Oil	--	576000		
2	APIOL	Rhizome	--	--		
2	APIOL	Shoot	--	--		
20	APIOLE	Leaf	0.36	22		
20	APIOLE	Seed	19650	36580	1	
0	APIOSE	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	ARSENIC	Plant	0.01	0.21	-0.44036097158714854	
112	ASCORBIC-ACID	Plant	430	7695	1.2127858660899764	
112	ASCORBIC-ACID	Shoot	--	--		
112	ASCORBIC-ACID	Fruit	--	1220	-0.20863307434385805	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
112	ASCORBIC-ACID	Leaf	--	--		
0	ASH	Plant	10823	137000	0.2888284424126049	
0	BARIUM	Plant	28	40	-0.4850890771296821	
24	BENZALDEHYDE	Leaf	--	--		
0	BENZOIC-ACID-4-O-BETA-D-GLUCOSIDE	Shoot	3	3		
26	BERGAPTEN	Root	--	--		
26	BERGAPTEN	Seed	--	--		
26	BERGAPTEN	Shoot	5	2000	1	
26	BERGAPTEN	Plant	--	990	1	
26	BERGAPTEN	Leaf	--	64	-0.5753159910149902	
26	BERGAPTEN	Tissue Culture	--	--		
26	BERGAPTEN	Fruit	--	--		
6	BETA-BISABOLENE	Leaf	2.76	2.76	-0.4259386179214522	
6	BETA-BISABOLENE	Seed	22	22	-0.8122766560766513	
53	BETA-CAROTENE	Plant	12	154	0.10686772072473448	
53	BETA-CAROTENE	Shoot	--	--		
0	BETA-CARYOPHYLLENE	Leaf	2.46	2.46	-0.33362497855888384	
0	BETA-CARYOPHYLLENE	Seed	6.6	770	-0.2508424294303912	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-CARYOPHYLLENE	Fruit Essent. Oil	11000	62100	-0.1770999112945981	
5	BETA-ELEMENE	Leaf	5.4	5.4	-0.39161391430469633	
0	BETA-FARNESENE	Leaf	3.9	3.9	-1.5174172088916698	
0	BETA-FARNESENE	Seed	25	25	-1	
3	BETA-PHELLANDRENE	Leaf	60	530	0.8015595197817582	
3	BETA-PHELLANDRENE	Seed	43	4970	1.6370507088688995	
3	BETA-PHELLANDRENE	Fruit Essent. Oil	--	35100	-0.618205207830777	
3	BETA-PHELLANDRENE	Seed Essent. Oil	--	71000	1.8705559734598718	
5	BETA-PHENYLETHANOL	Seed	--	--		
5	BETA-PHENYLETHANOL	Fruit Essent. Oil	--	--		
13	BETA-PINENE	Leaf	2.4	2.4	-0.42558968215063736	
13	BETA-PINENE	Seed	1	26460	2.5421676332016094	
13	BETA-PINENE	Seed Essent. Oil	--	378000	1.9849640052137334	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETA-PINENE	Fruit Essent. Oil	2000	203900	1.7864326694940778	
3	BETA-SELINENE	Leaf	1.68	1.68	-0.5078272560179726	
47	BETA-SITOSTEROL	Leaf	20	180	-0.9793951214818801	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	BICYCLOGERMACRENE	Leaf	5.16	5.16	-0.2775981741216532	
0	BIS-NORYANGONIN	Tissue Culture	--	--		
4	BORON	Plant	4	54	-0.2700616413387917	
0	BROMINE	Plant	3	21	-0.4562268205101402	ACTA AGRIC SCAND SUPPL 22: 1980
3	CADMIUM	Plant	0.01	0.57	-0.5534831889233711	
102	CAFFEIC-ACID	Stem	--	--		
28	CALCIUM	Plant	1000	16850	0.34877611734080916	
28	CALCIUM	Shoot	--	1600	-0.9589707171943687	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CAMPESTEROL	Sprout Seedling	--	--		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	Leaf	0.24	0.24	-0.19260216125051532	
9	CAMPHENE	Seed	3	490	0.10432519258473769	
9	CAMPHENE	Fruit	--	--		
9	CAMPHENE	Seed Essent. Oil	--	5000	0.29045559805793825	
9	CAMPHENE	Fruit Essent. Oil	7000	20800	1.3574673725411264	
0	CAR-3-ENE	Seed Essent. Oil	--	--		
0	CAR-3-ENE	Fruit Essent. Oil	--	--		
0	CAR-3-ENE	Leaf	--	--		
0	CARBOHYDRATES	Plant	69100	590805	-0.5253522396245337	
0	CAROTENE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CAROTOL	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	CARVEOL	Leaf	3.9	3.9	-1	
0	CHALCONE-FLAVONOID-ISOMERASE	Tissue Culture	--	--		
0	CHALCONE-SYNTHASE	Tissue Culture	--	--		
7	CHLORINE	Shoot	--	--		
77	CHLOROGENIC-ACID	Stem	--	--		
24	CHROMIUM	Plant	0.1	0.6	-0.8071397754932234	
0	CHRYSOERIOL-7-O-BETA-D-GLUCOSIDE	Seed	--	--		
0	CHRYSOERIOL-7-O-BETA-D-GLUCURONIDE	Leaf	--	--		
0	CIS-3-HEXEN-1-OL	Leaf	18.6	18.6	-0.6668120589054743	
0	CIS-3-HEXEN-1-OL	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-BETA-OCIMENE	Plant	--	--		
0	CIS-BETA-OCIMENE	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-LIGUSTILIDE	Root	--	--		
23	CITRIC-ACID	Root	--	--		
2	COBALT	Plant	0.4	4.7	-0.3238737292236686	
12	COPPER	Plant	1	12	-0.22332832033423827	
0	CRISPANE	Seed	--	104		
0	CRISPANONE	Seed	--	108		
0	CRYPTONE	Leaf	--	--		
0	CYMOL	Seed Essent. Oil	--	--		
8	DELTA-3-CARENE	Leaf	0.12	0.12	-0.49033769755843665	
9	DELTA-CADINENE	Leaf	1.38	1.38	-0.458077395302066	
9	DELTA-CADINENE	Seed	109	109		
1	DELTA-CADINOL	Leaf	--	--		
6	DILLAPIOL	Fruit Essent. Oil	--	37000		
0	DIMETHYL-BENZOFURAN	Leaf	--	--		
2	DIMETHYL-SULFIDE	Leaf	--	--		
0	E0	Leaf	--	600		
16	ELEMICIN	Leaf	18	18	-0.6965246951674532	
16	ELEMICIN	Seed	821	821	-1.10707303552368	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	ELEMICIN	Fruit Essent. Oil	--	42700		
0	EO	Plant	40	3000	-0.5121339088100166	
0	EO	Root	500	1000	-0.41927924121066534	
0	EO	Seed	15000	70000	0.33443352078718097	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	EO	Leaf	600	3000	-0.7507396833089339	
0	EO	Fruit	--	600	-0.8082996907619691	
10	ERIODICTYOL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
10	ERIODICTYOL	Tissue Culture	--	--		
12	ESTRAGOLE	Leaf	1.6	1.6	-0.8859248040447191	
24	ETHANOL	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
24	ETHANOL	Leaf	--	--		
13	FALCARINDIOL	Root	--	--		
16	FALCARINOL	Root	--	10	-0.8410871090127134	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	FALCARINONE	Root	--	15	0.9999999999999998	
0	FAT	Plant	3792	48000	-0.05468700183087534	
0	FAT	Seed	130000	330000	0.3403366687406834	
15	FIBER	Plant	12000	202464	-0.1503987970331505	
0	FIBER(CRUDE)	Plant	--	113000	0.1654290037069817	
0	FIBER(DIETARY)	Plant	--	293000	-0.7675395352257373	
0	FLAVANONE-SYNTHASE	Tissue Culture	--	--		
0	FLAVONOIDS	Tissue Culture	--	--		
0	FLUORINE	Plant	0.6	7.8	1.407465487079582	ACTA AGRIC SCAND SUPPL 22: 1980
15	FOLACIN	Plant	2	17	-0.4558411287938474	USDA's Ag Handbook 8 and sequelae)
7	FUMARIC-ACID	Root	--	--		
0	FURANOCOUMARINS	Root	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	GAMMA-CADINENE	Leaf	--	--		
0	GAMMA-ELEMENE	Leaf	--	--		
11	GAMMA-TERPINENE	Leaf	0.42	0.42	-0.37111331477411363	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	GAMMA-TERPINENE	Seed	3	1120	-0.6266101249241767	
11	GAMMA-TERPINENE	Seed Essent. Oil	--	5000	-1.0642536337764155	
11	GAMMA-TERPINENE	Fruit Essent. Oil	16000	36300	1.3597633205634474	
35	GERANIOL	Leaf	1.26	1.26	-0.22989043119456826	
2	GERMACRENE-D	Leaf	6.9	6.9	-0.5194683777682332	
4	GLYCOLIC-ACID	Root	--	--		
4	GLYCOLIC-ACID	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GRAVEOLONE	Tissue Culture	--	--		
0	GRAVEOLONE	Leaf	--	--		
0	HERACLENOL	Seed	3.7	3.7		
0	HEX-3-EN-1-YL-ACETATE	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	HEX-3-EN-1-YL-ACETATE	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEX-CIS-3-EN-1-OL	Leaf	--	--		
0	HEX-CIS-3-EN-1-YL-ACETATE	Plant	--	--		
0	HEXADECENOIC-ACID	Leaf	0.24	0.24		
0	HEXAN-1-AL	Leaf	--	--		
25	IMPERATORIN	Fruit	1	6	-0.6700467093873878	
25	IMPERATORIN	Leaf	0.53	0.53		
8	INOSITOL	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
6	IRON	Plant	1.3	17	-0.7182830071194793	
6	IRON	Shoot	--	--		
8	ISOIMPERATORIN	Fruit	--	6	-0.4133836909571628	
8	ISOIMPERATORIN	Root	--	500		
8	ISOIMPERATORIN	Leaf	--	--		
15	ISOPIMPINELLIN	Shoot	0.3	79	-1	
15	ISOPIMPINELLIN	Leaf	1.8	28		
15	ISOPIMPINELLIN	Tissue Culture	--	--		
15	ISOPIMPINELLIN	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	ISOPIMPINELLIN	Root	--	--		
15	ISOPIMPINELLIN	Fruit	--	--		
0	JASMONIC-ACID	Leaf	--	--		
75	KAEMPFEROL	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
0	LEAD	Plant	0.08	4	-0.45099044821147605	
0	LF	Plant	--	--		
60	LIMONENE	Leaf	16	16	-0.4309522084568708	
60	LIMONENE	Seed	6	1470	-0.6588822047761124	
60	LIMONENE	Seed Essent. Oil	--	--		
60	LIMONENE	Fruit Essent. Oil	10000	60100	-1.071797856637218	
0	LINALOL	Leaf	--	0.12	-0.442528334147384	
53	LINALOOL	Leaf	0.12	0.12	-0.647360756009463	
11	LITHIUM	Plant	0.76	0.792	-1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	LUTEIN	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
15	LUTEIN	Shoot	--	--		
0	LUTEOLIN-7-APIOSYL-GLUCOSIDE	Seed	--	--		
0	LUTEOLIN-7-APIOSYL-GLUCOSIDE	Fruit	--	--		
0	LUTEOLIN-7-DIGLUCOSIDE	Plant	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	LUTEOLIN-7-O-BETA-D-APIOGLUCOSIDE	Plant	--	--		
4	LYSINE	Plant	2190	18724	1.068243764451732	USDA's Ag Handbook 8 and sequelae)
0	M-XYLENE	Leaf	--	--		
65	MAGNESIUM	Plant	250	3160	-0.28134422251463814	
15	MALIC-ACID	Root	--	--		
14	MANGANESE	Plant	0.5	6	-0.6519018200346285	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	MERCURY	Plant	0.004	0.37	-0.4834929186399312	
2	METHANOL	Leaf	--	--		
15	METHIONINE	Plant	150	1282	-0.36062849626303595	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	METHYL-DISULFIDE	Plant	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	METHYL-DISULFIDE	Leaf	--	--		
2	MOLYBDENUM	Plant	0.1	14	1.719900856164318	
3	MUCILAGE	Root	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	MYRCENE	Leaf	18	255	-0.08065814342714553	
22	MYRCENE	Seed	168	1680	-0.11187948982801763	
22	MYRCENE	Fruit Essent. Oil	--	5200	-1.2495192038656824	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	MYRCENE	Seed Essent. Oil	--	24000	-0.4688443199240226	
6	MYRISTIC-ACID	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
31	MYRISTICIN	Leaf	131	960	-0.31201750441513737	
31	MYRISTICIN	Plant	425	2550	1	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
31	MYRISTICIN	Seed	14785	19800	1.3798434351573292	
31	MYRISTICIN	Leaf Essent. Oil	--	141176		
31	MYRISTICIN	Fruit	--	--		
31	MYRISTICIN	Fruit Essent. Oil	10000	7500000		
31	MYRISTICIN	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	MYRISTICIN	Root Essent. Oil	--	--		
31	MYRISTICIN	Seed Essent. Oil	--	108000	-1	
0	MYRISTOLIC-ACID	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	N-HEXANAL	Leaf	0.4	0.4	-1	
0	N-HEXANOL	Leaf	0.2	0.2	-1.0000000000000002	
56	NARINGENIN	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
56	NARINGENIN	Tissue Culture	--	--		
2	NEOXANTHIN	Shoot	--	--		
4	NERAL	Leaf	2.9	2.9	-0.3859763862907193	
39	NIACIN	Plant	7	87	0.1441247016236409	
3	NICKEL	Plant	0.1	8.5	1.3678940092779688	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	NICOTINAMIDE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
11	NICOTINIC-ACID	Sprout Seedling	--	--		
11	NICOTINIC-ACID	Tissue Culture	--	--		
0	NICOTINIC-ACID-BETA-D-GLUCOSIDE	Tissue Culture	--	--		
0	NICOTINIC-ACID-N-ALPHA-L-ARABINOSIDE	Tissue Culture	--	--		
0	NICOTINIC-ACID-N-BETA-D-GLUCOSIDE	Tissue Culture	--	--		
0	NITROGEN	Leaf	4900	40700	-0.15362670771204504	ACTA AGRIC SCAND SUPPL 22: 1980
0	O-METHYLBENZYL-ACETATE	Leaf	--	0.36		
0	OCTADEC-7-ENOIC-ACID	Fruit	--	--		
18	OLEIC-ACID	Seed	53000	53000	-0.5434090926367003	
18	OLEIC-ACID	Fruit	--	--		
15	OSTHOL	Fruit Essent. Oil	--	56000		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	OSTHOLE	Plant	840	3975	1.4062541963603976	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
6	OXYPEUCEDANIN	Fruit	7	26		
6	OXYPEUCEDANIN	Leaf	100	100	-1	
2	OXYPEUCEDANIN-HYDRATE	Leaf	--	--		
0	P-COUMARATE-COENZYME-1A-LIGASE	Tissue Culture	--	--		
25	P-COUMARIC-ACID	Stem	--	--		
16	P-CYMENE	Leaf	1.44	1.44	-0.39891714087745833	
16	P-CYMENE	Seed	34	34	-0.7268387752889803	
16	P-CYMENE	Fruit Essent. Oil	--	28000	0.8742799553144132	
0	P-CYMENE-8-OL	Leaf	4.38	4.38	-0.9999999999999992	
0	P-CYMENE-8-OL	Seed	28	28		
0	P-MENTHA-1,3,8-TRIENE	Leaf	--	--		
0	P-MENTHATRIENE	Leaf	0.36	0.36		
0	P-MENTHATRIENOLE	Leaf	0.84	18.3		
0	P-MENTHYL-ACETOPHENONE	Leaf	3.66	3.66		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	P-MENTHYL-ACETOPHENONE	Seed	31	31		
2	P-METHYL-ACETOPHENONE	Leaf	--	--		
0	P-XYLENE	Leaf	--	--		
13	PALMITIC-ACID	Seed	5000	5000	-0.5964348259626931	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
13	PALMITIC-ACID	Fruit Essent. Oil	--	5000		
11	PANTOTHENIC-ACID	Plant	3	26	-0.2201468605238584	USDA's Ag Handbook 8 and sequelae)
1	PENTATRIACONTANE	Leaf	0.18	0.18		
0	PETROSELINIC-ACID	Seed	100000	300000	-1.0351034848112577	
0	PETROSELINIC-ACID	Fruit	--	--		
0	PETROSELINIC-ACID	Seed Oil	--	--		
6	PHENETHYL-ALCOHOL	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PHENYALANINE-AMMONIA-LYASE	Tissue Culture	--	--		
2	PHENYL-ACETALDEHYDE	Leaf	--	--		
0	PHENYLALANINE-AMMONIA-LYASE	Tissue Culture	--	--		
4	PHOSPHORUS	Plant	324	4100	0.2457194116609105	
4	PHOSPHORUS	Shoot	--	--		
5	PHYLLLOQUINONE	Leaf	--	5.48	0.7535864349153043	
2	PHYTOSTEROLS	Leaf	50	450	-0.6806805153514085	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
14	POTASSIUM	Plant	4425	53833	2.23414657121527	
0	PROTEIN	Plant	20000	254096	0.6607675264472858	
0	PROTEIN	Seed	191000	191000	-0.38069318377058897	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
43	PROTocatechuic-acid	Stem	--	--		
31	PSORALEN	Fruit	1	10	-0.4628284057663575	
31	PSORALEN	Leaf	2.5	33	-0.7027180129457828	
31	PSORALEN	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	PSORALEN	Tissue Culture	--	--		
176	QUERCETIN	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
176	QUERCETIN	Tissue Culture	--	--		
176	QUERCETIN	Leaf	--	--		
1	QUINIC-ACID	Root	--	--		
15	RIBOFLAVIN	Plant	1	13.5	0.14552068492219167	
57	ROSMARINIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
0	RUBIDIUM	Leaf	2.2	65	0.8899436633016005	ACTA AGRIC SCAND SUPPL 22: 1980
87	RUTIN	Leaf	30000	30000	0.8579223754965293	
87	RUTIN	Shoot	--	44480	2.746754959397039	Varnaite, R. 1988. Rutin Content in Capsicum, Capsella, Urtica, Primula, Lepidium, Lactuca, Brassica, Anethum, Beta, Petroselinum, Allium Genera Representatives. Liet Tsr Mokslu Akad Darb Ser C, 4: 29-32.
5	SABINENE	Leaf	0.54	0.54	-0.2608648090275	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SABINENE	Seed	1	1190	-0.3863132836596433	
5	SABINENE	Fruit Essent. Oil	--	10400	-0.6587030409909505	
5	SABINENE	Seed Essent. Oil	--	17000	-0.4094438152245345	
7	SALICYLATES	Leaf	0.8	4	-0.5683122203043024	
0	SANTENE	Seed	1	140		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	SANTENE	Fruit Essent. Oil	--	2000		
0	SAXALIN	Leaf	--	--		
1	SEDANENOLIDE	Seed	--	--		
60	SELENIUM	Plant	0.001	0.021	-0.4265847116409652	
0	SENKYUNOLIDE	Root	5	5	-1	Abstract (See species file)
0	SESQUIPHELLANDRENE	Leaf	--	--		
14	SHIKIMIC-ACID	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	SILICON	Leaf	60	1425	3.8252310014499527	ACTA AGRIC SCAND SUPPL 22: 1980
4	SILICON	Plant	0.3	3.6	-0.5244328221889293	
3	SILVER	Plant	0.19	0.2		
1	SODIUM	Plant	404	5110	-0.021207392137970946	
8	STEARIC-ACID	Seed	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
12	STIGMASTEROL	Sprout Seedling	20	180	-0.8172423753879353	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	STRONTIUM	Plant	285	396	1.6348966326239824	
7	SUCCINIC-ACID	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
7	SUCCINIC-ACID	Root	--	--		
0	SUGARS	Plant	7110	90000	-0.2500180771944431	
14	SULFUR	Plant	380	4700	0.35776302805165466	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	TARTARIC-ACID	Root	--	--		
6	TAURINE	Plant	--	--		Stitt, Paul. Why George should eat broccoli.
23	TERPINEN-4-OL	Leaf	0.72	0.72	-0.3399114114851954	
9	TERPINOLENE	Leaf	33	105	-0.09833783481282221	
9	TERPINOLENE	Seed	6	700	-0.1567036907285562	
9	TERPINOLENE	Fruit Essent. Oil	10000	50500	1.4139927352702726	
0	TETRADECANAL	Leaf	3.84	3.84	-1	
0	TETRAMETHOXYALLYLBENZENE	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	TETRAMETHOXYALLYLBENZENE	Fruit	--	--		
0	TETRAMETHOXYALLYLBENZENE	Fruit Essent. Oil	--	--		
31	THIAMIN	Plant	--	7	-0.050998827890408445	
0	THIAMINE	Plant	0.2	2	-0.4618949437111338	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
71	THYMOL	Leaf	--	32	-0.4026253885663395	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	TIN	Plant	1	14	-0.4656082470551236	
0	TITANIUM	Plant	1	2	-1.4756031773377647	
1	TOLUENE	Leaf	--	--		
4	TRANS-2-HEXENAL	Leaf	12.5	12.5		
1	TRANS-2-HEXENOL	Leaf	0.2	0.2		
0	TRANS-BETA-OCIMENE	Plant	--	--		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	TRANS-BETA-OCIMENE	Leaf	--	--		
15	TRIGONELLINE	Tissue Culture	--	--		
22	UMBELLIFERONE	Leaf	--	--		
0	URONIC-ACID	Root	--	--		
2	VIOLAXANTHIN	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	VIT-A	Shoot	--	--		
0	VIT-B-1	Shoot	--	--		
0	VIT-B-6	Plant	2	14	-1	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
11	VIT-B2	Shoot	--	--		
11	VIT-B2	Tissue Culture	--	--		
0	WATER	Plant	--	921000	0.6424537912023661	
43	XANTHOTOXIN	Shoot	3	289	1.1050356026721566	
43	XANTHOTOXIN	Leaf	3	15	-1	
43	XANTHOTOXIN	Tissue Culture	--	--		
43	XANTHOTOXIN	Plant	--	--		
43	XANTHOTOXIN	Root	--	--		
43	XANTHOTOXIN	Fruit	--	--		
77	ZINC	Plant	--	--		
0	ZIRCONIUM	Plant	3.8	4	0.35149982013099734	