

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Cuminum cyminum

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	CARBOHYDRATES	Fruit	442000.0	570000.0	-1.1383877321758809	--
0	CARBOHYDRATES	Seed	442000.0	570000.0	0.18518872608740047	--
0	PETROSELINIC-ACID	Seed		522000.0	-0.08234362953415873	--
10	CUMINALDEHYDE	Seed Essent. Oil	205100.0	480000.0		--
10	CUMINALDEHYDE	Essential Oil		350000.0	-1.0	--
0	P-MENTHA-1,4-DIEN-7-AL	Seed Essent. Oil		319800.0		--
0	FAT	Seed	134000.0	270380.0	0.02629680271488368	--
0	FAT	Fruit	134000.0	270380.0	1.423888601701519	--
0	PROTEIN	Fruit	166000.0	212000.0	1.374076643190184	--
0	PROTEIN	Seed	166000.0	212000.0	-0.19388730833174384	--
18	OLEIC-ACID	Seed		154000.0	0.28687020919917255	--
15	FIBER	Seed	105000.0	136000.0	0.009642624567051585	--
15	FIBER	Fruit	105000.0	136000.0	-0.05356506176852561	--
11	GAMMA-TERPINENE	Seed Essent. Oil		135100.0	1.7741924046473574	--
0	ASH	Fruit	58000.0	89000.0	0.8373581639684924	--
0	ASH	Seed	58000.0	89000.0	1.2367887262181747	--
0	WATER	Fruit		81000.0	-2.9983398493677664	--
0	WATER	Seed		81000.0	-0.5625925943807273	--
13	BETA-PINENE	Seed Essent. Oil		60300.0	-0.4033073996580829	--
0	P-MENTHA-1,3-DIEN-7-AL	Seed Essent. Oil		60100.0		--
16	P-CYMENE	Seed Essent. Oil		57400.0	1.1697457846107164	--
0	EO	Fruit	20000.0	50000.0	0.1518886748253213	--
0	EO	Seed	20000.0	50000.0	0.08159531399912463	--
0	ALDEHYDES	Fruit	12000.0	30000.0		--
0	ALDEHYDES	Seed	12000.0	30000.0		Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CUMINYL-ALCOHOL	Seed	300.0	21660.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CUMINYL-ALCOHOL	Fruit	300.0	21660.0		--
14	POTASSIUM	Fruit	17880.0	20916.0	0.26537600660314625	--
14	POTASSIUM	Seed	17880.0	20916.0	0.7339716357950823	--
10	CUMINALDEHYDE	Fruit	4000.0	16000.0	1.0	--
10	CUMINALDEHYDE	Seed	4000.0	16000.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	CALCIUM	Fruit	9310.0	15511.0	2.6894460586450313	--
28	CALCIUM	Seed	9310.0	15511.0	2.087195698631959	--
16	P-CYMENE	Fruit	810.0	12639.0	1.093379153357459	--
16	P-CYMENE	Seed	810.0	12639.0	2.5658784542716937	--
11	GAMMA-TERPINENE	Seed	174.0	11800.0	1.3004692670430558	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	GAMMA-TERPINENE	Fruit	174.0	11800.0	1.5201342086172545	--
11	ALPHA-PHELLANDRENE	Seed Essent. Oil		8400.0	0.7805772238273097	--
0	P-MENTHA-1,4-DIEN-7-AL	Fruit	7080.0	7290.0		--
0	P-MENTHA-1,4-DIEN-7-AL	Seed	7080.0	7290.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Fruit	48.0	6600.0	-0.08639391856372851	--
13	BETA-PINENE	Seed	48.0	6600.0	0.11443413980397102	--
4	PHOSPHORUS	Seed	4900.0	5673.0	0.0844694836529903	--
4	PHOSPHORUS	Fruit	4900.0	5673.0	0.7462902843572051	--
13	ALPHA-TERPINENE	Seed Essent. Oil		5000.0	-0.747287894378325	--
22	MYRCENE	Seed Essent. Oil		5000.0	-0.6729231762483394	--
0	P-MENTHA-1,3-DIEN-7-AL	Fruit	3330.0	4560.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	P-MENTHA-1,3-DIEN-7-AL	Seed	3330.0	4560.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-BETA-FARNESENE	Seed Essent. Oil		4500.0		--
0	P-MENTH-3-EN-7-AL	Seed Essent. Oil		4400.0		--
1	CUMIN-ALCOHOL	Seed Essent. Oil		4200.0		--
5	SABINENE	Seed Essent. Oil		3200.0	-0.48390449587595435	--
20	CHOLINE	Seed		3003.0	1.2524025343894258	--
28	ALPHA-PINENE	Seed Essent. Oil		3000.0	-0.7212203254805465	--
1	ISOCARYOPHYLLENE	Seed Essent. Oil		2800.0		--
60	LIMONENE	Seed Essent. Oil		2500.0	-0.8605696309526396	--
1	SODIUM	Fruit	1680.0	2028.0	0.008362175941227531	--
1	SODIUM	Seed	1680.0	2028.0	2.5035675487310334	--
4	COSMOSIIN	Seed		1500.0		--
0	CIS-SABINENE-HYDRATE	Seed Essent. Oil		1500.0	-1.0	--
4	BENZYL-CINNAMATE	Fruit		1341.0		--
4	BENZYL-CINNAMATE	Seed		1341.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Fruit	30.0	1014.0	-0.217118135360517	--
5	SABINENE	Seed	30.0	1014.0	-0.3944636041574373	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Seed Essent. Oil		1000.0	-0.656858499149851	--
0	TRANS-ALPHA-BERGAMOTENE	Seed Essent. Oil		900.0		--
7	ANISALDEHYDE	Seed		837.0	-0.9438488054306591	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	ANISALDEHYDE	Fruit		837.0	0.3007182102385518	--
17	FARNESOL	Fruit		834.0	1.413989751209689	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
17	FARNESOL	Seed		834.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	P-ISOPROPYLPHENOL	Seed Essent. Oil		800.0		--
0	TRANS-SABINENE-HYDRATE	Seed Essent. Oil		800.0	-1.0	--
6	IRON	Seed	155.0	748.0	2.774806205372537	--
6	IRON	Fruit	155.0	748.0	2.4396262164214058	--
3	BETA-PHELLANDRENE	Seed Essent. Oil		700.0	-1.0822902451231144	--
60	LIMONENE	Fruit	60.0	696.0	-0.6503856897192445	--
60	LIMONENE	Seed	60.0	696.0	-0.7143557055167975	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	PHYTOSTEROLS	Root		680.0	-0.5617667644397336	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
23	ALPHA-TERPINEOL	Seed Essent. Oil		500.0	-0.7380690023576203	--
3	CYNAROSIDE	Seed		500.0	-1.0	--
7	SALICYLATES	Seed		450.0	2.0742057734588757	--
0	BETA-FARNESENE	Seed	220.0	440.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-FARNESENE	Fruit	220.0	440.0	1.0	--
1	CARVEOL	Fruit		435.0		--
8	CARYOPHYLLENE-OXIDE	Seed		435.0	1.097913908269028	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	CARVEOL	Seed		435.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	CARYOPHYLLENE-OXIDE	Fruit		435.0	-0.5007242267296801	--
9	TERPINOLENE	Seed Essent. Oil		400.0	-0.7791560503540546	--
9	CAMPHENE	Seed Essent. Oil		400.0	-1.4910054033640832	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	BETA-BISABOLENE	Fruit	60.0	360.0	-0.6279289020524476	--
6	BETA-BISABOLENE	Seed	60.0	360.0	-0.5964358465216921	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	PERILLALDEHYDE	Fruit		336.0	1.4139019929570265	--
11	PERILLALDEHYDE	Seed		336.0	1.3948390326025877	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	ALPHA-PINENE	Seed	9.0	330.0	-0.4681305937392061	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	ALPHA-PINENE	Fruit	9.0	330.0	-0.6326269333262723	--
31	CARYOPHYLLENE	Seed	144.0	320.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Fruit	144.0	320.0	-0.38650624079902074	--
53	LINALOOL	Seed	30.0	318.0	-0.1602566890671307	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LINALOL	Fruit	30.0	318.0	-0.5850669501995082	--
12	STIGMASTEROL	Seed		310.0	-0.13634492946832524	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
53	LINALOOL	Seed Essent. Oil		300.0	-0.5568630458522826	--
47	BETA-SITOSTEROL	Seed		300.0	-0.5158539786189745	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	P-MENTHA-3-EN-7-OL	Fruit	140.0	280.0		--
0	P-MENTHA-3-EN-7-OL	Seed	140.0	280.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Seed	90.0	279.0	-0.9915321681819333	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	BETA-PHELLANDRENE	Fruit	90.0	279.0	-0.4243936628944281	--
23	ALPHA-TERPINEOL	Seed	30.0	275.0	-0.4192681580586145	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	ALPHA-TERPINEOL	Fruit	30.0	275.0	-0.18222634096235243	--
8	DELTA-3-CARENE	Seed		270.0	1.2977713690461004	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	DELTA-3-CARENE	Fruit		270.0	-0.1615236669067504	--
0	PIPERITOL	Seed		243.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PIPERITOL	Fruit		243.0		--
0	CIS-SABINENE-HYDRATE	Fruit		207.0	1.414213562373095	--
0	CIS-SABINENE-HYDRATE	Seed		207.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-TERPINENE	Seed		204.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-TERPINENE	Fruit		204.0		--
0	CAR-3-ENE	Seed Essent. Oil		200.0	-1.0	--
71	THYMOL	Seed Essent. Oil		200.0	-0.730649211036064	--
7	PIPERITONE	Fruit		172.0		--
7	PIPERITONE	Seed		172.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DILLAPIOLE	Fruit		150.0	-1.0	--
0	DILLAPIOLE	Seed		150.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
67	1,8-CINEOLE	Fruit	40.0	138.0	-0.4155160165966862	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	METHYL-CINNAMATE	Seed		138.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
67	1,8-CINEOLE	Seed	40.0	138.0	-0.6912409465781895	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	METHYL-CINNAMATE	Fruit		138.0		--
22	MYRCENE	Seed	36.0	120.0	-1.016190392064844	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	MYRCENE	Fruit	36.0	120.0	-0.36584426066354236	--
0	DAUCENE	Fruit		90.0		--
0	DAUCENE	Seed		90.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-SABINENE-HYDRATE	Seed		87.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-SABINENE-HYDRATE	Fruit		87.0	-0.43545971945575607	--
112	ASCORBIC-ACID	Fruit	0.0	76.0	-0.27976355402626646	--
112	ASCORBIC-ACID	Seed	0.0	76.0	-0.2928301356509014	--
19	ACETYL-CHOLINE	Seed		68.0	-0.21613518728808323	--
11	ALPHA-PHELLANDRENE	Fruit		60.0	-0.5463965854128641	--
11	ALPHA-PHELLANDRENE	Seed		60.0	-0.9184826797367149	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TERPINOLENE-EPOXIDE	Seed		60.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TERPINOLENE-EPOXIDE	Fruit		60.0		--
77	ZINC	Fruit	41.0	58.0	0.8333322427894736	--
77	ZINC	Seed	41.0	58.0	0.3653236164034136	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	BORON	Seed	34.0	50.0	1.2280232969498832	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).
4	BORON	Fruit	34.0	50.0	0.20278384568897864	--
2	CAMPESTEROL	Seed		50.0	-0.5188689275444304	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
39	NIACIN	Seed	46.0	49.0	0.18301568158571277	--
39	NIACIN	Fruit	46.0	49.0	-0.1563834722018048	--
12	BORNYL-ACETATE	Fruit		36.0	-0.7126671869128719	--
12	BORNYL-ACETATE	Seed		36.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
14	MANGANESE	Fruit	24.0	33.0	-0.18593979479616832	--
14	MANGANESE	Seed	24.0	33.0	-0.25562914891156324	--
6	METHYL-CHAVICOL	Fruit		30.0	-0.9052787471318983	--
0	ALPHA-P-DIMETHYL-STYRENE	Fruit		30.0	-0.11624763874381962	--
5	BETA-ELEMENE	Seed		30.0	-0.7668490032631218	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Seed		30.0	-0.6762665967069378	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-P-DIMETHYL-STYRENE	Seed		30.0	-0.9120291854009067	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	COPAENE	Fruit		30.0	-0.7063409156616118	--
0	CIS-GAMMA-BISABOLENE	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	TRANS-PINOCARVEOL	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-GAMMA-BISABOLENE	Fruit		30.0		--
1	COPAENE	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	METHYL-CHAVICOL	Seed		30.0	-1.0272094750696692	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BETA-ELEMENE	Fruit		30.0	-0.5255615099967239	--
23	TERPINEN-4-OL	Fruit		30.0	-0.35380476892863855	--
2	TRANS-PINOCARVEOL	Fruit		30.0		--
13	ALPHA-TERPINENE	Seed		27.0	-0.49447014585831817	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Fruit		27.0	-0.3094025385841535	--
0	ALPHA-THUJENE	Seed		24.0	-1.1767496731268863	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-THUJENE	Fruit		24.0	-0.5742881361044722	--
12	COPPER	Fruit	9.0	16.0	0.24757908207921683	--
12	COPPER	Seed	9.0	16.0	0.10753302142111128	--
24	CHROMIUM	Fruit		8.4	0.6722150195358815	--
24	CHROMIUM	Seed		8.4	0.5412807345301005	--
53	BETA-CAROTENE	Seed	5.0	8.0	0.07076552722792115	--
53	BETA-CAROTENE	Fruit	5.0	8.0	-0.1353367732684366	--
31	THIAMIN	Seed	6.0	7.0	0.09921569102976133	--
31	THIAMIN	Fruit	6.0	7.0	0.21342198396383905	--
15	RIBOFLAVIN	Seed	3.0	4.0	0.18234587940570884	--
15	RIBOFLAVIN	Fruit	3.0	4.0	-0.21615825716438572	--
3	NICKEL	Seed		3.6	-0.22040689220295698	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	NICKEL	Fruit		3.6	0.31537310910976213	--
2	COBALT	Seed		2.2	-0.11052683130845588	--
2	COBALT	Fruit		2.2	-0.268784847122832	--
0	CUMINIC-ACID	Seed		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CUMINIC-ACID	Fruit		1.0		--
0	CUMINIC-ALCOHOL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	TANNIN	Fruit				--
4	APIIN	Seed				--
78	LUTEOLIN	Leaf				--
2	MYRTENOL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	CUMENE	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	P-MENTHA-1,3-DIEN-7-AL	Essential Oil				--
0	APIGETRIN	Seed				--
76	EUGENOL	Fruit				--
1	CUMENE	Fruit				--
0	LUTEOLIN-7-GLUCURONOSYL-GLUCOSIDE	Fruit				--
0	APIGENIN-7-GLUCURONOSYL-GLUCOSIDE	Seed				--
0	DELTA-5,6-OCTADECENOIC-ACID	Seed				--
0	CRYPTONE	Fruit				--
7	DIPENTENE	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	LUTEOLIN-7-GLUCOSIDE	Fruit				--
0	APIGENIN-5-O-GLUCOSIDE	Seed				--
7	DIPENTENE	Fruit				--
0	RESIN	Fruit				--
78	LUTEOLIN	Fruit				--
16	P-CYMENE	Essential Oil				--
0	APIGENIN-7-GLUCURONOSYL-GLUCOSIDE	Fruit				--
35	TANNIN	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
3	XANTHOPHYLL	Fruit				--
76	EUGENOL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELTA-5,6-OCTADECENOIC-ACID	Fruit				--
0	APIGENIN-7-GLUCOSIDE	Fruit				--
11	GAMMA-TERPINENE	Essential Oil				--
0	CRYPTONE	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
18	OLEIC-ACID	Seed Oil				--
0	GUM	Fruit				--
0	RESIN	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	OCTADECA-5,6-DIENOIC-ACID	Seed Oil				--
0	PETROSELINIC-ACID	Seed Oil				--
2	MYRTENOL	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	LUTEOLIN-7-GLUCOSIDE	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	APIGENIN-7-GLUCOSIDE	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
78	LUTEOLIN	Seed				--
3	XANTHOPHYLL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PHELLANDRAL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CUMINIC-ALCOHOL	Fruit				--
18	MANNITOL	Seed				--
0	P-MENTHA-1,4-DIEN-7-AL	Essential Oil				--
0	GUM	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
112	ASCORBIC-ACID	Tissue Culture				--
0	LUTEOLIN-7-GLUCURONOSYL-GLUCOSIDE	Seed				--
0	PHELLANDRAL	Fruit				--