

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Cuminum cyminum*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
67	1,8-CINEOLE	Fruit	40.0	138.0	-0.4155160165966862	--
19	ACETYL-CHOLINE	Seed		68.0	-0.21613518728808323	--
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.
0	ALDEHYDES	Fruit	12000.0	30000.0		--
0	ALPHA-P-DIMETHYL-STYRENE	Seed		30.0	-0.9120291854009067	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-P-DIMETHYL-STYRENE	Fruit		30.0	-0.11624763874381962	--
11	ALPHA-PHELLANDRENE	Seed		60.0	-0.9184826797367149	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Fruit		60.0	-0.5463965854128641	--
11	ALPHA-PHELLANDRENE	Seed Essent. Oil		8400.0	0.7805772238273097	--
28	ALPHA-PINENE	Fruit	9.0	330.0	-0.6326269333262723	--
28	ALPHA-PINENE	Seed Essent. Oil		3000.0	-0.7212203254805465	--
28	ALPHA-PINENE	Seed	9.0	330.0	-0.4681305937392061	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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	--
13	ALPHA-TERPINENE	Seed Essent. Oil		5000.0	-0.747287894378325	--
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	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	ALPHA-TERPINEOL	Seed Essent. Oil		500.0	-0.7380690023576203	--
0	ALPHA-THUJENE	Fruit		24.0	-0.5742881361044722	--
0	ALPHA-THUJENE	Seed		24.0	-1.1767496731268863	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	ANISALDEHYDE	Fruit		837.0	0.3007182102385518	--
7	ANISALDEHYDE	Seed		837.0	-0.9438488054306591	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	APIGENIN-5-O-GLUCOSIDE	Seed				--
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.
0	APIGENIN-7-GLUCOSIDE	Fruit				--
0	APIGENIN-7-GLUCURONOSYL-GLUCOSIDE	Seed				--
0	APIGENIN-7-GLUCURONOSYL-GLUCOSIDE	Fruit				--
0	APIGETRIN	Seed				--
4	APIIN	Seed				--
112	ASCORBIC-ACID	Seed	0.0	76.0	-0.2928301356509014	--
112	ASCORBIC-ACID	Fruit	0.0	76.0	-0.27976355402626646	--
112	ASCORBIC-ACID	Tissue Culture				--
0	ASH	Seed	58000.0	89000.0	1.2367887262181747	--
0	ASH	Fruit	58000.0	89000.0	0.8373581639684924	--
4	BENZYL-CINNAMATE	Seed		1341.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	BENZYL-CINNAMATE	Fruit		1341.0		--
6	BETA-BISABOLENE	Seed	60.0	360.0	-0.5964358465216921	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
6	BETA-BISABOLENE	Fruit	60.0	360.0	-0.6279289020524476	--
53	BETA-CAROTENE	Fruit	5.0	8.0	-0.1353367732684366	--
53	BETA-CAROTENE	Seed	5.0	8.0	0.07076552722792115	--
5	BETA-ELEMENE	Seed		30.0	-0.7668490032631218	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BETA-ELEMENE	Fruit		30.0	-0.5255615099967239	--
0	BETA-FARNESENE	Fruit	220.0	440.0	1.0	--
0	BETA-FARNESENE	Seed	220.0	440.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Fruit	90.0	279.0	-0.4243936628944281	--
3	BETA-PHELLANDRENE	Seed	90.0	279.0	-0.9915321681819333	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Seed Essent. Oil		700.0	-1.0822902451231144	--
13	BETA-PINENE	Fruit	48.0	6600.0	-0.08639391856372851	--
13	BETA-PINENE	Seed Essent. Oil		60300.0	-0.4033073996580829	--
13	BETA-PINENE	Seed	48.0	6600.0	0.11443413980397102	--
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	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		--
12	BORNYL-ACETATE	Seed		36.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
12	BORNYL-ACETATE	Fruit		36.0	-0.7126671869128719	--

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	--
28	CALCIUM	Seed	9310.0	15511.0	2.087195698631959	--
28	CALCIUM	Fruit	9310.0	15511.0	2.6894460586450313	--
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.)
9	CAMPHENE	Seed Essent. Oil		400.0	-1.4910054033640832	--
0	CAR-3-ENE	Seed Essent. Oil		200.0	-1.0	--
0	CARBOHYDRATES	Fruit	442000.0	570000.0	-1.1383877321758809	--
0	CARBOHYDRATES	Seed	442000.0	570000.0	0.18518872608740047	--
1	CARVEOL	Fruit		435.0		--
1	CARVEOL	Seed		435.0	-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	--
31	CARYOPHYLLENE	Seed	144.0	320.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	CARYOPHYLLENE-OXIDE	Fruit		435.0	-0.5007242267296801	--
8	CARYOPHYLLENE-OXIDE	Seed		435.0	1.097913908269028	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
20	CHOLINE	Seed		3003.0	1.2524025343894258	--
24	CHROMIUM	Fruit		8.4	0.6722150195358815	--
24	CHROMIUM	Seed		8.4	0.5412807345301005	--
0	CIS-BETA-FARNESENE	Seed Essent. Oil		4500.0		--
0	CIS-GAMMA-BISABOLENE	Fruit		30.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-GAMMA-BISABOLENE	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-SABINENE-HYDRATE	Fruit		207.0	1.414213562373095	--
0	CIS-SABINENE-HYDRATE	Seed Essent. Oil		1500.0	-1.0	--
0	CIS-SABINENE-HYDRATE	Seed		207.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	COBALT	Seed		2.2	-0.11052683130845588	--
2	COBALT	Fruit		2.2	-0.268784847122832	--
1	COPAENE	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	COPAENE	Fruit		30.0	-0.7063409156616118	--
12	COPPER	Seed	9.0	16.0	0.10753302142111128	--
12	COPPER	Fruit	9.0	16.0	0.24757908207921683	--
4	COSMOSIIN	Seed		1500.0		--
0	CRYPTONE	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	CRYPTONE	Fruit				--
1	CUMENE	Fruit				--
1	CUMENE	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	CUMIN-ALCOHOL	Seed Essent. Oil		4200.0		--
10	CUMINALDEHYDE	Seed	4000.0	16000.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
10	CUMINALDEHYDE	Fruit	4000.0	16000.0	1.0	--
10	CUMINALDEHYDE	Seed Essent. Oil	205100.0	480000.0		--
10	CUMINALDEHYDE	Essential Oil		350000.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CUMINIC-ACID	Fruit		1.0		--
0	CUMINIC-ACID	Seed		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CUMINIC-ALCOHOL	Fruit				--
0	CUMINIC-ALCOHOL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CUMINYL-ALCOHOL	Fruit	300.0	21660.0		--
0	CUMINYL-ALCOHOL	Seed	300.0	21660.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	CYNAROSIDE	Seed		500.0	-1.0	--
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.
8	DELTA-3-CARENE	Fruit		270.0	-0.1615236669067504	--
8	DELTA-3-CARENE	Seed		270.0	1.2977713690461004	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DELTA-5,6-OCTADECENOIC-ACID	Seed				--
0	DELTA-5,6-OCTADECENOIC-ACID	Fruit				--
0	DILLAPIOLE	Seed		150.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DILLAPIOLE	Fruit		150.0	-1.0	--
7	DIPENTENE	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	DIPENTENE	Fruit				--
0	EO	Seed	20000.0	50000.0	0.08159531399912463	--
0	EO	Fruit	20000.0	50000.0	0.1518886748253213	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
76	EUGENOL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
76	EUGENOL	Fruit				--
17	FARNESOL	Fruit		834.0	1.413989751209689	--
17	FARNESOL	Seed		834.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	FAT	Fruit	134000.0	270380.0	1.423888601701519	--
0	FAT	Seed	134000.0	270380.0	0.02629680271488368	--
15	FIBER	Fruit	105000.0	136000.0	-0.05356506176852561	--
15	FIBER	Seed	105000.0	136000.0	0.009642624567051585	--
11	GAMMA-TERPINENE	Fruit	174.0	11800.0	1.5201342086172545	--
11	GAMMA-TERPINENE	Seed Essent. Oil		135100.0	1.7741924046473574	--
11	GAMMA-TERPINENE	Essential Oil				--
11	GAMMA-TERPINENE	Seed	174.0	11800.0	1.3004692670430558	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GUM	Fruit				--
0	GUM	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
6	IRON	Fruit	155.0	748.0	2.4396262164214058	--
6	IRON	Seed	155.0	748.0	2.774806205372537	--
1	ISOCARYOPHYLLENE	Seed Essent. Oil		2800.0		--
60	LIMONENE	Seed Essent. Oil		2500.0	-0.8605696309526396	--
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.
0	LINALOL	Fruit	30.0	318.0	-0.5850669501995082	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
53	LINALOOL	Seed	30.0	318.0	-0.1602566890671307	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Seed Essent. Oil		300.0	-0.5568630458522826	--
78	LUTEOLIN	Leaf				--
78	LUTEOLIN	Seed				--
78	LUTEOLIN	Fruit				--
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.
7	LUTEOLIN-7-GLUCOSIDE	Fruit				--
0	LUTEOLIN-7-GLUCURONOSYL-GLUCOSIDE	Seed				--
0	LUTEOLIN-7-GLUCURONOSYL-GLUCOSIDE	Fruit				--
14	MANGANESE	Seed	24.0	33.0	-0.25562914891156324	--
14	MANGANESE	Fruit	24.0	33.0	-0.18593979479616832	--
18	MANNITOL	Seed				--
6	METHYL-CHAVICOL	Fruit		30.0	-0.9052787471318983	--
6	METHYL-CHAVICOL	Seed		30.0	-1.0272094750696692	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	METHYL-CINNAMATE	Seed		138.0		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	--
22	MYRCENE	Seed Essent. Oil		5000.0	-0.6729231762483394	--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	MYRTENOL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	MYRTENOL	Fruit				--
39	NIACIN	Fruit	46.0	49.0	-0.1563834722018048	--
39	NIACIN	Seed	46.0	49.0	0.18301568158571277	--
3	NICKEL	Fruit		3.6	0.31537310910976213	--
3	NICKEL	Seed		3.6	-0.22040689220295698	--
0	OCTADECA-5,6-DIENOIC-ACID	Seed Oil				--
18	OLEIC-ACID	Seed		154000.0	0.28687020919917255	--
18	OLEIC-ACID	Seed Oil				--
16	P-CYMENE	Fruit	810.0	12639.0	1.093379153357459	--
16	P-CYMENE	Seed Essent. Oil		57400.0	1.1697457846107164	--
16	P-CYMENE	Essential Oil				--
16	P-CYMENE	Seed	810.0	12639.0	2.5658784542716937	--
0	P-ISOPROPYLPHENOL	Seed Essent. Oil		800.0		--
0	P-MENTH-3-EN-7-AL	Seed Essent. Oil		4400.0		--
0	P-MENTHA-1,3-DIEN-7-AL	Seed Essent. Oil		60100.0		--
0	P-MENTHA-1,3-DIEN-7-AL	Essential Oil				--
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	P-MENTHA-1,3-DIEN-7-AL	Fruit	3330.0	4560.0		--
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.
0	P-MENTHA-1,4-DIEN-7-AL	Fruit	7080.0	7290.0		--
0	P-MENTHA-1,4-DIEN-7-AL	Seed Essent. Oil		319800.0		--
0	P-MENTHA-1,4-DIEN-7-AL	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
0	P-MENTHA-3-EN-7-OL	Fruit	140.0	280.0		--
11	PERILLALDEHYDE	Seed		336.0	1.3948390326025877	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	PERILLALDEHYDE	Fruit		336.0	1.4139019929570265	--
0	PETROSELINIC-ACID	Seed		522000.0	-0.08234362953415873	--
0	PETROSELINIC-ACID	Seed Oil				--
0	PHELLANDRAL	Fruit				--
0	PHELLANDRAL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	PHOSPHORUS	Seed	4900.0	5673.0	0.0844694836529903	--
4	PHOSPHORUS	Fruit	4900.0	5673.0	0.7462902843572051	--
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.)
0	PIPERITOL	Seed		243.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PIPERITOL	Fruit		243.0		--
7	PIPERITONE	Fruit		172.0		--
7	PIPERITONE	Seed		172.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
14	POTASSIUM	Fruit	17880.0	20916.0	0.26537600660314625	--
14	POTASSIUM	Seed	17880.0	20916.0	0.7339716357950823	--
0	PROTEIN	Fruit	166000.0	212000.0	1.374076643190184	--
0	PROTEIN	Seed	166000.0	212000.0	-0.19388730833174384	--
0	RESIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	RESIN	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
15	RIBOFLAVIN	Fruit	3.0	4.0	-0.21615825716438572	--
15	RIBOFLAVIN	Seed	3.0	4.0	0.18234587940570884	--
5	SABINENE	Seed	30.0	1014.0	-0.3944636041574373	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Seed Essent. Oil		3200.0	-0.48390449587595435	--
5	SABINENE	Fruit	30.0	1014.0	-0.217118135360517	--
7	SALICYLATES	Seed		450.0	2.0742057734588757	--
1	SODIUM	Seed	1680.0	2028.0	2.5035675487310334	--
1	SODIUM	Fruit	1680.0	2028.0	0.008362175941227531	--
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.)
35	TANNIN	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
35	TANNIN	Fruit				--
23	TERPINEN-4-OL	Seed		30.0	-0.6762665967069378	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	--
23	TERPINEN-4-OL	Fruit		30.0	-0.35380476892863855	--
9	TERPINOLENE	Seed Essent. Oil		400.0	-0.7791560503540546	--
0	TERPINOLENE-EPOXIDE	Fruit		60.0		--
0	TERPINOLENE-EPOXIDE	Seed		60.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	THIAMIN	Fruit	6.0	7.0	0.21342198396383905	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	THIAMIN	Seed	6.0	7.0	0.09921569102976133	--
71	THYMOL	Seed Essent. Oil		200.0	-0.730649211036064	--
0	TRANS-ALPHA-BERGAMOTENE	Seed Essent. Oil		900.0		--
2	TRANS-PINOCARVEOL	Fruit		30.0		--
2	TRANS-PINOCARVEOL	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-SABINENE-HYDRATE	Fruit		87.0	-0.43545971945575607	--
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	Seed Essent. Oil		800.0	-1.0	--
0	WATER	Fruit		81000.0	-2.9983398493677664	--
0	WATER	Seed		81000.0	-0.5625925943807273	--
3	XANTHOPHYLL	Fruit				--
3	XANTHOPHYLL	Seed				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	ZINC	Fruit	41.0	58.0	0.8333322427894736	--
77	ZINC	Seed	41.0	58.0	0.3653236164034136	--