

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Cuminum cyminum

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DELTA-5,6-OCTADECENOIC-ACID	Seed				--
7	DIPENTENE	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	APIGENIN-7-GLUCOSIDE	Fruit				--
0	APIGENIN-5-O-GLUCOSIDE	Seed				--
0	DELTA-5,6-OCTADECENOIC-ACID	Fruit				--
0	RESIN	Fruit				--
35	TANNIN	Seed				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
16	P-CYMENE	Essential Oil				--
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	GUM	Fruit				--
11	GAMMA-TERPINENE	Essential Oil				--
2	MYRTENOL	Fruit				--
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	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	CUMINIC-ALCOHOL	Fruit				--
0	PETROSELINIC-ACID	Seed Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	PELLANDRAL	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.
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.
18	MANNITOL	Seed				--
0	PELLANDRAL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
76	EUGENOL	Fruit				--
112	ASCORBIC-ACID	Tissue Culture				--
0	LUTEOLIN-7-GLUCURONOSYL-GLUCOSIDE	Seed				--
1	CUMENE	Fruit				--
0	LUTEOLIN-7-GLUCURONOSYL-GLUCOSIDE	Fruit				--
0	CUMINIC-ALCOHOL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	TANNIN	Fruit				--
4	APIIN	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
78	LUTEOLIN	Leaf				--
2	MYRTENOL	Seed				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CRYPTONE	Fruit				--
7	LUTEOLIN-7-GLUCOSIDE	Fruit				--
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				--
7	DIPENTENE	Fruit				--
0	APIGETRIN	Seed				--
78	LUTEOLIN	Fruit				--
0	APIGENIN-7-GLUCURONOSYL-GLUCOSIDE	Fruit				--
0	APIGENIN-7-GLUCURONOSYL-GLUCOSIDE	Seed				--
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		--
2	COBALT	Fruit		2.2	-0.268784847122832	--
2	COBALT	Seed		2.2	-0.11052683130845588	--
3	NICKEL	Seed		3.6	-0.22040689220295698	--
3	NICKEL	Fruit		3.6	0.31537310910976213	--
15	RIBOFLAVIN	Fruit	3.0	4.0	-0.21615825716438572	--
15	RIBOFLAVIN	Seed	3.0	4.0	0.18234587940570884	--
31	THIAMIN	Fruit	6.0	7.0	0.21342198396383905	--
31	THIAMIN	Seed	6.0	7.0	0.09921569102976133	--
53	BETA-CAROTENE	Fruit	5.0	8.0	-0.1353367732684366	--
53	BETA-CAROTENE	Seed	5.0	8.0	0.07076552722792115	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	CHROMIUM	Fruit		8.4	0.6722150195358815	--
24	CHROMIUM	Seed		8.4	0.5412807345301005	--
12	COPPER	Seed	9.0	16.0	0.10753302142111128	--
12	COPPER	Fruit	9.0	16.0	0.24757908207921683	--
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.
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	--
1	COPAENE	Fruit		30.0	-0.7063409156616118	--
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	CIS-GAMMA-BISABOLENE	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-GAMMA-BISABOLENE	Fruit		30.0		--
5	BETA-ELEMENE	Fruit		30.0	-0.5255615099967239	--
2	TRANS-PINOCARVEOL	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	COPAENE	Seed		30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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.
23	TERPINEN-4-OL	Fruit		30.0	-0.35380476892863855	--
2	TRANS-PINOCARVEOL	Fruit		30.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
14	MANGANESE	Seed	24.0	33.0	-0.25562914891156324	--
14	MANGANESE	Fruit	24.0	33.0	-0.18593979479616832	--
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	--
39	NIACIN	Fruit	46.0	49.0	-0.1563834722018048	--
39	NIACIN	Seed	46.0	49.0	0.18301568158571277	--
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.)
4	BORON	Fruit	34.0	50.0	0.20278384568897864	--
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).
77	ZINC	Fruit	41.0	58.0	0.8333322427894736	--
77	ZINC	Seed	41.0	58.0	0.3653236164034136	--
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		--
11	ALPHA-PHELLANDRENE	Fruit		60.0	-0.5463965854128641	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ALPHA-PHELLANDRENE	Seed		60.0	-0.9184826797367149	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
19	ACETYL-CHOLINE	Seed		68.0	-0.21613518728808323	--
112	ASCORBIC-ACID	Seed	0.0	76.0	-0.2928301356509014	--
112	ASCORBIC-ACID	Fruit	0.0	76.0	-0.27976355402626646	--
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	--
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.
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	--
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		--
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	--
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	PIPERITONE	Seed		172.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	PIPERITONE	Fruit		172.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CAR-3-ENE	Seed Essent. Oil		200.0	-1.0	--
71	THYMOL	Seed Essent. Oil		200.0	-0.730649211036064	--
0	BETA-TERPINENE	Fruit		204.0		--
0	BETA-TERPINENE	Seed		204.0		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		207.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PIPERITOL	Seed		243.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	PIPERITOL	Fruit		243.0		--
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.
23	ALPHA-TERPINEOL	Fruit	30.0	275.0	-0.18222634096235243	--
23	ALPHA-TERPINEOL	Seed	30.0	275.0	-0.4192681580586145	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.
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		--
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.)
53	LINALOOL	Seed Essent. Oil		300.0	-0.5568630458522826	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.)
0	LINALOL	Fruit	30.0	318.0	-0.5850669501995082	--
53	LINALOOL	Seed	30.0	318.0	-0.1602566890671307	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.
28	ALPHA-PINENE	Fruit	9.0	330.0	-0.6326269333262723	--
28	ALPHA-PINENE	Seed	9.0	330.0	-0.4681305937392061	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
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	--
6	BETA-BISABOLENE	Seed	60.0	360.0	-0.5964358465216921	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	BETA-BISABOLENE	Fruit	60.0	360.0	-0.6279289020524476	--
9	CAMPHENE	Seed Essent. Oil		400.0	-1.4910054033640832	--
9	TERPINOLENE	Seed Essent. Oil		400.0	-0.7791560503540546	--
8	CARYOPHYLLENE-OXIDE	Fruit		435.0	-0.5007242267296801	--
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.
8	CARYOPHYLLENE-OXIDE	Seed		435.0	1.097913908269028	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-FARNESENE	Fruit	220.0	440.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-FARNESENE	Seed	220.0	440.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	SALICYLATES	Seed		450.0	2.0742057734588757	--
23	ALPHA-TERPINEOL	Seed Essent. Oil		500.0	-0.7380690023576203	--
3	CYNAROSIDE	Seed		500.0	-1.0	--
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.)
60	LIMONENE	Seed	60.0	696.0	-0.7143557055167975	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	LIMONENE	Fruit	60.0	696.0	-0.6503856897192445	--
3	BETA-PHELLANDRENE	Seed Essent. Oil		700.0	-1.0822902451231144	--
6	IRON	Seed	155.0	748.0	2.774806205372537	--
6	IRON	Fruit	155.0	748.0	2.4396262164214058	--
0	TRANS-SABINENE-HYDRATE	Seed Essent. Oil		800.0	-1.0	--
0	P-ISOPROPYLPHENOL	Seed Essent. Oil		800.0		--
17	FARNESOL	Seed		834.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
17	FARNESOL	Fruit		834.0	1.413989751209689	--
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	--
0	TRANS-ALPHA-BERGAMOTENE	Seed Essent. Oil		900.0		--
23	TERPINEN-4-OL	Seed Essent. Oil		1000.0	-0.656858499149851	--
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	Fruit	30.0	1014.0	-0.217118135360517	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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		--
4	COSMOSIIN	Seed		1500.0		--
0	CIS-SABINENE-HYDRATE	Seed Essent. Oil		1500.0	-1.0	--
1	SODIUM	Seed	1680.0	2028.0	2.5035675487310334	--
1	SODIUM	Fruit	1680.0	2028.0	0.008362175941227531	--
60	LIMONENE	Seed Essent. Oil		2500.0	-0.8605696309526396	--
1	ISOCARYOPHYLLENE	Seed Essent. Oil		2800.0		--
28	ALPHA-PINENE	Seed Essent. Oil		3000.0	-0.7212203254805465	--
20	CHOLINE	Seed		3003.0	1.2524025343894258	--
5	SABINENE	Seed Essent. Oil		3200.0	-0.48390449587595435	--
1	CUMIN-ALCOHOL	Seed Essent. Oil		4200.0		--
0	P-MENTH-3-EN-7-AL	Seed Essent. Oil		4400.0		--
0	CIS-BETA-FARNESENE	Seed Essent. Oil		4500.0		--
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		--
13	ALPHA-TERPINENE	Seed Essent. Oil		5000.0	-0.747287894378325	--
22	MYRCENE	Seed Essent. Oil		5000.0	-0.6729231762483394	--
4	PHOSPHORUS	Seed	4900.0	5673.0	0.0844694836529903	--
4	PHOSPHORUS	Fruit	4900.0	5673.0	0.7462902843572051	--
13	BETA-PINENE	Fruit	48.0	6600.0	-0.08639391856372851	--
13	BETA-PINENE	Seed	48.0	6600.0	0.11443413980397102	--
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		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ALPHA-PHELLANDRENE	Seed Essent. Oil		8400.0	0.7805772238273097	--
11	GAMMA-TERPINENE	Fruit	174.0	11800.0	1.5201342086172545	--
11	GAMMA-TERPINENE	Seed	174.0	11800.0	1.3004692670430558	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
16	P-CYMENE	Fruit	810.0	12639.0	1.093379153357459	--
16	P-CYMENE	Seed	810.0	12639.0	2.5658784542716937	--
28	CALCIUM	Seed	9310.0	15511.0	2.087195698631959	--
28	CALCIUM	Fruit	9310.0	15511.0	2.6894460586450313	--
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	--
14	POTASSIUM	Fruit	17880.0	20916.0	0.26537600660314625	--
14	POTASSIUM	Seed	17880.0	20916.0	0.7339716357950823	--
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		--
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	EO	Seed	20000.0	50000.0	0.08159531399912463	--
0	EO	Fruit	20000.0	50000.0	0.1518886748253213	--
16	P-CYMENE	Seed Essent. Oil		57400.0	1.1697457846107164	--
0	P-MENTHA-1,3-DIEN-7-AL	Seed Essent. Oil		60100.0		--
13	BETA-PINENE	Seed Essent. Oil		60300.0	-0.4033073996580829	--
0	WATER	Fruit		81000.0	-2.9983398493677664	--
0	WATER	Seed		81000.0	-0.5625925943807273	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ASH	Seed	58000.0	89000.0	1.2367887262181747	--
0	ASH	Fruit	58000.0	89000.0	0.8373581639684924	--
11	GAMMA-TERPINENE	Seed Essent. Oil		135100.0	1.7741924046473574	--
15	FIBER	Seed	105000.0	136000.0	0.009642624567051585	--
15	FIBER	Fruit	105000.0	136000.0	-0.05356506176852561	--
18	OLEIC-ACID	Seed		154000.0	0.28687020919917255	--
0	PROTEIN	Fruit	166000.0	212000.0	1.374076643190184	--
0	PROTEIN	Seed	166000.0	212000.0	-0.19388730833174384	--
0	FAT	Fruit	134000.0	270380.0	1.423888601701519	--
0	FAT	Seed	134000.0	270380.0	0.02629680271488368	--
0	P-MENTHA-1,4-DIEN-7-AL	Seed Essent. Oil		319800.0		--
10	CUMINALDEHYDE	Essential Oil		350000.0	-1.0	--
10	CUMINALDEHYDE	Seed Essent. Oil	205100.0	480000.0		--
0	PETROSELINIC-ACID	Seed		522000.0	-0.08234362953415873	--
0	CARBOHYDRATES	Fruit	442000.0	570000.0	-1.1383877321758809	--
0	CARBOHYDRATES	Seed	442000.0	570000.0	0.18518872608740047	--