

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Citrus reticulata

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	(E)-BETA-OCIMENE	Fruit	4.0	5.0	-0.6151691947960529	--
0	(Z)-BETA-OCIMENE	Fruit		0.1	-0.7485469887599769	--
67	1,8-CINEOLE	Fruit	0.0	76.0	-0.41910464878819126	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	3',5-DIHYDROXY-6,7,8-TRIMETHOXY-FLAVONE	Pericarp		2.1		--
0	3'-DIMETHYL-NOBILETIN	Pericarp		21.4		--
0	3'-HYDROXY-4',5,6,7,8-PENTAMETHOXY-FLAVONE	Leaf				--
0	3,5,5-TRIMETHYLBENZYL-ALCOHOL	Fruit		3.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	4',5,7,8-TETRAMETHOXY-FLAVONE	Pericarp	161.0	185.7		--
0	4',5,7-TRI-O-METHYL-APIGENIN	Pericarp		5.7		--
0	4',5,7-TRIHYDROXY-3',6,8-TRIMETHOXY-FLAVONE	Pericarp				--
0	4'-5-7-TRIMETHOXYFLAVONE	Pericarp				--
1	4'-HYDROXY-5,6,7,8-TETRAMETHOXY-FLAVONE	Pericarp		1.4		--
0	4,5-DIHYDROXY-7,8-DIMETHOXY-FLAVONE	Pericarp				--
0	5,5'-OXY-DIMETHYLENE-BIS-(2-FURALDEHYDE)	Pericarp				--
0	5-DEMETHYL-NOBILETIN	Pericarp		257.1		--
0	5-HYDROXY-3',4',6,7-TETRAMETHOXY-FLAVONE	Pericarp		35.7		--
0	5-HYDROXY-3,5',7,8-TETRAMETHOXY-3',4'-METHYLENEDIOXY-FLAVONE	Fruit				--
0	5-HYDROXY-4',7,8-TRIMETHOXY-FLAVONE	Pericarp				--
0	5-O-DEMETHYL-NOBILETIN	Pericarp		4.0		--
0	7-DEMETHYL-TANGERETIN	Pericarp		5.0		--
0	7-HYDROXY-3',4',5,6,8-PENTAMETHOXY-FLAVONE	Pericarp		10.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	7-HYDROXY-3',4',5,6-TETRAMETHOXY-FLAVONE	Leaf				--
0	8-HYDROXY-4',5,7-TRIMETHOXY-FLAVONE	Pericarp		2.8		--
2	8-METHOXY-CIRSILINEOL	Pericarp		12.1		--
6	ACETALDEHYDE	Fruit	0.0	2.0	-0.7067882885418681	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	ALANINE	Fruit	70.0	2740.0	-0.3802547043758256	--
7	ALPHA-CAROTENE	Fruit	0.2	2.0	-0.25314632170375756	--
0	ALPHA-COPAENE	Fruit	1.0	2.0	-0.6867645101915246	--
0	ALPHA-CUBEBENE	Fruit	0.7	1.0	-0.6220320233548484	--
2	ALPHA-HUMULENE	Fruit	0.7	1.0	-0.598173569962584	--
15	ALPHA-LINOLENIC-ACID	Fruit	100.0	806.0	-0.7874611428502755	USDA's Ag Handbook 8 and sequelae)
11	ALPHA-PHELLANDRENE	Fruit	5.0	6.0	-0.5736201696885931	--
28	ALPHA-PINENE	Fruit	50.0	55.0	-0.7044240563995721	--
3	ALPHA-SELINENE	Fruit		2.0	-1.0145652291233325	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-SINENSAL	Fruit	2.0	3.0	1.0	--
0	ALPHA-SINESAL	Fruit	1.0	32.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Fruit	0.7	1.0	-0.4549438642997257	--
23	ALPHA-TERPINEOL	Fruit	1.0	2.0	-0.40686466721857434	--
0	ALPHA-TERPINYL-ACETATE	Fruit	1.0	5.0	-0.7106101836720669	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-THUJENE	Fruit	1.0	2.0	-0.5946551522156464	--
32	ALPHA-TOCOPHEROL	Fruit	3.0	31.0	-0.6444565233542005	--
0	ALPHA-YLANGENE	Fruit		1.0	-0.7179018133512801	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
5	ALUMINUM	Fruit	1.0	15.0	-0.21915758507532193	ACTA AGRIC SCAND SUPPL 22: 1980
14	ARGININE	Fruit	440.0	3546.0	-0.20372390514917343	USDA's Ag Handbook 8 and sequelae)
2	ARSENIC	Fruit	0.04	0.3	-0.15246528271419005	ACTA AGRIC SCAND SUPPL 22: 1980
112	ASCORBIC-ACID	Fruit	280.0	3684.0	-0.05542896425867096	--
0	ASH	Fruit	3900.0	31525.0	-0.6509769293457256	ACTA AGRIC SCAND SUPPL 22: 1980
2	ASPARAGINE	Fruit	180.0	850.0	-0.3407885457306878	--
3	ASPARTIC-ACID	Fruit	240.0	6206.0	-0.5192722442905813	--
1	BEHENIC-ACID	Seed Oil				--
9	BENZYL-ALCOHOL	Fruit	1.0	2.0	1.4141599980735915	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-APOCAROTENOL	Fruit				--
53	BETA-CAROTENE	Fruit	1.0	44.0	-0.0657494218885312	--
0	BETA-CARYOPHYLLENE	Fruit	1.0	2.0	-0.5058677869700708	--
0	BETA-CITRAURIN	Fruit				--
5	BETA-ELEMENE	Fruit	0.7	1.0	-0.565275335737646	--
13	BETA-PINENE	Fruit	20.0	23.0	-0.2971064953564389	--
5	BETA-SESQUIPHELLANDRENE	Fruit		20.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
47	BETA-SITOSTEROL	Root				--
47	BETA-SITOSTEROL	Pericarp				--
3	BETA-TERPINEOL	Fruit		40.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	BORON	Fruit	1.0	14.0	-0.5220324995843817	--
0	BRAYLIN	Root				--
0	BROMINE	Fruit		1.0	-0.42563543443835	ACTA AGRIC SCAND SUPPL 22: 1980
3	CADMIUM	Fruit		0.02	-0.5848464463574334	ACTA AGRIC SCAND SUPPL 22: 1980

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CALAMIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
28	CALCIUM	Fruit	140.0	3077.0	-0.17982842232359114	--
2	CAMPESTEROL	Root				--
2	CAMPESTEROL	Pericarp				--
9	CAMPHENE	Fruit	1.0	40.0	-0.3352175138149692	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CARBOHYDRATES	Fruit	102000.0	901914.0	0.6365269983057671	--
19	CARVONE	Fruit	0.0	3.0	-0.5003949723462134	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Fruit	2.0	9.0	-0.395772877445224	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	CHLORINE	Fruit		24.0	-0.6858111593916871	--
1	CHOLESTEROL	Root				--
1	CHOLESTEROL	Pericarp				--
24	CHROMIUM	Fruit	0.01	0.08	-0.4963965640383935	ACTA AGRIC SCAND SUPPL 22: 1980
9	CIRSIMARITIN	Pericarp		1.4		--
1	CIS-3-HEXENOL	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-CARVEOL	Fruit	1.0	4.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CIS-SABINENE-HYDRATE	Fruit		0.1	-0.7071067811865477	--
23	CITRIC-ACID	Fruit	8600.0	12200.0	-0.4519563898290651	--
20	CITRONELLAL	Fruit	4.0	5.0	-0.9952774234291415	--
0	CITRONELLIC-ACID	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	CITRONELLOL	Fruit	0.4	0.8	-0.5199467377830584	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CITRONELLYL-ACETATE	Fruit	0.7	1.0	1.0000000000000002	--
2	COBALT	Fruit		0.005	-0.5345099214648011	ACTA AGRIC SCAND SUPPL 22: 1980
12	COPPER	Fruit	0.0	4.8	-0.6241106933300086	--
0	CYCLOCALAMIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	CYSTINE	Fruit	70.0	564.0	-0.48744653821722156	USDA's Ag Handbook 8 and sequelae)
0	DEACETYL-NOMILIN	Seed				--
0	DEACETYL-NOMILIN-17-O-BETA-D-GLUCOSIDE	Seed				--
0	DEACETYL-NOMILINIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				--
0	DECANAL	Fruit	8.0	9.0	-0.816743214675704	--
3	DECANOIC-ACID	Fruit		3.0	1.4142131746286055	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	DECANOL	Fruit		4.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	DECYL-ACETATE	Fruit	1.0	5.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	DELTA-3-CARENE	Fruit	0.0	5.0	-0.6048308539868422	--
9	DELTA-CADINENE	Fruit		20.0	-0.4645992072439037	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DELTA-ELEMENE	Fruit	6.0	10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DIMETHYL-ANTHRALINATE	Fruit		90.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
34	DIOSMIN	Leaf				--
2	DODECANAL	Fruit	1.0	15.0	0.3730620025303552	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
1	DODECANOIC-ACID	Fruit		1.0	1.0000000000000002	--
1	DODECANOL	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EO	Fruit	7500.0	10000.0	-0.625591783140096	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
24	ETHANOL	Fruit	0.0	183.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	EUPATILIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
8	EUPATORIN	Pericarp		3.5		--
2	FARNESENE	Fruit	1.0	2.0	1.0000000000000002	--
0	FAT	Fruit	1900.0	22000.0	-0.4732178594145328	--
61	FERULIC-ACID	Pericarp				--
0	FERULOYL-PUTRESCINE	Fruit		0.0	-1.0	--
15	FIBER	Fruit	1890.0	43000.0	-0.9311577665884301	--
0	FLUORINE	Fruit	0.1	0.76	-0.5863462540268758	ACTA AGRIC SCAND SUPPL 22: 1980
15	FOLACIN	Fruit	0.0	2.0	-0.019192793995839758	USDA's Ag Handbook 8 and sequelae)
22	GAMMA-AMINOBUTYRIC-ACID	Fruit		180.0	-0.6918375369704655	--
0	GAMMA-CADANINE	Fruit		2.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GAMMA-CADINENE	Fruit	1.0	2.0	-0.9084313290424243	--
0	GAMMA-ELEMENE	Fruit	15.0	20.0	-0.6770276034934981	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

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0	GAMMA-SELINENE	Fruit		1.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	GAMMA-TERPINENE	Leaf Essent. Oil		201500.0	1.9087625075774095	--
11	GAMMA-TERPINENE	Fruit	23.0	25.0	-0.6467237641924287	--
0	GARDENIN-B	Pericarp				--
13	GERANIAL	Fruit	5.0	6.0	-1.0012482240392633	--
35	GERANIOL	Fruit	0.0	0.1	-0.611319076444153	--
35	GERANIOL	Essential Oil				--
5	GERANYL-ACETATE	Fruit	0.7	1.0	-0.9431637487853173	--
0	GERANYL-OXY-PYRANOCOUMARIN	Root				--
0	GIBBERELIC-ACID	Fruit				--
8	GLUTAMIC-ACID	Fruit	160.0	5158.0	-0.6287716109665302	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
12	GLYCINE	Fruit	20.0	5158.0	0.6009206138414905	--
0	HEPTANOIC-ACID	Fruit		1.0	0.9999999999999999	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	HEPTANOL	Fruit	1.0	2.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	HESPERIDIN	Pericarp		47800.0	-1.3719458405761777	--
31	HESPERIDIN	Fruit				--
31	HESPERIDIN	Seed				--
31	HESPERIDIN	Plant				--
31	HESPERIDIN	Leaf				--
31	HESPERIDIN	Fruit Juice				--
7	HISTIDINE	Fruit	440.0	3546.0	1.2854264273564884	USDA's Ag Handbook 8 and sequelae)

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2	HUMULENE	Fruit		5.0	-0.7947139016786847	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ICHANGIN-17-O-BETA-D-GLUCOSIDE	Seed				--
6	IRON	Fruit	1.0	79.0	-0.2141164748349134	--
3	ISOLEUCINE	Fruit	170.0	1370.0	-0.681123893553361	USDA's Ag Handbook 8 and sequelae)
3	ISOPULEGOL	Fruit	1.0	5.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ISOSINENSETIN	Pericarp		135.7		--
0	KAEMPFERIDE-TRIMETHYL-ETHER	Fruit				--
7	LAURIC-ACID	Seed Oil				--
2	LEUCINE	Fruit	50.0	1290.0	-0.8102055642534455	--
60	LIMONENE	Fruit	6500.0	9400.0	0.5979144802317528	--
60	LIMONENE	Essential Oil				--
5	LIMONIN	Seed				--
5	LIMONIN	Pericarp		73.0	1.0	--
0	LIMONIN-17-O-BETA-D-GLUCOSIDE	Seed				--
0	LINALOL	Fruit	3.0	610.0	-0.5349466145888611	--
53	LINALOOL	Leaf Essent. Oil		95500.0	-0.09113638161798661	--
53	LINALOOL	Fruit	3.0	610.0	-0.41515861877017357	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
27	LINOLEIC-ACID	Fruit	270.0	2176.0	-0.32469981100559747	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Seed Oil				--
0	LONGIFOLENE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	LUTEIN	Fruit	0.2	2.0	-0.6619982620916077	--
4	LYSINE	Fruit	40.0	2579.0	-0.3976767860750818	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Fruit	111.0	1416.0	-0.33050162584685566	USDA's Ag Handbook 8 and sequelae)
15	MALIC-ACID	Fruit	1800.0	2100.0	-0.8150680933283987	--
1	MALONIC-ACID	Fruit				--
14	MANGANESE	Fruit	0.0	4.6	-0.3732056900241152	--
1	MERCURY	Fruit		0.001	-0.7865389313824043	ACTA AGRIC SCAND SUPPL 22: 1980
15	METHIONINE	Fruit	130.0	1048.0	0.11018842391001216	USDA's Ag Handbook 8 and sequelae)
0	METHYL-HEPTENONE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	METHYL-N-METHYL-ANTHRALINATE	Fruit	1.0	33.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	METHYL-N-METHYL-ANTHRANILATE	Fruit	0.0	0.1		--
0	METHYL-THYMOL	Fruit		10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	MOLYBDENUM	Fruit		0.1	-0.46519775248328327	ACTA AGRIC SCAND SUPPL 22: 1980
22	MYRCENE	Fruit	160.0	180.0	-0.3564743999203521	--
6	MYRISTIC-ACID	Fruit	10.0	80.0	-0.2653696344954155	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID	Seed Oil				--
1	N-METHYL-TYRAMINE	Pericarp				--
1	N-METHYL-TYRAMINE	Fruit	0.0	58.0	1.0	--
12	NARINGIN	Fruit Juice				--
12	NARINGIN	Pericarp				--
1	NARIRUTIN	Pericarp		2100.0	-1.0	--
1	NARIRUTIN	Fruit Juice				--
6	NEOHESPERIDIN	Fruit Juice				--
6	NEOHESPERIDIN	Pericarp				--
4	NERAL	Fruit	3.0	4.0	-0.8844537428871607	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
10	NEROL	Fruit	0.4	0.8	-0.5635185349637161	--
5	NERYL-ACETATE	Fruit	1.0	2.0	-0.7162496373600711	--
39	NIACIN	Fruit	1.0	35.0	-0.3435391760304161	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	NICKEL	Fruit	0.01	0.3	-0.6882250201691348	ACTA AGRIC SCAND SUPPL 22: 1980
0	NITROGEN	Fruit	1600.0	13075.0	-0.10849236253135133	ACTA AGRIC SCAND SUPPL 22: 1980
0	NOBELITIN	Fruit				--
8	NOBILETIN	Pericarp	1441.0	3571.4		--
2	NOMILIN	Seed				--
0	NOMILIN-17-O-BETA-D-GLUCOSIDE	Seed				--
0	NOMILINIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				--
0	NONANAL	Fruit	0.7	1.0	-0.9850654184384069	--
2	NONANOIC-ACID	Fruit		1.0	-0.6724074507021538	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NONANOL	Fruit	2.0	10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	NOOTKATONE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	OBACUNONE	Seed				--
0	OBACUNONE-17-O-BETA-D-GLUCOSIDE	Seed				--
2	OCIMENE	Fruit		8.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	OCTANAL	Fruit	7.0	8.0	-0.7970811413304556	--
5	OCTANOIC-ACID	Fruit		4.0	-0.3728250649100773	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	OCTANOL	Fruit	0.0	0.1	-0.7071067811865478	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	OCTOPAMINE	Fruit	1.0	2.0	1.0	--
0	OCTYL-ACETATE	Fruit	2.0	4.0	-0.7079028233983095	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
18	OLEIC-ACID	Seed Oil				--
18	OLEIC-ACID	Fruit	300.0	2418.0	-0.4621088253743955	USDA's Ag Handbook 8 and sequelae)
15	OSTHOL	Root				--
9	OXALIC-ACID	Fruit				--
16	P-CYMENE	Leaf Essent. Oil		162900.0	1.64248251066809	--
16	P-CYMENE	Fruit	0.0	0.1	-0.5797537532122179	--
0	P-MENTHA-1-EN-9-YL-ACETATE	Fruit		0.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	PALMITIC-ACID	Seed Oil				--
13	PALMITIC-ACID	Fruit	200.0	1612.0	-0.3404401792460306	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Seed Oil				--
2	PALMITOLEIC-ACID	Fruit	40.0	320.0	-0.28694433994508195	USDA's Ag Handbook 8 and sequelae)
11	PANTOTHENIC-ACID	Fruit	2.0	16.0	-0.13423488366094238	USDA's Ag Handbook 8 and sequelae)
11	PERILLALDEHYDE	Fruit	0.0	10.0	-0.6812436875156582	--
0	PERILLYL-ACETATE	Fruit	1.0	10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	PHENYLALANINE	Fruit	50.0	1693.0	-0.5662627709383539	--
4	PHOSPHORUS	Fruit	90.0	1385.0	-0.5561459282696419	--
0	PONKANETIN	Pericarp				--
14	POTASSIUM	Fruit	1200.0	13127.0	-0.4237450594829465	--
0	PROLINE	Fruit	310.0	2499.0	-0.4140853937927713	USDA's Ag Handbook 8 and sequelae)
0	PROTEIN	Fruit	6130.0	80228.0	-0.3923843167459661	--
1	QUINIC-ACID	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	RETICULAXANTHIN	Fruit				--
0	RETROCALAMIN	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
2	RETUSIN	Fruit				--
15	RIBOFLAVIN	Fruit	0.0	4.0	-0.21615825716438572	--
0	RUBIDIUM	Fruit	0.25	2.4	-1.2520743067131963	ACTA AGRIC SCAND SUPPL 22: 1980
1	RUBIXANTHIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
5	SABINENE	Fruit	32.0	35.0	-0.5246096791708357	--
0	SABINENE-HYDRATE	Fruit	1.0	20.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	SALICYLATES	Fruit	5.0	50.0	-0.19336883267960767	--
0	SALVIGENIN	Pericarp		10.0		--
22	SCOPARONE	Pericarp		4.0		--
60	SELENIUM	Fruit		0.0	-0.38618723699673646	ACTA AGRIC SCAND SUPPL 22: 1980
1	SERINE	Fruit	120.0	1773.0	-0.6602067645050584	--
3	SESELIN	Root				--
4	SILICON	Fruit	3.0	23.0	-0.5337165506418682	ACTA AGRIC SCAND SUPPL 22: 1980
2	SINENSETIN	Pericarp		35.7		--
1	SODIUM	Fruit	8.0	154.0	-0.16934713941094268	--
8	STEARIC-ACID	Seed Oil				--
8	STEARIC-ACID	Fruit	10.0	80.0	-0.27391600706826585	USDA's Ag Handbook 8 and sequelae)
12	STIGMASTEROL	Pericarp				--
12	STIGMASTEROL	Root				--
0	SUBEROSIN	Root				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SUGARS	Fruit	69400.0	113600.0	-0.4152860528874366	USDA's Ag Handbook 8 and sequelae)
14	SULFUR	Fruit	130.0	1000.0	-0.28853428975640755	ACTA AGRIC SCAND SUPPL 22: 1980
0	SYNEPHERINE	Fruit	50.0	280.0	1.0	--
5	SYNEPHRINE	Pericarp				--
5	SYNEPHRINE	Fruit				--
0	TANGERAXANTHIN	Fruit				--
15	TANGERETIN	Pericarp	203.0	1214.2		--
0	TANGERITIN	Fruit				--
0	TANGERITIN	Pericarp				--
23	TERPINEN-4-OL	Fruit		0.1	-0.358333842321623	--
23	TERPINEN-4-OL	Leaf Essent. Oil		71300.0	0.05582026899192498	--
0	TERPINEOLENE	Fruit	4.0	110.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	TERPINOLENE	Fruit	2.0	3.0	-0.7430510373433167	--
0	TETRADECANAL	Fruit		5.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	THIAMIN	Fruit	1.0	8.0	0.3414272755878574	--
4	THREONINE	Fruit	100.0	806.0	-0.9193855017922554	USDA's Ag Handbook 8 and sequelae)
71	THYMOL	Fruit		0.1	-0.7071067811865474	--
0	THYMYL-METHYL-ETHER	Fruit		10.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	TRANS-CARVEOL	Fruit	0.0	4.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-SABINENE-HYDRATE	Fruit	0.0	0.1	-0.5231287251565837	--
29	TRYPTOPHAN	Fruit	60.0	484.0	-0.5142886582699204	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
11	TYRAMINE	Fruit		1.0	0.7071067811865478	--
8	TYROSINE	Fruit	110.0	887.0	-0.634707050013197	USDA's Ag Handbook 8 and sequelae)
2	UNDECANAL	Fruit		0.1	-0.8307063685526169	--
0	UNDECANOIC-ACID	Fruit		1.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	UNDECANOL	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	VALENCENE	Fruit	6.0	7.0	1.0	--
3	VALINE	Fruit	20.0	2176.0	-0.4698079693781215	--
0	VIT-B-6	Fruit	1.0	5.0	-0.538913394725687	USDA's Ag Handbook 8 and sequelae)
0	WATER	Fruit	879720.0	886000.0	0.5018755015736748	--
1	XANTHOXYLETIN	Root				--
1	XANTHYLETIN	Root				--
5	ZEAXANTHIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
77	ZINC	Fruit	0.8	8.0	-0.6709616277275268	ACTA AGRIC SCAND SUPPL 22: 1980