

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Citrus limon

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	LIMONENE	Leaf Essent. Oil	284000.0	754000.0	2.654734671831716	--
23	ALPHA-TERPINEOL	Leaf Essent. Oil	4000.0	125000.0	1.6609342933031976	Jim Duke's personal files.
8	CARYOPHYLLENE-OXIDE	Leaf Essent. Oil	0.8	15600.0	1.322705019532784	Jim Duke's personal files.
60	LIMONENE	Fruit Essent. Oil	512000.0	980000.0	1.267182025507371	Jim Duke's personal files.
1	NARIRUTIN	Pericarp		3600.0	1.0	Jim Duke's personal files.
71	THYMOL	Leaf Essent. Oil		11000.0	1.0	Jim Duke's personal files.
0	ISOPULEGOLE	Leaf Essent. Oil	18000.0	114000.0	1.0	Jim Duke's personal files.
0	GERANIOL-ACETATE	Leaf Essent. Oil		8100.0	1.0	Jim Duke's personal files.
0	NEROL-ACETATE	Leaf Essent. Oil		9000.0	1.0	Jim Duke's personal files.
13	GERANIAL	Essential Oil	42.0	236.0	1.0	--
13	GERANIAL	Leaf Essent. Oil	3000.0	233000.0	1.0	Jim Duke's personal files.
4	NERAL	Essential Oil	27.0	130.0	1.0	--
19	D-LIMONENE	Leaf Essent. Oil	99000.0	667000.0	1.0	Jim Duke's personal files.
4	NERAL	Leaf Essent. Oil	4000.0	172700.0	1.0	Jim Duke's personal files.
0	EO	Pt	2000.0	6000.0	1.0	--
31	HESPERIDIN	Pericarp	20500.0	68800.0	0.9831655478788394	Jim Duke's personal files.
0	FAT	Seed	300000.0	400000.0	0.7090517076840918	--
9	SINAPIC-ACID	Fruit	14.0	18.0	0.6272500481871801	--
0	WATER	Fruit	850000.0	894000.0	0.5366602504029064	--
0	CARBOHYDRATES	Fruit	111000.0	863000.0	0.42843384218109976	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	LINALOOL-ACETATE	Leaf Essent. Oil		22000.0	0.409907762680937	Jim Duke's personal files.
23	CITRIC-ACID	Fruit		59500.0	0.3223249898875974	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
62	CAFFEINE	Flower		50.0	0.21997067253202995	--
31	THIAMIN	Fruit	4.0	6.0	0.08541669233982067	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
112	ASCORBIC-ACID	Fruit	5208.0	5566.0	0.061588136058018224	--
0	TRANS-BETA-OCIMENE	Leaf Essent. Oil		7500.0	0.027166291246208063	Jim Duke's personal files.
0	PROTEIN	Fruit	10000.0	111000.0	0.020127724197141796	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SODIUM	Fruit		470.0	-0.13938121430353298	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
28	CALCIUM	Fruit	700.0	3227.0	-0.14521436633635507	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Fruit	0.0	2.0	-0.14693466516508752	--
11	GAMMA-TERPINENE	Leaf Essent. Oil	3000.0	44000.0	-0.14954213307604686	Jim Duke's personal files.
53	LINALOOL	Leaf Essent. Oil	18000.0	81000.0	-0.1829511978385886	Jim Duke's personal files.
25	P-COUMARIC-ACID	Fruit	6.0	102.0	-0.20876433550573723	--
6	IRON	Fruit	23.0	72.0	-0.24188358819633976	--
14	POTASSIUM	Fruit		14700.0	-0.28457604716385243	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
23	TERPINEN-4-OL	Leaf Essent. Oil	29600.0	31000.0	-0.2861319108695746	Jim Duke's personal files.
22	MYRCENE	Leaf Essent. Oil	5500.0	10000.0	-0.32786228882013646	Jim Duke's personal files.
102	CAFFEIC-ACID	Fruit	21.0	35.0	-0.3324337022744836	--
7	SALICYLATES	Fruit		0.0	-0.3367420403588193	--
4	PHOSPHORUS	Fruit	100.0	1979.0	-0.3757244939645237	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
61	FERULIC-ACID	Fruit	14.0	40.0	-0.3813850356982369	--
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil	100.0	3500.0	-0.38515655776504104	Jim Duke's personal files.
9	TERPINOLENE	Essential Oil	14.0	120.0	-0.39476259711357375	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-THUJENE	Essential Oil	16.0	40.0	-0.40032749008251933	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
0	FAT	Fruit		28000.0	-0.42739034203512904	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
22	MYRCENE	Essential Oil	65.0	1270.0	-0.42741750795730477	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	RIBOFLAVIN	Fruit	2.0	3.0	-0.4303249009534089	--
6	BETA-BISABOLENE	Leaf Essent. Oil		8000.0	-0.45226094922261545	Jim Duke's personal files.
5	SABINENE	Leaf Essent. Oil		10000.0	-0.4720621937310914	Jim Duke's personal files.
2	ALPHA-HUMULENE	Essential Oil		10.0	-0.48105436900291004	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
16	P-CYMENE	Leaf Essent. Oil	4100.0	20000.0	-0.4814765484301064	Jim Duke's personal files.
2	CAMPESTEROL	Fruit		20.0	-0.48957181191497545	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
28	ALPHA-PINENE	Essential Oil	40.0	500.0	-0.5556700287286983	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
39	NIACIN	Fruit	10.0	19.0	-0.5574314089774005	--
53	LINALOOL	Essential Oil	8.0	30.0	-0.583010006932893	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Essential Oil		20.0	-0.5926545907300464	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Essential Oil	50.0	175.0	-0.5948547061177535	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Essential Oil	1.0	40.0	-0.6167580897613645	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	GERANIOL	Leaf Essent. Oil	13000.0	60200.0	-0.6318280565838599	Jim Duke's personal files.
16	P-CYMENE	Essential Oil	12.0	31.0	-0.6331366260891432	--
3	BETA-PHELLANDRENE	Leaf Essent. Oil		3300.0	-0.6449387865926303	Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
87	RUTIN	Fruit	1.0	2.0	-0.6531383244068485	--
67	1,8-CINEOLE	Leaf Essent. Oil	11000.0	50000.0	-0.6565847961763176	Jim Duke's personal files.
2	CITRONELLYL-ACETATE	Plant	4.0	20.0	-0.6827759635190207	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Leaf Essent. Oil		7000.0	-0.6862264928828316	Jim Duke's personal files.
47	BETA-SITOSTEROL	Fruit		80.0	-0.6891305552196143	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	Essential Oil	2796.0	8000.0	-0.6910184174131357	--
9	CAMPHENE	Essential Oil	2.0	50.0	-0.6924881415674572	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Fruit Essent. Oil		7000.0	-0.6959144908685471	Jim Duke's personal files.
13	BETA-PINENE	Essential Oil	40.0	1270.0	-0.7021862831547401	--
15	LUTEIN	Fruit	0.12	1.2	-0.731124155967682	--
28	ALPHA-PINENE	Leaf Essent. Oil	500.0	2000.0	-0.7421534872468563	Jim Duke's personal files.
0	ASH	Fruit		28000.0	-0.7422580290226741	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
28	ALPHA-PINENE	Fruit Essent. Oil		7000.0	-0.7563238037559155	Jim Duke's personal files.
31	CARYOPHYLLENE	Essential Oil	11.0	28.0	-0.7680967243064245	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	ALPHA-TERPINEOL	Essential Oil	6.0	50.0	-0.7708262254085273	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Essential Oil		70.0	-0.7756123212065256	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	CITRAL	Essential Oil	250.0	300.0	-0.7878308981922465	--
11	GAMMA-TERPINENE	Essential Oil	290.0	1400.0	-0.8030057127991168	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
15	FIBER	Fruit	17000.0	47000.0	-0.8934118438004772	--
15	CITRONELLOL	Leaf Essent. Oil	3700.0	14000.0	-0.9724708703903254	Jim Duke's personal files.
20	CITRONELLAL	Leaf Essent. Oil	25000.0	89000.0	-1.0	Jim Duke's personal files.
0	ALPHA-BERGAMOTENE	Essential Oil		250.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LINALOL	Essential Oil	8.0	30.0	-1.0	--
3	ISOPULEGOL	Leaf Essent. Oil		40000.0	-1.0	Jim Duke's personal files.
0	LINALOL	Leaf Essent. Oil	17000.0	81000.0	-1.0	--
10	NEROL	Leaf Essent. Oil	8000.0	76000.0	-1.0	Jim Duke's personal files.
0	HEPTANAL	Essential Oil		4.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	BETA-BISABOLENE	Essential Oil	23.0	400.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
12	STIGMASTEROL	Fruit		10.0	-1.0338847831220805	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
2	PHYTOSTEROLS	Fruit		120.0	-1.0633155337611349	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	EO	Pericarp		2600.0	-1.1594356213080714	--
3	BETA-PHELLANDRENE	Essential Oil		80.0	-1.254423892232491	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	KILOCALORIES	Fruit		2640.0	-1.5500422105520721	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
8	NOBILETIN	Pericarp				Jim Duke's personal files.
0	DEACETYL-NOMILIN	Seed				Jim Duke's personal files.
0	HERACLENOL	Fruit Essent. Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	BERGAMOTTIN	Essential Oil		649.0		Jim Duke's personal files.
0	ALPHA-BERGAMOTENE	Petiole				--
0	7-GLUCOSYL-APIGENIN	Flower				Jim Duke's personal files.
0	ISORHOIFOLIN	Leaf				Jim Duke's personal files.
5	ZEAXANTHIN	Leaf				--
2	GERANYL-FORMATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	OCTAN-1-AL	Pericarp				Jim Duke's personal files.
0	NONANAL	Petiole		1.5		--
78	LUTEOLIN	Flower				--
9	TERPINOLENE	Leaf Essent. Oil				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-FLAVONE-8-O-BETA-D-RHAMNOSYL	Plant				--
5	BYAKANGELICIN	Fruit Essent. Oil				Jim Duke's personal files.
1	PABULENOL	Fruit Essent. Oil				Jim Duke's personal files.
0	TRIDECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	CAMPHENE	Leaf Essent. Oil				Jim Duke's personal files.
22	MYRCENE	Pericarp Essent. Oil				Jim Duke's personal files.
3	DIPHENYLAMINE	Plant				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-FLAVONE-8-O-BETA-D-RHAMNOSYL-GLUCOSIDE	Plant				--
23	TERPINEN-4-OL	Pericarp Essent. Oil	1000.0	11000.0		Jim Duke's personal files.
3	HEXANOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	OSTHOL	Root				Jim Duke's personal files.
13	DIOSMETIN	Plant				--
13	BETA-PINENE	Petiole		595.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LIMOCITROL-3-O-(5-ALPHA-GLUCOSYL-3-HYDROXY-3-METHYL-GLUTARATE-(1,2)-BETA-GLUCOSIDE)	Pericarp				Jim Duke's personal files.
0	CITROPTEN	Fruit Essent. Oil				Jim Duke's personal files.
0	BRAYLIN	Root				Jim Duke's personal files.
2	NOMILIN	Seed				Jim Duke's personal files.
2	DODECANAL	Petiole		0.0		--
0	LIMOCITROL	Pericarp				Jim Duke's personal files.
0	8-GERANYLOXYPORALEN	Fruit Essent. Oil				Jim Duke's personal files.
0	2'-O-XYLOSYL-VITEXIN	Flower				--
0	NERYL-ACETONE	Leaf Essent. Oil		28000.0		Jim Duke's personal files.
0	D-GALACTURONIC-ACID	Fruit				--
2	HERACLENIN	Fruit Essent. Oil				Jim Duke's personal files.
0	BERGAMOTENE	Essential Oil	16.0	40.0		--
0	NARINGOSIDE	Fruit				--
0	6-C-GLUCOSYL-DIOSMETIN	Pericarp				Jim Duke's personal files.
0	ISORHAMNETIN-3-ARABINOGLUCOSIDE	Plant				--
28	ALPHA-PINENE	Pericarp				Jim Duke's personal files.
0	XYLOSYL-VITEXIN	Flower				--
3	GERANYL-BUTYRATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	NERYL-ACETATE	Petiole		13.0		--
23	ALPHA-TERPINEOL	Pericarp Essent. Oil	4000.0	73000.0		Jim Duke's personal files.
23	ALPHA-TERPINEOL	Pericarp				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-FLAVONE-6-O-BETA-D-RHAMNOSYL	Plant				--
0	TRANS-LIMONENE-1,2-OXIDE	Essential Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ISORHAMNETIN	Flower				--
0	PHLORIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	ALPHA-THUJENE	Petiole		20.0		--
22	MYRCENE	Pericarp				Jim Duke's personal files.
34	DIOSMIN	Leaf				Jim Duke's personal files.
2	OCIMENE	Leaf Essent. Oil				Jim Duke's personal files.
0	3',4',5-TRIHYDROXY-FLAVONE-7-O-BETA-D-RHAMNOSYL-GLUCOSIDE	Plant				--
9	SYRINGIN	Pericarp				Jim Duke's personal files.
5	HEXANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DICONIFERYL-ALCOHOL-4-BETA-D-GLUCOSIDE	Pericarp				Jim Duke's personal files.
28	ALPHA-PINENE	Petiole		90.0		--
0	LIMOCITRIN-3-O-(5-ALPHA-GLUCOSYL-3-HYDROXY-3-METHYL-GLUTARATE-(1,2)-BETA-GLUCOSIDE)	Pericarp				Jim Duke's personal files.
15	CITRONELLOL	Pericarp Essent. Oil				Jim Duke's personal files.
47	BETA-SITOSTEROL	Plant				--
0	DECANAL	Petiole		1.5		--
0	ALPHA-AMINO-BUTYRIC-ACID	Plant				--
0	LIMOCITRIN-3-O-(5-ALPHA-GLUCOSYL-3	Plant				--
0	8-GERANYL-OXY-5-METHOXY-PSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
0	NEROL-ACETATE	Pericarp Essent. Oil				Jim Duke's personal files.
2	CONIFERIN	Pericarp				Jim Duke's personal files.
0	METHYL-HEPTANONE	Leaf Essent. Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	P-ALPHA-DIMETHYLSTYRENE	Plant				--
0	AUREUSIDIN-6-RHAMNOGLUCOSIDE	Plant				--
12	NARINGIN	Pericarp				Jim Duke's personal files.
0	6-8-DI-C-GLUCOSYL-DIOSMETIN	Pericarp				Jim Duke's personal files.
0	3-(3',4',5'-TRIMETHOXY-PHENYL)-PROPANYL-PROPIONATE	Fruit Essent. Oil				Jim Duke's personal files.
1	XANTHYLETIN	Root				Jim Duke's personal files.
5	GERANYL-ACETATE	Essential Oil	12.0	310.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Petiole		12.0		--
10	NEROL	Petiole		41.0		--
13	ALPHA-TERPINENE	Pericarp				Jim Duke's personal files.
7	LINALYL-ACETATE	Essential Oil				--
11	GAMMA-TERPINENE	Pericarp				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-FLAVONE-6,8-DI-C-GLUCOSIDE	Pericarp				--
26	BERGAPTEN	Plant				Jim Duke's personal files.
2	PHELLOPTERIN	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-TERPINYL-ACETATE	Petiole		0.1		--
0	LUTEOLIN-7-O-BETA-D-RUTINOSIDE	Leaf				Jim Duke's personal files.
16	P-CYMENE	Pericarp Essent. Oil				Jim Duke's personal files.
0	OBACUNONE-17-O-BETA-D-GLUCOPYRANOSIDE	Seed				Jim Duke's personal files.
5	SYNEPHRINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEXADECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	OBACUNONE-17-O-BETA-D-GLUCOSIDE	Seed				Jim Duke's personal files.
0	DELTA-CARENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	BETA-PHELLANDRENE	Petiole		8.0		--
0	LIMOCITRIN-3-O-(3-HYDROXY-3-METHYL-GLUTARATE-(1,2)-BETA-GLUCOSIDE	Pericarp				Jim Duke's personal files.
15	CITRONELLOL	Pericarp				Jim Duke's personal files.
2	NERYL-FORMATE	Essential Oil		20.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
16	P-CYMENE	Petiole		7.5		--
0	ALPHA,ALPHA-P-TRIMETHYLBENZYL-ALCOHOL	Plant				--
0	LIMOCITRIN-3-O-(3	Plant				--
0	8-GERAN-OXYPORALEN	Essential Oil		387.0		Jim Duke's personal files.
10	NEROL	Pericarp Essent. Oil				Jim Duke's personal files.
0	CITRUSIN-C	Pericarp				Jim Duke's personal files.
0	GERANIOL-ACETATE	Pericarp Essent. Oil				Jim Duke's personal files.
2	OXYPEUCEDANIN-HYDRATE	Essential Oil		64.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	AUREUSIDIN-6-GLUCOSIDE	Plant				--
1	N-METHYL-TYRAMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	6,7-DIMETHOXYCOUMARIN	Bark		162.0		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
0	3-(3',4',5'-TRIMETHOXY-PHENYL)-PROPANYL-ACETATE	Fruit Essent. Oil				Jim Duke's personal files.
1	XANTHOXYLETIN	Root				Jim Duke's personal files.
87	RUTIN	Leaf				Jim Duke's personal files.
4	NERAL	Petiole		60.0		--
15	TANGERETIN	Pericarp				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-3',8-DIMETHOXY-FLAVONE-3-O-BETA-D-GLUCOSYL-RHAMNOSIDE	Pericarp				--
26	BERGAPTEN	Fruit Essent. Oil				Jim Duke's personal files.
71	THYMOL	Pericarp Essent. Oil	53000.0	111000.0		Jim Duke's personal files.
11	PERILLALDEHYDE	Fruit				--
23	ALPHA-TERPINEOL	Petiole		32.0		--
0	LINONIN	Leaf				Jim Duke's personal files.
0	CIS-LIMONENE-1,2-OXIDE	Essential Oil				Jim Duke's personal files.
3	OBACUNONE	Seed				Jim Duke's personal files.
0	SUBEROSIN	Root				Jim Duke's personal files.
0	HESPERIDOSIDE	Fruit				--
3	NOOTKATONE	Tissue Culture				Jim Duke's personal files.
0	DECYL-ALDEHYDE	Leaf				--
11	ALPHA-PHELLANDRENE	Petiole		2.0		--
0	LIMOCITRIN-3-(6-O-ALPHA-L-RHAMNOSYL-BETA-D-GLUCOSE)	Pericarp				Jim Duke's personal files.
20	CITRONELLAL	Pericarp Essent. Oil				Jim Duke's personal files.
0	NEROL-ACETATE	Essential Oil	16.0	310.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-COPAENE	Petiole		0.0		--
28	ADENOSINE	Pericarp				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LIMOCITRIN-3-(6-O-ALPHA-L-RHAMNOSYL-BETA-D-GLUCOSIDE)	Pericarp				--
0	8-(7',8'-EPOXY-GERANYLOXY)-PSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
3	NOOTKATONE	Essential Oil		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CITRUSIN-B	Pericarp				Jim Duke's personal files.
35	GERANIOL	Pericarp				Jim Duke's personal files.
6	OXYPEUCEDANIN	Essential Oil		207.0		--
0	OCTANOL	Petiole		2.0		--
2	AUREUSIDIN	Plant				--
0	NEOHESPERIDOSIDE	Pericarp				--
0	5-ISOPENTENOXY-7-METHOXYCOUMARIN	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	3-(3',4',5'-TRIMETHOXY-PHENYL)-2-PROPENYL-PROPIONATE	Fruit Essent. Oil				Jim Duke's personal files.
35	GERANIOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	LINALOOL	Pericarp				Jim Duke's personal files.
10	NEROL	Pericarp				Jim Duke's personal files.
22	MYRCENE	Petiole		75.0		--
5	SYNEPHRINE	Pericarp				Jim Duke's personal files.
0	4',5,7-TRIHYDROXY-3',8-DIMETHOXY-FLAVONE-3-O-BETA-D-GLUCOSIDE	Pericarp				--
2	BERGAMOTTIN	Fruit Essent. Oil				Jim Duke's personal files.
15	ISOPIMPINELLIN	Plant				--
0	PENTADECANE	Plant				--
2	FARNESENE	Essential Oil				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
9	TERPINOLENE	Petiole		26.0		--
0	CHLOROPHYLL-B	Leaf				--
0	7-(3'-METHYL-BUT-2'-ENYL-OXY)-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
0	O-PHENYLPHENOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	STACHYDRINE	Plant				--
0	NONAN-1-OL	Leaf Essent. Oil		14000.0		Jim Duke's personal files.
1	DECYL-ACETATE	Plant		5.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LIMETTIN	Shoot				Jim Duke's personal files.
0	PENTADECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
20	CITRONELLAL	Pericarp				Jim Duke's personal files.
0	BETA-HUMULENE	Essential Oil		10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	CITRONELLYL-ACETATE	Petiole		1.0		--
16	ACETIC-ACID	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LIMOCITRIN	Pericarp				Jim Duke's personal files.
0	5-(3'-METHYL-BUT-2'-ENYL-OXY)-8-(2',3'-DIHYDROXY-3'-METHYL-BUTYL-OXY)-PSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
4	OSTHOLE	Root				--
0	OCTANAL	Petiole		2.0		--
56	NARINGENIN	Pericarp				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	5-GERANYL-OXYPSORALEN	Pericarp				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	3-(3',4',5'-TRIMETHOXY-PHENYL)-2-PROPENYL-ACETATE	Fruit Essent. Oil				Jim Duke's personal files.
2	VIOLAXANTHIN	Leaf				--
4	NERAL	Pericarp Essent. Oil				Jim Duke's personal files.
0	CITRUSIN-A	Pericarp				Jim Duke's personal files.
0	LINALOL	Pericarp Essent. Oil	7000.0	110000.0		--
3	SESELIN	Leaf				Jim Duke's personal files.
0	4',5,7-TRIHIDROXY-3',6,8-TRIMETHOXY-FLAVONE-3-O-BETA-D-GLUCOSIDE	Plant				--
0	BETA-BERGAMOTENE	Leaf Essent. Oil		8000.0		Jim Duke's personal files.
0	TETRAHYDROGERANIOL	Essential Oil		10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ISOLIMOCITROL-3-BETA-D-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ERIODICTYOSIDE	Fruit				--
23	TERPINEN-4-OL	Petiole		22.0		--
0	LIMONOATE-A-RING-LACTONE	Leaf				Jim Duke's personal files.
0	CHLOROPHYLL-A	Leaf				--
0	5-GERANYL-OXY-7-METHOXY-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
3	NOOTKATONE	Plant				--
2	ALPHA-HUMULENE	Petiole		1.5		--
31	HESPERIDIN	Fruit				Jim Duke's personal files.
0	NONAN-1-AL	Pericarp				Jim Duke's personal files.
2	DECANOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	ISOIMPERATORIN	Fruit Essent. Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	PECTIN	Pericarp				--
20	CITRONELLAL	Essential Oil				Jim Duke's personal files.
5	BETA-ELEMENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
20	CITRONELLAL	Petiole		3.0		--
0	8-GERAN-OXYPORALEN	Pericarp				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LIMETTIN	Essential Oil		295.0		--
0	5-(3'-METHYL-BUT-2'-ENYL-OXY)-8-(2",3"-EPOXY-3"-METHYL-BUTYL-OXY)-PSORALEN	Fruit Essent. Oil				Jim Duke's personal files.
13	GERANIAL	Pericarp Essent. Oil		17600.0		Jim Duke's personal files.
0	OCTYL-ALDEHYDE	Essential Oil				--
0	(Z)-BETA-OCIMENE	Petiole		3.5		--
3	MUCILAGE	Fruit				--
0	COUMARINS	Pt				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	5-GERANOXY-7-METHOXYPORALEN	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	PHELLOPTERIN	Fruit Essent. Oil				Jim Duke's personal files.
12	VICENIN-2	Pericarp				Jim Duke's personal files.
0	QUERCETIN-3,5-DIGLUCOSIDE	Plant				--
53	LINALOOL	Pericarp Essent. Oil	7000.0	111000.0		Jim Duke's personal files.
0	NARIRUTIN-GLUCOSIDE	Leaf				Jim Duke's personal files.
0	CITROPTEN	Fruit				--
44	SCOPOLETIN	Leaf				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-HEXEN-1-OL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	AURAPTEN	Fruit Essent. Oil				Jim Duke's personal files.
0	TETRADECANE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ISOLIMOCITROL-3,7,4'-TRIMETHYL-ETHER	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ERIOCITRIN	Fruit		1.0		Jim Duke's personal files.
11	GAMMA-TERPINENE	Petiole		535.0		--
0	LIMONIN-17-O-BETA-D-GLUCOSIDE	Seed				Jim Duke's personal files.
0	5-(3'-METHYL-BUT-2'-ENYL-OXY)-7-METHOXY-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
0	NONYL-ALDEHYDE	Essential Oil				--
0	1-HEXEN-3-OL	Petiole		2.0		--
28	ALPHA-PINENE	Pericarp Essent. Oil	5000.0	14000.0		Jim Duke's personal files.
0	LIMONOATE-A-RING-LACTONE	Fruit				--
0	NOMILINIC-ACID-4-BETA-D-GLUCOSIDE	Pericarp		9.8		Jim Duke's personal files.
3	DECANOIC-ACID	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
25	IMPERATORIN	Fruit Essent. Oil				Jim Duke's personal files.
0	PE	Plant				--
23	CITRIC-ACID	Fruit Juice				Jim Duke's personal files.
0	BETA-CARYOPHYLLENE	Petiole		13.0		--
0	8-C-GLUCOSYL-DIOSMETIN	Pericarp				Jim Duke's personal files.
0	LAURALDEHYDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETA-PINENE	Pericarp Essent. Oil				Jim Duke's personal files.
60	LIMONENE	Pericarp Essent. Oil	512000.0	774000.0		--
0	FATTY-ACIDS(C12-C24)	Silk Stigma Style				Jim Duke's personal files.
0	OCTYL-ACETATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	(E)-BETA-OCIMENE	Petiole		6.0		--
0	APIGENIN-C-GLYCOSIDE	Plant				--
0	METHYL-HEPTENONE	Leaf Essent. Oil		6000.0		--
0	5-GERANOXY-7-METHOXYCOUMARIN	Essential Oil	603.0	630.0		--
2	UNDECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
176	QUERCETIN	Flower				--
60	LIMONENE	Petiole		3090.0		--
1	NARIRUTIN	Leaf				Jim Duke's personal files.
0	CITRONIN	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	SCOPARONE	Leaf				Jim Duke's personal files.
0	3-(4-HYDROXY-3-METHOXY-PHENYL)-1-GLUCOSYL-PROP-2-ENE	Pericarp				Jim Duke's personal files.
112	ASCORBIC-ACID	Fruit Juice				Jim Duke's personal files.
0	TETRADECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ISOLIMOCITROL	Pericarp				Jim Duke's personal files.
0	EPIJASMONIC-ACID-METHYL-ESTER	Pericarp				Jim Duke's personal files.
13	ALPHA-TERPINENE	Petiole		8.0		--
1	CARVEOL	Essential Oil				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	5-(2',3'-EPOXY-3'-METHYL-BUTYL-OXY)-7-METHOXY-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
0	NONYL-ACETATE	Plant				--
5	GERANYL-ACETATE	Petiole		12.0		--
0	LIMONIN-17-O-BETA-D-GLUCOPYRANOSIDE	Seed				Jim Duke's personal files.
0	HEPTADECANAL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NOMILINIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				Jim Duke's personal files.
0	DECANAL	Essential Oil	6.0	20.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ICHANGIN-4-BETA-D-GLUCOSIDE	Pericarp		19.6		Jim Duke's personal files.
0	P-MENTHA-2,8-DIEN-1-OL	Essential Oil				--
53	CITRAL	Pericarp				--
1	CARVEOL	Petiole		0.0		--
0	7-RHAMNO-GLUCOSYL-LUTEOLIN	Flower				--
3	SESELIN	Root				Jim Duke's personal files.
0	ERIODICTYOSIDE	Pericarp				Jim Duke's personal files.
0	OCTOPAMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	NOOTKATONE	Petiole		0.0		--
0	METHYL-HEPTANONE	Essential Oil				--
0	5,7-DIMETHOXYCOUMARIN	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	CITRAL	Fruit Essent. Oil		6000.0		Jim Duke's personal files.
3	BETA-PHELLANDRENE	Pericarp Essent. Oil		65900.0		Jim Duke's personal files.
0	UMBELLIPRENIN	Shoot				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NARINGIN-6"-MALONATE	Leaf				Jim Duke's personal files.
0	CITRONETIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
22	SCOPARONE	Bark		162.5		Jim Duke's personal files.
0	3',4',5-TRIHYDROXY- FLAVONONE-7-O-BETA-D- RHAMNOSYL	Plant				--
0	2-CARBOXYARABINITOL	Leaf				Jim Duke's personal files.
8	ISOIMPERATORIN	Essential Oil				--
1	DODECANOIC-ACID	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-SINENSAL	Petiole		1.5		--
19	D-LIMONENE	Pericarp				Jim Duke's personal files.
0	5-(2',3'-DIHYDROXY-3'- METHYL-BUTYL-OXY)-7- METHOXY-COUMARIN	Fruit Essent. Oil				Jim Duke's personal files.
4	CADINENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NONANAL	Essential Oil	9.0	30.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	GERANIOL	Petiole		80.0		--
5	LIMONIN	Seed				Jim Duke's personal files.
8	GLUTAMIC-ACID	Plant				--
0	NOMILIN-17-O-BETA-D- GLUCOSIDE	Seed				Jim Duke's personal files.
1	DECAN-1-AL	Pericarp				Jim Duke's personal files.
0	ICHANGIN-17-O-BETA-D- GLUCOSIDE	Seed				Jim Duke's personal files.
0	P-MENTHA-1,8-DIEN-9-YL- ACETATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	NEOXANTHIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	DELTA-3-CARENE	Petiole		1.0		--
0	7-RHAMNO-GLUCOSYL-DIOSMETIN	Flower				--
0	JASMONIC-ACID-METHYL-ESTER	Pericarp				Jim Duke's personal files.
19	CARVONE	Essential Oil				Jim Duke's personal files.
1	SELINENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	OCTANOL	Essential Oil	10.0	15.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	2-NONENAL	Petiole		1.0		--
0	ALPHA-TERPINYL-PROPIONATE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	MENTH-1-EN-9-OL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	VALENCENE	Tissue Culture				Jim Duke's personal files.
0	4-(3-METHYL-2-BUTENOXY)-ACETOPHENONE	Pericarp				--
0	NEOBYAKANGELICOL	Fruit Essent. Oil				Jim Duke's personal files.
6	OXYPEUCEDANIN	Fruit Essent. Oil				Jim Duke's personal files.
22	UMBELLIFERONE	Shoot				Jim Duke's personal files.
11	GAMMA-TERPINENE	Pericarp Essent. Oil	12000.0	83200.0		Jim Duke's personal files.
31	CARYOPHYLLENE	Leaf Essent. Oil				Jim Duke's personal files.
0	NARINGIN-GLUCOSIDE	Leaf				Jim Duke's personal files.
0	ISOERIOCITRIN	Leaf				Jim Duke's personal files.
5	SABINENE	Pericarp Essent. Oil				Jim Duke's personal files.
0	3',4',5-TRIHYDROXY-FLAVONE-7-O-BETA-D-RHAMNOSYL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	APIGENIN-7-(6-O-ALPHA-RHAMNOSYL-BETA-GLUCOSIDE)	Pericarp				Jim Duke's personal files.
2	DODECANAL	Essential Oil		10.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-SINENSAL	Petiole		0.0		--
19	D-LIMONENE	Essential Oil				Jim Duke's personal files.
0	CNIDICIN	Fruit Essent. Oil				Jim Duke's personal files.
0	BYAKANGELICOL	Essential Oil				--
0	NONAN-1-AL	Essential Oil	3.0	7.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	GERANIAL	Petiole		60.0		--
0	ALPHA-CUBEBENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	LIMONIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	GERANYL-OXY-PYRANOCOUMARIN	Root				Jim Duke's personal files.
2	NOMILIN	Sprout Seedling				Jim Duke's personal files.
0	DEACETYL-NOMILIN-17-O-BETA-D-GLUCOPYRANOSIDE	Seed				--
31	HESPERIDIN	Leaf				Jim Duke's personal files.
0	P-CYMOL	Essential Oil				--
26	BERGAPTEN	Essential Oil		10.0		Jim Duke's personal files.
6	NEOHESPERIDIN	Pericarp				Jim Duke's personal files.
6	BETA-BISABOLENE	Petiole		25.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	7-PENTAHYDROXY-2',3',5,5'-PENTAHYDROXY-FLAVANONE-7-(6-O-ALPHA-L-RHAMNOSYL-BETA-D-GLUCOSIDE	Pericarp				--
4	ISOVITEXIN	Pericarp				Jim Duke's personal files.
13	BETA-PINENE	Pericarp				Jim Duke's personal files.
44	SCOPOLETIN	Shoot				Jim Duke's personal files.
5	OCTANOIC-ACID	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NONANOL	Petiole		0.0		--
0	LUTEOLIN-7-O-BETA-RUTINOSIDE	Leaf				--
9	TERPINOLENE	Pericarp Essent. Oil				Jim Duke's personal files.
0	4',7-DIHYDROXY-3'-METHOXY-FLAVONONE-8-O-BETA-D-GLUCOSYL-RHAMNOSIDE	Pericarp				Jim Duke's personal files.
0	BYAKANGELICOL	Fruit Essent. Oil				Jim Duke's personal files.
24	PECTIN	Exocarp				Jim Duke's personal files.
11	TYRAMINE	Leaf				--
0	PONCIRIN	Plant				--
0	GAMMA-SITOSTEROL	Plant				--
9	CAMPHENE	Petiole		3.0		--
12	NARINGIN	Leaf				Jim Duke's personal files.
0	ERIOCITRIN	Leaf				Jim Duke's personal files.
0	2',4',5'-TRIHYDROXY-FLAVONONE-7-O-BETA-D-GLUCOSYL-RHAMNOSIDE	Pericarp				--
0	ALPHA,ALPHA-P-TRIMETHYLBENZYL-ALCOHOL	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
25	IMPERATORIN	Fruit				--
34	DIOSMIN	Fruit		5.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SABINENE	Petiole		95.0		--
19	D-LIMONENE	Pericarp Essent. Oil		694400.0		Jim Duke's personal files.
0	CITRUSIN-F	Pericarp				Jim Duke's personal files.
5	BYAKANGELICIN	Essential Oil		29.0		--
0	NOMILIN-17-O-BETA-D-GLUCOPYRANOSIDE	Seed				Jim Duke's personal files.
0	2-DODECENAL	Petiole		0.0		--
0	ALPHA-COPAENE	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LIMOCITROL-3-O-(5-ALPHA-GLUCOSYL-3	Plant				--
2	RHOIFOLIN	Leaf				Jim Duke's personal files.