

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Citrus paradisi

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-6-ISO-PROPENYL-4,8-ALPHA-DIMETHYL-4-ALPHA-(R)-5,6-(R)-7,8,8-ALPHA(R)-HEXAHYDRO-2-(1H)NAPHTHALENONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	(+)-8,9-DIDEHYDRO-ALPHA-VETIVONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	(+)-8,9-DIDEHYDRO-NOOTKATONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	(+)-ALPHA-CYPERONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	(+)-ALPHA-VETIVONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	(+)-NOOTKATONE	Plant				--
0	(-)-10-EPI-ALPHA-CYPERONE	Fruit				--
0	(E)-BETA-OCIMENE	Pericarp		8.0		--
0	(Z)-BETA-OCIMENE	Pericarp		1.0		--
0	1,10-DIHYDRO-ALPHA-VETIVONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	1,8-P-MENTHADIEN-2-YL-ACETATE	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	1,8-P-MENTHADIEN-9-YL-ACETATE	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	10-EPI-ALPHA-CYPERONE	Fruit				--
0	2-H-1:8(3-BETA-D-GLUCOPYRANOSYL-OXY-2-HYDROXY-3-METHYL-BUTYL)-7-METHOXY-BENZOPYRAN-2-ONE	Plant				--
0	24-METHYLENE-CYCLOARTENOL	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	24-METHYLENE-LOPHENOL	Fruit Epidermis				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	24-METHYLENE-LOPHENOL	Pericarp				--
1	3',4',5,6,7,8-HEXAMETHOXYFLAVONE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	3,7(11)-EUDESMADIEN-2-ONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	3-HYDROXY-ETHYL-HEXANOATE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	4',5,6,7,8-PENTAMETHOXY-FLAVONE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	4',5,6,7-TETRAHYDROXY-FLAVONE-8-O-BETA-D-GLUCOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	4',5,7-TRIHYDROXY-FLAVONE-6-C-GLUCOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	4',5-DIHYDROXY-FLAVONONE-7-O-BETA-D-RHAMNOSYL-GLUCOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	5,6-DIHYDROERGOSTEROL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	5-(3,6-DIMETHYL-6-FORMYL-2-HEPTENYL)-OXYPSORALEN	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	5-(3,7-DIMETHYL-6-EPOXY-2-OCTENYL)-OXYPSORALEN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	5-(6,7-DIHYDROXY-3,7-DIMETHYL-2-OCTENYL)-OXYPSORALEN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	5-HYDROXY-4'-METHOXY-FLAVANONE-7-O-BETA-D-RHAMNOSYL-GLUCOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	7-(3,7-DIMETHYL-6-EPOXY-OCT-TRANS-2-ENYL)-OXYCOUMARIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	7-GERANOXYCOUMARIN	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	7-GERANYL-OXYCOUMARIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	7-METHOXY-8(2,3-DIHYDROXY-ISOPENTYL)-COUMARIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	7-METHOXY-8(2,3-EPOXY-ISOPENTENYL)-COUMARIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	7-OBACUNOL	Seed	8.0	9.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
16	ACETIC-ACID	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
32	AESCULETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ALANINE	Fruit		90.0	-1.4217792176532806	--
0	ALPHA-AMINO-BUTYRIC-ACID	Fruit		190.0		--
7	ALPHA-CAROTENE	Fruit		0.0	-0.5519699729560847	--
0	ALPHA-COPAENE	Pericarp				--
2	ALPHA-CRYPTOXANTHIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	ALPHA-CRYTOXANTHIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	ALPHA-CUBEBENE	Pericarp		2.0		--
0	ALPHA-FARNESENE	Pericarp	0.7	2.0		--
2	ALPHA-HUMULENE	Pericarp		7.0		--
2	ALPHA-HUMULENE	Leaf		29.0	-0.41881559329428053	--
15	ALPHA-LINOLENIC-ACID	Fruit	50.0	550.0	-0.9033936410418376	USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-MUUROLENE	Pericarp		2.0		--
11	ALPHA-PHELLANDRENE	Pericarp	1.0	2.0		--
28	ALPHA-PINENE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
28	ALPHA-PINENE	Leaf		55.0	-0.22097367328296394	--
28	ALPHA-PINENE	Pericarp	12.0	47.0		--
0	ALPHA-SINENSAL	Pericarp		0.0		--
13	ALPHA-TERPINENE	Pericarp		1.0		--
23	ALPHA-TERPINEOL	Pericarp		7.0		--
23	ALPHA-TERPINEOL	Leaf		29.0	-0.5393424102140746	--
0	ALPHA-THUJENE	Pericarp		1.0		--
32	ALPHA-TOCOPHEROL	Fruit	3.0	29.0	-0.6752411923996696	--
0	ALPHA-YLANGENE	Pericarp				--
5	ALUMINUM	Fruit	1.0	330.0	-0.12751726414283882	--
0	APIGENIN-7-O-BETA-D-RUTINOSIDE	Leaf		5.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ARABAN	Fruit				--
14	ARGININE	Fruit	470.0	760.0	-0.9468544491143548	--
2	ARSENIC	Fruit	0.001	4.4	5.101801784885793	--
112	ASCORBIC-ACID	Fruit	337.0	3862.0	-0.044361459552841695	--
0	ASH	Fruit	3050.0	110000.0	1.381160459916271	--
2	ASPARAGINE	Fruit		420.0	-0.6477225740518642	--
3	ASPARTIC-ACID	Fruit	810.0	4700.0	-0.7171245699225177	--
0	BARIUM	Fruit	0.44	22.0	-0.17362306724912926	--
2	BERGAMOTTIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BERGAPTOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	BETA-BISABOLENE	Pericarp				--
53	BETA-CAROTENE	Fruit	0.0	5.0	-0.14113571921676207	--
0	BETA-CARYOPHYLLENE	Pericarp		130.0		--
0	BETA-COPAENE	Pericarp				--
0	BETA-CUBEBENE	Pericarp		17.0		--
0	BETA-HUMULENE	Pericarp				--
3	BETA-PHELLANDRENE	Pericarp				--
13	BETA-PINENE	Pericarp	0.7	2.0		--
13	BETA-PINENE	Leaf		55.0	-0.34800512476675877	--
0	BETA-SINENSAL	Pericarp		0.0		--
47	BETA-SITOSTEROL	Fruit		130.0	-0.6234365080108808	--
0	BISABOLENE	Pericarp				--
4	BORON	Fruit	1.0	33.0	-0.13949053957899715	--
0	BRAYLIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BROMINE	Fruit	1.0			ACTA AGRIC SCAND SUPPL 22: 1980
0	BYANGELICIN	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	CADINENE	Pericarp				--
3	CADMIUM	Fruit	0.002	0.066	-0.44965581051601666	--
102	CAFFEIC-ACID	Fruit	40.0	51.0	-0.3294714675858169	--
62	CAFFEINE	Flower		29.0	-1.3198240351921797	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	CALCIUM	Fruit	117.0	11000.0	1.6484860149222178	--
2	CAMPESTEROL	Fruit		20.0	-0.48957181191497545	--
9	CAMPHENE	Pericarp				--
0	CARBOHYDRATES	Fruit	80800.0	948000.0	0.8829725241617936	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	CARVEOL	Pericarp				--
0	CARVYL-ACETATE	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
31	CARYOPHYLLENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
22	CATECHOL	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	CHALCONASE	Fruit				--
7	CHLORINE	Plant		6.0	-1.4797990466255704	--
1	CHOLESTEROL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
24	CHROMIUM	Fruit	0.002	0.55	-0.43038124621628904	--
0	CIS-BETA-FARNESENE	Pericarp		2.0		--
0	CIS-LINALOL-OXIDE	Fruit				--
0	CIS-LINALOOL-OXIDE	Pericarp		28.0		--
53	CITRAL	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
23	CITRIC-ACID	Fruit	11900.0	21000.0	-0.3079040401143372	--
20	CITRONELLAL	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
15	CITRONELLOL	Leaf		70.0	-0.42686676977581944	--
2	CITRONELLYL-ACETATE	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	CITROSTADIENOL	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	COBALT	Fruit	0.005	0.22	-0.5084821806978201	--
2	CONIFERIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	COPAENE	Pericarp		2.0		--
12	COPPER	Fruit	0.0	7.7	-0.3984053050544054	--
0	COUMARINS	Pericarp		14000.0		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	CRYPTOXANTHIN	Fruit	0.03	0.3	-0.636682262247135	--
7	CYCLOARTENOL	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	CYCLOEUCALENOL	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CYSTINE	Fruit		2.0	-1.0736993666328245	--
0	D-CADINENE	Plant				--
19	D-LIMONENE	Fruit	3410.0	9575.0		--
19	D-LIMONENE	Plant		9000.0	1.999954303307047	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	DEACETYL-NOMILIN	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	DEACETYL-NOMILINIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	DECANAL	Pericarp		9.0		--
2	DECANOL	Pericarp		3.0		--
1	DECYL-ACETATE	Pericarp		0.4		--
0	DECYL-ALDEHYDE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	DECYLIC-ACID	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	DELTA-3-CARENE	Pericarp		0.0		--
9	DELTA-CADINENE	Pericarp		17.0		--
0	DEOXY-LIMONOL	Seed		8.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	DIHYDROKAEMPFEROL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	DODECANAL	Pericarp		0.7		--
3	ELEMENE	Pericarp				--
0	EO	Fruit	6000.0	10000.0	-0.625591783140096	--
0	EO	Pericarp	3700.0	10000.0	-0.12155373449197493	--
0	EO	Leaf		1800.0	-0.8562914539240508	--
0	EPI-ISO-OBACUNOIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
10	ERIODICTYOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
30	ESCULETIN	Fruit				--
0	FAT	Fruit	1000.0	19000.0	-0.49613161810423473	--
61	FERULIC-ACID	Pericarp	25.0	160.0	-1.0	--
61	FERULIC-ACID	Fruit	25.0	35.0	-0.5720775535473553	--
0	FERULOYL-PUTRESINE	Plant	15.0	41.0		--
15	FIBER	Fruit	2000.0	172000.0	0.28614824332305033	--
0	FLUORINE	Fruit	0.03	0.9	-0.4479948907171637	ACTA AGRIC SCAND SUPPL 22: 1980
2	FRIEDELIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	FRUCTOSE	Plant		12400.0		--
0	GALACTAN	Plant				--
0	GALACTURONIC-ACID	Fruit				--
0	GAMMA-CADINENE	Pericarp				--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	GAMMA-CAROTENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
11	GAMMA-TERPINENE	Pericarp	0.4	1.0		--
13	GERANIAL	Fruit	420.0	700.0	1.029040358819024	--
13	GERANIAL	Pericarp	4.0	700.0		--
13	GERANIAL	Leaf		31.0	-0.4010084489455154	--
35	GERANIOL	Plant				--
35	GERANIOL	Pericarp		2.0		--
5	GERANYL-ACETATE	Leaf		10.0	-1.0179833272400691	--
5	GERANYL-ACETATE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
5	GERANYL-ACETATE	Pericarp		5.0		--
0	GERANYL-OXY-PYRANOCOUMARIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	GERMACRENE-D	Pericarp		13.0		--
0	GLUCOSAN	Plant				--
7	GLUCOSE	Fruit		19500.0	-0.6881467128834249	--
8	GLUTAMIC-ACID	Fruit	220.0	2800.0	-0.8122742603309042	--
12	GLYCINE	Fruit				--
0	HEPTULOSE	Pericarp				--
8	HESPERETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
31	HESPERIDIN	Fruit				--
0	HEX-1-EN-3-OL	Pericarp		0.4		--
7	HISTIDINE	Fruit		140.0	-1.1025880317240395	--
0	HORDENENE	Fruit		0.0		--
2	HUMULENE	Fruit				--
2	HUMULENE	Pericarp				--

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0	INTERMEDEOL	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
6	IRON	Fruit	1.0	88.0	-0.1784159005130795	--
0	ISO-OBACUNOIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ISOMERANZIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ISOPULEGOL	Pericarp		2.0		--
11	ISORHAMNETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ISORHOIFOLIN	Leaf				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ISOSAKURANETIN	Fruit				--
75	KAEMPFEROL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	KILOCALORIES	Fruit		1724.0	-2.9412879921150874	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	LEAD	Fruit	0.02	7.7	-0.03499033604194593	--
0	LEUCINES	Fruit		240.0	1.0	--
0	LIMETTIN	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
60	LIMONENE	Leaf		205.0	-0.23212407778841473	--
5	LIMONIN	Plant	9.0	140.0		--
5	LIMONIN	Fruit	3.0	477.0		--
5	LIMONIN	Seed	1188.0	1885.0		--
5	LIMONIN	Pericarp	6.0	65.0	-1.0	--
0	LIMONOATE-A-RING-LACTONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LIMONOL	Seed		23.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	LINALOL	Pericarp		13.0		--
0	LINALOL	Fruit				--
7	LINALYL-ACETATE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
27	LINOLEIC-ACID	Fruit	190.0	2090.0	-0.32591314054469284	USDA's Ag Handbook 8 and sequelae)
11	LITHIUM	Fruit	0.088	2.31	1.8670378728368338	--
15	LUTEIN	Fruit	0.095	0.95	-0.7527259978039551	--
16	LYCOPENE	Fruit	30.0	336.0	0.05302712626772389	--
4	LYSINE	Fruit	160.0	1760.0	-0.6097925666909821	--
65	MAGNESIUM	Fruit	15.0	3300.0	0.5418998341350072	--
15	MALIC-ACID	Fruit	400.0	600.0	-0.9127272216734706	--
1	MALONIC-ACID	Fruit				--
14	MANGANESE	Fruit	0.0	7.7	-0.3527646944182478	--
3	MANNOSE	Fruit				--
2	MARMIN	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	MERANZIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	MERANZIN-HYDRATE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	MERCURY	Fruit	0.0	0.001	-0.7865389313824043	--
15	METHIONINE	Fruit	3.0	222.0	-0.9069733792825451	--
0	METHYL-ANTHRALINATE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
2	MOLYBDENUM	Fruit	0.1	0.77	-0.3309149921902472	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	MONOTERPENES	Pericarp		130.0		--
22	MYRCENE	Fruit	72.0	190.0	-0.35491275646315373	--
22	MYRCENE	Pericarp	77.0	185.0		--
0	N-DODECASANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-DORIACONTANE	Fruit				--
0	N-DOTRIACONTANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-EICOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-HENEICOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	N-HENTRIACONTANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-HEPTACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	N-HEXACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	N-METHYL-TYRAMINE	Fruit				--
1	N-NONACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-NONYL-ALCOHOL	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	N-OCTACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-OCTYL-ACETATE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	N-OCTYL-ALCOHOL	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	N-PENTACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-PENTATRIACONTANE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-TETRACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-TETRATRIACONTANE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-TRIACONTANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
56	NARINGENIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NARINGENIN-7-BETA-(4-BETA-D-GLUCOSYL)-NEOHESPERIDOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NARINGENIN-7-BETA-(4-BETA-D-GLUCOSYL)-RUTINOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NARINGENIN-7-O-BETA-D-RUTINOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NARINGENIN-RUTINOSIDE	Fruit				--
12	NARINGIN	Fruit	245.0	195000.0		--
12	NARINGIN	Seed	200.0	2677.0		--
12	NARINGIN	Pericarp	2701.0	15595.0		--
0	NARINGIN-4-BETA-D-GLUCOSIDE	Plant				--
1	NARIRUTIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	NEOHESPERIDIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	NERAL	Fruit	0.0	210.0	0.21477685159099982	--
10	NEROL	Pericarp		3.0		--
5	NERYL-ACETATE	Pericarp		0.4		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NEUROSPORENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
39	NIACIN	Fruit	2.0	44.0	-0.2232247949977374	--
3	NICKEL	Fruit	0.04	7.7	1.5622677545774823	--
0	NITROGEN	Fruit	990.0	16360.0	0.12184480637349815	ACTA AGRIC SCAND SUPPL 22: 1980
2	NOMILIN	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NOMILINIC-ACID	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	NOMILINIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NONANAL	Pericarp		3.0		--
0	NONANOL	Pericarp		0.7		--
3	NOOTKATONE	Pericarp		27.0		--
3	OBACUNONE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	OCTANOL	Pericarp		11.0		--
0	OCTOPAMINE	Plant		0.0		--
0	OCTOPAMINE	Hull Husk				--
0	OCTYL-ALDEHYDE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	OCTYLIC-ACID	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
18	OLEIC-ACID	Fruit	120.0	1320.0	-0.4705714791864392	USDA's Ag Handbook 8 and sequelae)
15	OSTHOL	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	OSTHOLE	Root				--
9	OXALIC-ACID	Plant				--
0	P-CAFFEIC-ACID	Pericarp	5.0	12.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
25	P-COUMARIC-ACID	Pericarp	5.0	25.0	-1.0	--
25	P-COUMARIC-ACID	Fruit	0.0	53.0	-0.4886747256490017	--
16	P-CYMENE	Pericarp				--
16	P-CYMENE	Leaf		385.0	-0.08025671568278799	--
0	P-MENTH-1-ENE-8-THIOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
13	PALMITIC-ACID	Fruit	120.0	1320.0	-0.34498600170914256	USDA's Ag Handbook 8 and sequelae)
2	PALMITOLEIC-ACID	Fruit	10.0	110.0	-0.32532624490387124	USDA's Ag Handbook 8 and sequelae)
11	PANTOTHENIC-ACID	Plant	3.0	31.0	0.07338228684128613	--
0	PARADISIOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
24	PECTIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PENTAN-1-OL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
11	PERILLALDEHYDE	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	PERILLYL-ACETATE	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	PHENYLALANINE	Fruit				--
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.
8	PHLOROGLUCINOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Fruit	76.0	5280.0	0.6269205475189703	--
5	PHYLLOQUINONE	Fruit		0.001	-0.23285139490462353	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PHYTOENE	Fruit				--
0	PHYTOFLUENE	Fruit				--
2	PHYTOSTEROLS	Fruit		170.0	-0.9989014472088928	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	POLYGALACTURONIC-ACID	Fruit				--
0	PONCIRIN	Fruit				--
0	PONCITRIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	POTASSIUM	Fruit	1300.0	46200.0	2.502343144222965	--
0	PROLINE	Fruit		590.0	-0.9381817496597383	--
0	PROTEIN	Fruit	6000.0	70290.0	-0.5256075282009448	--
0	PSI-CAROTENE	Plant				--
176	QUERCETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	QUINIC-ACID	Fruit				--
2	RHOIFOLIN	Leaf				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Fruit	0.0	5.0	-0.0019916133753625524	--
0	RUBIDIUM	Fruit	0.26	22.0	0.22373836408620662	ACTA AGRIC SCAND SUPPL 22: 1980
5	SABINENE	Pericarp	13.0	26.0		--
5	SABINENE	Leaf		45.0	-0.23253758249077405	--
7	SALICYLATES	Fruit	0.0	70.0	-0.13601954960792303	--
44	SCOPOLETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
60	SELENIUM	Fruit	0.0	0.027	-0.3794918743602091	--
1	SERINE	Fruit	150.0	3100.0	-0.19170709792847418	--
3	SESELIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SESLIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	SESQUITERPENES	Pericarp		130.0		--
4	SILICON	Fruit		2.0	-0.6019449725946585	ACTA AGRIC SCAND SUPPL 22: 1980
3	SILVER	Fruit	0.022	0.11	-0.43140967622714665	--
9	SINAPIC-ACID	Fruit	2.0	5.0	-1.4113126084211554	--
9	SINAPIC-ACID	Pericarp	2.0	35.0	-1.0	--
1	SODIUM	Fruit	0.0	341.0	-0.15161413942649452	--
8	STEARIC-ACID	Fruit	10.0	110.0	-0.27192646640928014	USDA's Ag Handbook 8 and sequelae)
12	STIGMASTEROL	Fruit		20.0	-0.8951703667819086	--
0	STRONTIUM	Fruit	3.3	220.0	2.5791714294180785	--
3	SUBAPHYLLIN	Leaf				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
3	SUBAPHYLLIN	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	SUBEROSIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	SUCROSE	Fruit		21400.0	-0.5950841762317102	--
0	SUGARS	Fruit	33000.0	99600.0	-0.4730742344749007	--
14	SULFUR	Fruit	7.0	2090.0	0.4700861895135408	--
0	SYNEPHERINE	Fruit		0.0	-1.0	--
23	TERPINEN-4-OL	Pericarp		3.0		--
23	TERPINEN-4-OL	Leaf		305.0	-0.1661703321057829	--
9	TERPINOLENE	Pericarp	1.0	11.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	TERPINOLENE	Leaf		28.0	-0.19642611566435517	--
31	THIAMIN	Fruit	0.0	6.0	0.08541669233982067	--
4	THREONINE	Fruit		100.0	-1.2128642044978408	--
4	TIN	Fruit	0.66	3.3	-0.3642012762593144	--
0	TITANIUM	Fruit	0.11	7.7	-0.5795941269861224	--
0	TRANS-ALPHA-BERGAMOTENE	Pericarp				--
0	TRANS-CARYOPHYLLENE	Pericarp		13.0		--
0	TRANS-LINALOL-OXIDE	Pericarp		13.0		--
0	TRANS-OBACUNOIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
29	TRYPTOPHAN	Fruit	20.0	220.0	-0.8847986548914832	--
11	TYRAMINE	Fruit		0.0	-1.414213562373095	--
8	TYROSINE	Fruit		61.0	-0.9769799928135696	--
22	UMBELLIFERONE	Fruit				--
2	UNDECANAL	Pericarp				--
0	URONIC-ACID	Fruit				--
0	VALENCENE	Pericarp				--
3	VALINE	Fruit		240.0	-0.8692582235353649	--
0	WATER	Fruit	847000.0	930000.0	0.6931916201344491	--
1	XANTHOXYLETIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	XANTHYLETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	XYLAN	Fruit				--
3	XYLOSE	Fruit				--
0	ZETA-CAROTENE	Fruit				--
77	ZINC	Fruit	0.0	22.0	-0.24975934398276664	--
0	ZIRCONIUM	Fruit	0.44	2.2	-0.29684971083527095	--