

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	PSI-CAROTENE	Plant				--
0	24-METHYLENE-LOPHENOL	Fruit Epidermis				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	SESQUITERPENES	Pericarp		130.0		--
0	FERULOYL-PUTRESINE	Plant	15.0	41.0		--
0	ALPHA-CUBEBENE	Pericarp		2.0		--
0	7-GERANYL-OXYCOUMARIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	SESLIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NONANOL	Pericarp		0.7		--
0	DEACETYL-NOMILINIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BETA-SINENSAL	Pericarp		0.0		--
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	NARINGENIN-7-O-BETA-D-RUTINOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	VALENCENE	Pericarp				--
0	HEX-1-EN-3-OL	Pericarp		0.4		--
0	N-OCTACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BARIUM	Fruit	0.44	22.0	-0.17362306724912926	--
0	P-CAFFEIC-ACID	Pericarp	5.0	12.0		--
0	3,7(11)-EUDESMADIEN-2-ONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROTEIN	Fruit	6000.0	70290.0	-0.5256075282009448	--
0	CIS-LINALOOL-OXIDE	Pericarp		28.0		--
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	SUBEROSIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	LEUCINES	Fruit		240.0	1.0	--
0	ALPHA-COPAENE	Pericarp				--
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	ZETA-CAROTENE	Fruit				--
0	HORDENENE	Fruit		0.0		--
0	NONANAL	Pericarp		3.0		--
0	DEACETYL-NOMILIN	Seed				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	N-NONYL-ALCOHOL	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	BYANGELICIN	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	NEUROSPORENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	LEAD	Fruit	0.02	7.7	-0.03499033604194593	--
0	FAT	Fruit	1000.0	19000.0	-0.49613161810423473	--
0	PROLINE	Fruit		590.0	-0.9381817496597383	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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	METHYL-ANTHRALINATE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	PENTAN-1-OL	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	TRANS-CARYOPHYLLENE	Pericarp		13.0		--
0	OCTYLIC-ACID	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	24-METHYLENE-LOPHENOL	Pericarp				--
0	TRANS-OBACUNOIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CIS-LINALOL-OXIDE	Fruit				--
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	KILOCALORIES	Fruit		1724.0	-2.9412879921150874	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	XYLAN	Fruit				--
0	D-CADINENE	Plant				--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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	ALPHA-SINENSAL	Pericarp		0.0		--
0	OCTYL-ALDEHYDE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	ASH	Fruit	3050.0	110000.0	1.381160459916271	--
0	24-METHYLENE-CYCLOARTENOL	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	TITANIUM	Fruit	0.11	7.7	-0.5795941269861224	--
0	TRANS-LINALOL-OXIDE	Pericarp		13.0		--
0	STRONTIUM	Fruit	3.3	220.0	2.5791714294180785	--
0	DECANAL	Pericarp		9.0		--
0	PONCITRIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	MONOTERPENES	Pericarp		130.0		--
0	BETA-HUMULENE	Pericarp				--
0	PARADISIOL	Fruit				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
0	BROMINE	Fruit	1.0			ACTA AGRIC SCAND SUPPL 22: 1980
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	5-(3,7-DIMETHYL-6-EPOXY-2-OCTENYL)-OXYPSORALEN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	GALACTURONIC-ACID	Fruit				--
0	OCTOPAMINE	Hull Husk				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-H-1:8(3-BETA-D-GLUCOPYRANOSYL-OXY-2-HYDROXY-3-METHYL-BUTYL)-7-METHOXY-BENZOPYRAN-2-ONE	Plant				--
0	TRANS-ALPHA-BERGAMOTENE	Pericarp				--
0	ALPHA-AMINO-BUTYRIC-ACID	Fruit		190.0		--
0	EO	Leaf		1800.0	-0.8562914539240508	--
0	ISOSAKURANETIN	Fruit				--
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.
0	EPI-ISO-OBACUNOIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PONCIRIN	Fruit				--
0	MERANZIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	HEPTULOSE	Pericarp				--
0	BETA-CUBEBENE	Pericarp		17.0		--
0	N-TETRATRIACONTANE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BRAYLIN	Root				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	5,6-DIHYDROERGOSTEROL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	GAMMA-CADINENE	Pericarp				--
0	RUBIDIUM	Fruit	0.26	22.0	0.22373836408620662	ACTA AGRIC SCAND SUPPL 22: 1980
0	N-HEPTACOSANE	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	LINALOL	Pericarp		13.0		--
0	1,10-DIHYDRO-ALPHA-VETIVONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	GALACTAN	Plant				--
0	NARINGIN-4-BETA-D-GLUCOSIDE	Plant				--
0	N-DOTRIACONTANE	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	EO	Fruit	6000.0	10000.0	-0.625591783140096	--
0	POLYGALACTURONIC-ACID	Fruit				--
0	WATER	Fruit	847000.0	930000.0	0.6931916201344491	--
0	BETA-CARYOPHYLLENE	Pericarp		130.0		--
0	N-TETRACOSANE	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	NOMILINIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	(+)-NOOTKATONE	Plant				--
0	LINALOL	Fruit				--
0	CHALCONASE	Fruit				--
0	ALPHA-MUUROLENE	Pericarp		2.0		--
0	(-)-10-EPI-ALPHA-CYPERONE	Fruit				--
0	MERANZIN-HYDRATE	Pericarp				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
0	CIS-BETA-FARNESENE	Pericarp		2.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PHYTOFLUENE	Fruit				--
0	BETA-COPAENE	Pericarp				--
0	N-PENTATRIACONTANE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
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.
0	4',5,7-TRIHYDROXY-FLAVONE-6-C-GLUCOSIDE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	EO	Pericarp	3700.0	10000.0	-0.12155373449197493	--
0	NOMILINIC-ACID	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	N-HENEICOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ARABAN	Fruit				--
0	(+)-ALPHA-VETIVONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	SYNEPHERINE	Fruit		0.0	-1.0	--
0	LIMONOL	Seed		23.0		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
0	N-EICOSANE	Fruit				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
0	DEOXY-LIMONOL	Seed		8.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PHYTOENE	Fruit				--
0	LIMETTIN	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	P-MENTH-1-ENE-8-THIOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	N-PENTACOSANE	Fruit				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	URONIC-ACID	Fruit				--
0	APIGENIN-7-O-BETA-D-RUTINOSIDE	Leaf		5.0		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	LIMONOATE-A-RING-LACTONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FLUORINE	Fruit	0.03	0.9	-0.4479948907171637	ACTA AGRIC SCAND SUPPL 22: 1980
0	7-METHOXY-8(2,3-EPOXY-ISOPENTENYL)-COUMARIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	10-EPI-ALPHA-CYPERONE	Fruit				--
0	N-DORIACONTANE	Fruit				--
0	ISO-OBACUNOIC-ACID-17-O-BETA-D-GLUCOSIDE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	OCTANOL	Pericarp		11.0		--
0	DECYLIC-ACID	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	CARBOHYDRATES	Fruit	80800.0	948000.0	0.8829725241617936	--
0	(Z)-BETA-OCIMENE	Pericarp		1.0		--
0	GLUCOSAN	Plant				--
0	ALPHA-YLANGENE	Pericarp				--
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	BERGAPTOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	NITROGEN	Fruit	990.0	16360.0	0.12184480637349815	ACTA AGRIC SCAND SUPPL 22: 1980
0	OCTOPAMINE	Plant		0.0		--
0	(+)-8,9-DIDEHYDRO-NOOTKATONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	SUGARS	Fruit	33000.0	99600.0	-0.4730742344749007	--
0	ALPHA-FARNESENE	Pericarp	0.7	2.0		--
0	7-METHOXY-8(2,3-DIHYDROXY-ISOPENTYL)-COUMARIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ZIRCONIUM	Fruit	0.44	2.2	-0.29684971083527095	--
0	N-DODECASANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	DECYL-ALDEHYDE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
0	BISABOLENE	Pericarp				--
0	NARINGENIN-RUTINOSIDE	Fruit				--
0	(E)-BETA-OCIMENE	Pericarp		8.0		--
0	GERANYL-OXY-PYRANOCOUMARIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	INTERMEDEOL	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ALPHA-THUJENE	Pericarp		1.0		--
0	N-OCTYL-ACETATE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-HYDROXY-ETHYL- HEXANOATE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	CITROSTADIENOL	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SERINE	Fruit	150.0	3100.0	-0.19170709792847418	--
1	3',4',5,6,7,8- HEXAMETHOXYFLAVONE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	DECYL-ACETATE	Pericarp		0.4		--
1	N-NONACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	N-METHYL-TYRAMINE	Fruit				--
1	XANTHYLETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	MERCURY	Fruit	0.0	0.001	-0.7865389313824043	--
1	NARIRUTIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	CHOLESTEROL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	COPAENE	Pericarp		2.0		--
1	XANTHOXYLETIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SODIUM	Fruit	0.0	341.0	-0.15161413942649452	--
1	CARVEOL	Pericarp				--
1	MALONIC-ACID	Fruit				--
1	QUINIC-ACID	Fruit				--
1	4',5,6,7,8-PENTAMETHOXY- FLAVONE	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	HUMULENE	Fruit				--
2	MOLYBDENUM	Fruit	0.1	0.77	-0.3309149921902472	--
2	UNDECANAL	Pericarp				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	GERMACRENE-D	Pericarp		13.0		--
2	ASPARAGINE	Fruit		420.0	-0.6477225740518642	--
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.)
2	DECANOL	Pericarp		3.0		--
2	GAMMA-CAROTENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
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.
2	CYSTINE	Fruit		2.0	-1.0736993666328245	--
2	N-HEXACOSANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	MARMIN	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	ARSENIC	Fruit	0.001	4.4	5.101801784885793	--
2	PALMITOLEIC-ACID	Fruit	10.0	110.0	-0.32532624490387124	USDA's Ag Handbook 8 and sequelae)
2	CRYPTOXANTHIN	Fruit	0.03	0.3	-0.636682262247135	--
2	RHOIFOLIN	Leaf				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	HUMULENE	Pericarp				--
2	FRIEDELIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	ALPHA-HUMULENE	Pericarp		7.0		--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	NOMILIN	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	CONIFERIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	ALPHA-HUMULENE	Leaf		29.0	-0.41881559329428053	--
2	COBALT	Fruit	0.005	0.22	-0.5084821806978201	--
2	DODECANAL	Pericarp		0.7		--
2	CAMPESTEROL	Fruit		20.0	-0.48957181191497545	--
2	BERGAMOTTIN	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	NICKEL	Fruit	0.04	7.7	1.5622677545774823	--
3	SESELIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ASPARTIC-ACID	Fruit	810.0	4700.0	-0.7171245699225177	--
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	XYLOSE	Fruit				--
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.
3	BETA-PHELLANDRENE	Pericarp				--
3	CADMIUM	Fruit	0.002	0.066	-0.44965581051601666	--
3	CYCLOEUCALENOL	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	OBACUNONE	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ALANINE	Fruit		90.0	-1.4217792176532806	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	MANNOSE	Fruit				--
3	N-HENTRIACONTANE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	VALINE	Fruit		240.0	-0.8692582235353649	--
3	ELEMENE	Pericarp				--
3	SILVER	Fruit	0.022	0.11	-0.43140967622714665	--
3	ISOPULEGOL	Pericarp		2.0		--
3	NOOTKATONE	Pericarp		27.0		--
4	OSTHOLE	Root				--
4	LYSINE	Fruit	160.0	1760.0	-0.6097925666909821	--
4	NERAL	Fruit	0.0	210.0	0.21477685159099982	--
4	TIN	Fruit	0.66	3.3	-0.3642012762593144	--
4	THREONINE	Fruit		100.0	-1.2128642044978408	--
4	BORON	Fruit	1.0	33.0	-0.13949053957899715	--
4	CADINENE	Pericarp				--
4	PHOSPHORUS	Fruit	76.0	5280.0	0.6269205475189703	--
4	SILICON	Fruit		2.0	-0.6019449725946585	ACTA AGRIC SCAND SUPPL 22: 1980
5	LIMONIN	Fruit	3.0	477.0		--
5	GERANYL-ACETATE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
5	SABINENE	Pericarp	13.0	26.0		--
5	GERANYL-ACETATE	Leaf		10.0	-1.0179833272400691	--
5	SABINENE	Leaf		45.0	-0.23253758249077405	--
5	NERYL-ACETATE	Pericarp		0.4		--
5	GERANYL-ACETATE	Pericarp		5.0		--
5	PHYLLOQUINONE	Fruit		0.001	-0.23285139490462353	--
5	LIMONIN	Seed	1188.0	1885.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	LIMONIN	Pericarp	6.0	65.0	-1.0	--
5	ALUMINUM	Fruit	1.0	330.0	-0.12751726414283882	--
5	LIMONIN	Plant	9.0	140.0		--
6	NEOHESPERIDIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
6	BETA-BISABOLENE	Pericarp				--
6	IRON	Fruit	1.0	88.0	-0.1784159005130795	--
7	PHENYLALANINE	Fruit				--
7	HISTIDINE	Fruit		140.0	-1.1025880317240395	--
7	ALPHA-CAROTENE	Fruit		0.0	-0.5519699729560847	--
7	SALICYLATES	Fruit	0.0	70.0	-0.13601954960792303	--
7	CYCLOARTENOL	Pericarp				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	LINALYL-ACETATE	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
7	CHLORINE	Plant		6.0	-1.4797990466255704	--
7	GLUCOSE	Fruit		19500.0	-0.6881467128834249	--
8	DELTA-3-CARENE	Pericarp		0.0		--
8	HESPERETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	STEARIC-ACID	Fruit	10.0	110.0	-0.27192646640928014	USDA's Ag Handbook 8 and sequelae)
8	FRUCTOSE	Plant		12400.0		--
8	GLUTAMIC-ACID	Fruit	220.0	2800.0	-0.8122742603309042	--
8	PHLOROGLUCINOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	TYROSINE	Fruit		61.0	-0.9769799928135696	--
9	DELTA-CADINENE	Pericarp		17.0		--
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	--
9	SINAPIC-ACID	Fruit	2.0	5.0	-1.4113126084211554	--
9	CAMPHENE	Pericarp				--
9	SINAPIC-ACID	Pericarp	2.0	35.0	-1.0	--
9	OXALIC-ACID	Plant				--
10	NEROL	Pericarp		3.0		--
10	ERIODICTYOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
11	TYRAMINE	Fruit		0.0	-1.414213562373095	--
11	LITHIUM	Fruit	0.088	2.31	1.8670378728368338	--
11	GAMMA-TERPINENE	Pericarp	0.4	1.0		--
11	PANTOTHENIC-ACID	Plant	3.0	31.0	0.07338228684128613	--
11	ALPHA-PHELLANDRENE	Pericarp	1.0	2.0		--
11	PERILLALDEHYDE	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
11	ISORHAMNETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
12	STIGMASTEROL	Fruit		20.0	-0.8951703667819086	--
12	GLYCINE	Fruit				--
12	NARINGIN	Seed	200.0	2677.0		--
12	COPPER	Fruit	0.0	7.7	-0.3984053050544054	--
12	NARINGIN	Pericarp	2701.0	15595.0		--
12	NARINGIN	Fruit	245.0	195000.0		--
13	BETA-PINENE	Pericarp	0.7	2.0		--
13	BETA-PINENE	Leaf		55.0	-0.34800512476675877	--
13	GERANIAL	Fruit	420.0	700.0	1.029040358819024	--
13	ALPHA-TERPINENE	Pericarp		1.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	GERANIAL	Leaf		31.0	-0.4010084489455154	--
13	GERANIAL	Pericarp	4.0	700.0		--
13	PALMITIC-ACID	Fruit	120.0	1320.0	-0.34498600170914256	USDA's Ag Handbook 8 and sequelae)
14	SUCROSE	Fruit		21400.0	-0.5950841762317102	--
14	POTASSIUM	Fruit	1300.0	46200.0	2.502343144222965	--
14	ARGININE	Fruit	470.0	760.0	-0.9468544491143548	--
14	MANGANESE	Fruit	0.0	7.7	-0.3527646944182478	--
14	SULFUR	Fruit	7.0	2090.0	0.4700861895135408	--
15	ALPHA-LINOLENIC-ACID	Fruit	50.0	550.0	-0.9033936410418376	USDA's Ag Handbook 8 and sequelae)
15	LUTEIN	Fruit	0.095	0.95	-0.7527259978039551	--
15	METHIONINE	Fruit	3.0	222.0	-0.9069733792825451	--
15	CITRONELLOL	Leaf		70.0	-0.42686676977581944	--
15	RIBOFLAVIN	Fruit	0.0	5.0	-0.0019916133753625524	--
15	OSTHOL	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	MALIC-ACID	Fruit	400.0	600.0	-0.9127272216734706	--
15	FIBER	Fruit	2000.0	172000.0	0.28614824332305033	--
16	LYCOPENE	Fruit	30.0	336.0	0.05302712626772389	--
16	ACETIC-ACID	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
16	P-CYMENE	Pericarp				--
16	P-CYMENE	Leaf		385.0	-0.08025671568278799	--
18	OLEIC-ACID	Fruit	120.0	1320.0	-0.4705714791864392	USDA's Ag Handbook 8 and sequelae)
19	D-LIMONENE	Plant		9000.0	1.999954303307047	Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
19	D-LIMONENE	Fruit	3410.0	9575.0		--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
20	CITRONELLAL	Pericarp				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
22	MYRCENE	Fruit	72.0	190.0	-0.35491275646315373	--
22	MYRCENE	Pericarp	77.0	185.0		--
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.
22	UMBELLIFERONE	Fruit				--
23	ALPHA-TERPINEOL	Pericarp		7.0		--
23	CITRIC-ACID	Fruit	11900.0	21000.0	-0.3079040401143372	--
23	ALPHA-TERPINEOL	Leaf		29.0	-0.5393424102140746	--
23	TERPINEN-4-OL	Pericarp		3.0		--
23	TERPINEN-4-OL	Leaf		305.0	-0.1661703321057829	--
24	PECTIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
24	CHROMIUM	Fruit	0.002	0.55	-0.43038124621628904	--
25	P-COUMARIC-ACID	Pericarp	5.0	25.0	-1.0	--
25	P-COUMARIC-ACID	Fruit	0.0	53.0	-0.4886747256490017	--
27	LINOLEIC-ACID	Fruit	190.0	2090.0	-0.32591314054469284	USDA's Ag Handbook 8 and sequelae)
28	CALCIUM	Fruit	117.0	11000.0	1.6484860149222178	--
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		--
29	TRYPTOPHAN	Fruit	20.0	220.0	-0.8847986548914832	--
30	ESCULETIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	HESPERIDIN	Fruit				--
31	THIAMIN	Fruit	0.0	6.0	0.08541669233982067	--
31	CARYOPHYLLENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
32	ALPHA-TOCOPHEROL	Fruit	3.0	29.0	-0.6752411923996696	--
32	AESCULETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
35	GERANIOL	Plant				--
35	GERANIOL	Pericarp		2.0		--
39	NIACIN	Fruit	2.0	44.0	-0.2232247949977374	--
44	SCOPOLETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
47	BETA-SITOSTEROL	Fruit		130.0	-0.6234365080108808	--
53	CITRAL	Fruit				Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.
53	BETA-CAROTENE	Fruit	0.0	5.0	-0.14113571921676207	--
56	NARINGENIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
60	SELENIUM	Fruit	0.0	0.027	-0.3794918743602091	--
60	LIMONENE	Leaf		205.0	-0.23212407778841473	--
61	FERULIC-ACID	Fruit	25.0	35.0	-0.5720775535473553	--
61	FERULIC-ACID	Pericarp	25.0	160.0	-1.0	--
62	CAFFEINE	Flower		29.0	-1.3198240351921797	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
65	MAGNESIUM	Fruit	15.0	3300.0	0.5418998341350072	--
75	KAEMPFEROL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
77	ZINC	Fruit	0.0	22.0	-0.24975934398276664	--
102	CAFFEIC-ACID	Fruit	40.0	51.0	-0.3294714675858169	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
112	ASCORBIC-ACID	Fruit	337.0	3862.0	-0.044361459552841695	--
176	QUERCETIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses