

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in Citrus aurantium

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	4-TERPINEOL	Plant	--	--		
1	6,7-DIMETHOXYCOUMARIN	Fruit	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
6	ACETALDEHYDE	Plant	--	--		
16	ACETIC-ACID	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
16	ACETIC-ACID	Plant	--	--		
2	ALPHA-HUMULENE	Plant	--	--		
5	ALPHA-IONONE	Plant	--	--		
11	ALPHA-PHELLANDRENE	Leaf	1	20	-0.3001378339446704	
28	ALPHA-PINENE	Plant	--	--		
28	ALPHA-PINENE	Leaf	1	1	-0.22447959885047528	
13	ALPHA-TERPINENE	Leaf	1	1	-0.31184560399489664	
23	ALPHA-TERPINEOL	Leaf	460	760	0.7438510443528464	
23	ALPHA-TERPINEOL	Plant	--	--		
112	ASCORBIC-ACID	Fruit	420	3947	-0.03907641517084457	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
112	ASCORBIC-ACID	Leaf	--	3000	-0.16555832480808047	Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
2	AURAPTEN	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
20	BENZOIC-ACID	Plant	--	--		
26	BERGAPTEN	Fruit	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
53	BETA-CAROTENE	Fruit	1	27	-0.09861011559570874	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
5	BETA-ELEMENE	Plant	--	--		
13	BETA-PINENE	Plant	--	--		
13	BETA-PINENE	Leaf	70	170	-0.17838109246360231	
4	CADINENE	Plant	--	--		
4	CADINENE	Leaf	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
28	CALCIUM	Fruit	18	4230	0.08623828803163008	
9	CAMPHENE	Plant	--	--		
9	CAMPHENE	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
19	CARVONE	Plant	--	--		
31	CARYOPHYLLENE	Plant	--	--		
18	CINNAMIC-ACID	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	CINNAMIC-ACID	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	CIS-3-HEXENOL	Leaf	1	1		
3	CIS-OCIMENE	Leaf	1	110	-0.6693017803090183	
53	CITRAL	Plant	--	--		
2	CITRANTIN	Fruit	--	--		
23	CITRIC-ACID	Fruit	--	--		Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp.
23	CITRIC-ACID	Plant	--	--		
20	CITRONELLAL	Plant	--	--		
15	CITRONELLOL	Plant	--	--		
12	COPPER	Fruit	4	10	-0.21939758331858253	Suzuki, A., Morimoto, I., and Okitsu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
57	COUMARIN	Fruit	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
2	CRYPTOXANTHIN	Plant	--	--		
19	D-LIMONENE	Plant	--	--		
8	DELTA-3-CARENE	Plant	--	--		
9	DELTA-CADINENE	Plant	--	--		
7	DIPENTENE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	DIPENTENE	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	DODECANAL	Plant	--	--		
24	ETHANOL	Plant	--	--		
17	FARNESOL	Plant	--	--		
17	FARNESOL	Leaf	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	FIBER	Plant	3000	160000	-0.46435066688212184	
12	FORMALDEHYDE	Plant	--	--		
13	FORMIC-ACID	Pericarp	--	--		
13	FORMIC-ACID	Plant	--	--		
13	FORMIC-ACID	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	GAMMA-TERPINENE	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	GAMMA-TERPINENE	Leaf	50	110	-0.15983052104707215	
11	GAMMA-TERPINENE	Pericarp	--	--		
11	GAMMA-TERPINENE	Plant	--	--		
13	GERANIAL	Leaf	1	1	-0.4060621023305319	
13	GERANIAL	Plant	--	--		
35	GERANIOL	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
35	GERANIOL	Leaf	200	350	-0.06791028766181946	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	GERANYL-ACETATE	Fruit	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
5	GERANYL-ACETATE	Leaf	261	261	0.3570910203674803	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
31	HESPERIDIN	Fruit	700	2500		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
31	HESPERIDIN	Leaf	--	--		
31	HESPERIDIN	Flower	--	--		
3	HEXANOL	Plant	--	--		
15	INDOLE	Plant	--	--		
6	IRON	Fruit	3	260	0.5038617420819682	
2	ISOSCUTELLAREIN	Plant	--	--		
8	JASMONE	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
60	LIMONENE	Leaf	70	110	-0.3320641434683265	
60	LIMONENE	Plant	1000	8000	4.430891974366298	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
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.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	LIMONIN	Plant	--	--		
53	LINALOOL	Leaf	1990	2795	1.288060378681955	
7	LINALYL-ACETATE	Flower	80	520	-0.45159116756655254	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	LINALYL-ACETATE	Leaf	4429	5500	0.46478491571028424	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
65	MAGNESIUM	Fruit	800	1730	-0.18510138251654518	Suziki, A., Morimoto, I., and Okitsu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
15	MALIC-ACID	Plant	--	--		
14	MANGANESE	Fruit	--	8	-0.3507865335531638	Suziki, A., Morimoto, I., and Okitsu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
3	MANNOSE	Plant	--	--		
2	METHANOL	Plant	--	--		
2	METHYL-ANTHRANILATE	Flower	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
22	MYRCENE	Leaf	130	550	0.025793360942901168	
22	MYRCENE	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
22	MYRCENE	Plant	--	--		
56	NARINGENIN	Plant	--	--		

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12	NARINGIN	Fruit	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
6	NEOHESPERIDIN	Fruit	--	--		
4	NERAL	Leaf	1	1	-0.386496325306488	
4	NERAL	Plant	--	--		
10	NEROL	Leaf	100	150	0.2210563851407086	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
10	NEROL	Plant	--	--		
11	NEROLIDOL	Plant	--	--		
5	NERYL-ACETATE	Fruit	--	--		Chemical Constituents of Oriental Herbs (3 diff. books)
5	NERYL-ACETATE	Leaf	55	755	0.9027789321499269	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
39	NIACIN	Fruit	3	24	-0.49059008618146793	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	NOBILETIN	Fruit	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
8	NOBILETIN	Plant	--	--		
2	NOMILIN	Plant	--	--		
3	NOOTKATONE	Plant	--	--		
16	P-CYMENE	Leaf	100	270	-0.17579834905797595	

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16	P-CYMENE	Plant	--	--		
13	PALMITIC-ACID	Plant	--	--		
24	PECTIN	Plant	--	--		
24	PECTIN	Pericarp	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
4	PHELLANDRENE	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	PHELLANDRENE	Pericarp	--	--		
4	PHELLANDRENE	Plant	--	--		
26	PHENOL	Plant	--	--		
2	PHENYLACETIC-ACID	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	PHENYLACETIC-ACID	Plant	--	--		
4	PHOSPHORUS	Fruit	120	1600	-0.4908418737652641	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	POTASSIUM	Fruit	1020	13800	-0.36420230977490436	
2	RHOIFOLIN	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
15	RIBOFLAVIN	Fruit	1	3	-0.4303249009534089	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	RUTOSIDE	Pericarp	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
5	SABINENE	Leaf	1	40	-0.23572328048185884	

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5	SABINENE	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	SABINENE	Pericarp	--	--		
5	SABINENE	Plant	--	--		
3	SESELIN	Root	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
2	SINENSETIN	Pericarp	--	--		
2	SINENSETIN	Plant	--	--		
2	SINENSETIN	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
2	SINENSETIN	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	SODIUM	Fruit	54	116	-0.1729506367339856	Suzuki, A., Morimoto, I., and Okitsu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
6	STACHYDRINE	Leaf	--	1000		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	TANGERETIN	Plant	--	--		
15	TANGERETIN	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	TANGERETIN	Pericarp	--	--		
41	TANNIC-ACID	Plant	--	--		

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35	TANNIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
23	TERPINEN-4-OL	Leaf	50	80	-0.29464326118547207	
9	TERPINOLENE	Leaf	1	10	-0.2193558436556226	
9	TERPINOLENE	Plant	--	--		
9	TERPINOLENE	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	TERPINOLENE	Pericarp	--	--		
31	THIAMIN	Fruit	1	6	0.08541669233982067	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
71	THYMOL	Leaf	1	1	-0.41949505884088445	
22	UMBELLIFERONE	Plant	--	--		
2	UNDECANAL	Plant	--	--		
2	VIOLAXANTHIN	Pericarp	--	--		
2	VIOLAXANTHIN	Plant	--	--		
2	VIOLAXANTHIN	Hull Husk	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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	--	16	-0.4302746084448067	