

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in Capsicum frutescens

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
67	1,8-CINEOLE	Fruit	--	--		
0	1-HEXANOL	Fruit	--	--		
0	1-PENTANOL	Fruit	--	--		
0	2-DECENOIC-ACID	Fruit	--	--		
0	2-HEPTANONE	Fruit	--	--		
0	2-HEXANOL	Fruit	--	--		
0	2-ISO-BUTYL-3-METHOXY-PYRAZINE	Fruit	--	121		
0	2-METHOXY-3-ISOBUTYL-PYRAZINE	Fruit	--	--		
0	2-METHYL-BUTANAL	Fruit	--	--		
0	2-METHYL-BUTYRIC-ACID	Fruit	--	--		
0	2-OCTANONE	Fruit	--	--		
0	2-OCTENOIC-ACID	Fruit	--	--		
0	2-PENTYL-FURAN	Fruit	--	--		
4	2-UNDECANONE	Fruit	--	--		
0	3-ACETAMIDO-2-METHYL-PENTADECANE	Fruit	--	--		
0	3-ACETAMIDO-2-METHYL-TETRADECANE	Fruit	--	--		
0	3-HYDROXY-ALPHA-CAROTENE	Fruit	--	--		
0	3-ISOBUTYL-2-METHOXYPYRAZINE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	3-METHYL-BUTAN-1-OL	Fruit	--	--		
0	3-METHYL-BUTANAL	Fruit	--	--		
0	4-METHYL-3-PENTEN-2-ONE	Fruit	--	--		
0	4-METHYL-HEPTADECANE	Fruit	--	--		
0	4-METHYL-HEXADECANE	Fruit	--	--		
0	4-METHYL-PENTAN-1-OL	Fruit	--	--		
0	4-METHYL-PENTANOIC-ACID	Fruit	--	--		
0	4-METHYLPENTADECANE	Fruit	--	--		
0	4-METHYLPENTYL-2-METHYL-BUTYRATE	Fruit	--	--		
0	4-METHYLPENTYL-3-METHYL-BUTYRATE	Fruit	--	--		
0	4-METHYLTETRADECANE	Fruit	--	--		
0	4-METHYLTRIDECANE	Fruit	--	--		
0	5-METHYL-2-FURFURAL	Fruit	--	--		
0	7-METHYL-OCTANOIC-ACID	Fruit	--	--		
0	8-METHYL-NONANOATE	Fruit	--	--		
0	8-METHYL-NONANOIC-ACID	Fruit	--	--		
16	ACETIC-ACID	Resin, Exudate, Sap	--	--		
3	ALANINE	Fruit	820	6691	1.172599390703127	USDA's Ag Handbook 8 and sequelae)
7	ALPHA-CAROTENE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	ALPHA-LINOLENIC-ACID	Fruit	50	408	-0.9676999486324697	USDA's Ag Handbook 8 and sequelae)
11	ALPHA-PHELLANDRENE	Fruit	--	--		
23	ALPHA-TERPINEOL	Fruit	--	--		
5	ALUMINUM	Fruit	--	--		
1	ANTHERAXANTHIN	Fruit	--	--		
4	APIIN	Fruit	--	--		
0	ARACHIDIC-ACID	Fruit	--	--		
14	ARGININE	Fruit	960	7834	0.9400462931719672	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Fruit	350	19992	1.1455818273019922	
0	ASH	Fruit	6000	65000	0.21586982574245966	
2	ASPARAGINE	Fruit	--	--		
3	ASPARTIC-ACID	Fruit	2860	23338	1.7314621798304917	USDA's Ag Handbook 8 and sequelae)
0	AUROCHROME	Fruit	--	--		
0	BARIUM	Fruit	--	--		
1	BEHENIC-ACID	Fruit	--	--		
24	BENZALDEHYDE	Fruit	--	--		
53	BETA-CAROTENE	Fruit	1	38	-0.0773473137851821	
0	BETA-CAROTENE-EPOXIDE	Fruit	--	--		
13	BETA-IONONE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-PHENETHYLACETATE	Fruit	--	--		
13	BETA-PINENE	Fruit	--	--		
47	BETA-SITOSTEROL	Fruit	60	70	-0.702269364661361	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
14	BETAINE	Fruit	--	--		
4	BORON	Fruit	4	17	-0.4616311374782685	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
6	BUTYRIC-ACID	Resin, Exudate, Sap	--	--		
102	CAFFEIC-ACID	Fruit	32	32	-0.3329891212786086	
28	CALCIUM	Fruit	175	1560	-0.5298919085411719	
2	CAMPESTEROL	Fruit	20	30	-0.4046460894399287	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
41	CAMPHOR	Fruit	--	--		
1	CAPROIC-ACID	Resin, Exudate, Sap	--	--		
44	CAPSAICIN	Seed	--	5		
44	CAPSAICIN	Fruit	100	17900	1	
44	CAPSAICIN	Tissue Culture	--	--		
44	CAPSAICIN	Pericarp	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CAPSANTHIN	Fruit	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	CAPSANTHIN-3,6-EPOXIDE	Fruit	--	--		
0	CAPSANTHIN-5,6-EPOXIDE	Fruit	--	--		
0	CAPSANTHONE	Fruit	--	--		
0	CAPSIAMIDE	Fruit	20	200		
3	CAPSIDIOL	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	CAPSIDOL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	CAPSOLUTEIN	Fruit	--	--		
1	CAPSORUBIN	Fruit	--	--		
0	CARBOHYDRATES	Fruit	87000	849000	0.353568647501926	
0	CARNAUBIC-ACID	Seed	--	--		
19	CARVONE	Fruit	--	--		
31	CARYOPHYLLENE	Fruit	--	--		
77	CHLOROGENIC-ACID	Fruit	--	--		
77	CHLOROGENIC-ACID	Stem	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	CHROMIUM	Fruit	3	3.5	-0.01602978329031414	
18	CINNAMIC-ACID	Fruit	--	--		
0	CIS-3-HEXEN-1-OL	Fruit	--	--		
23	CITRIC-ACID	Fruit	--	--		
0	CITROXANTHIN	Fruit	--	--		
0	CITRULLIN	Fruit	--	--		
2	COBALT	Fruit	0.5	0.8	-0.43826781025666195	
12	COPPER	Fruit	2	14	0.0919201936132837	
0	CRYPTOCAPSIN	Fruit	--	--		
2	CRYPTOXANTHIN	Fruit	--	--		
0	CUCURBITAXANTHIN-A	Fruit	--	--		
0	CUCURBITAXANTHIN-B	Fruit	--	--		
0	CYCLOVIOLAXANTHIN	Fruit	--	--		
2	CYSTINE	Fruit	380	3101	2.1590364256446732	USDA's Ag Handbook 8 and sequelae)
0	DECANOIC-ACID-VANILLYLAMIDE	Fruit	1	68		
8	DELTA-3-CARENE	Fruit	--	--		
1	DIHYDROCAPSAICIN	Fruit	75	1628		
1	DIHYDROCAPSAICIN	Pericarp	--	--		
0	EO	Fruit	16000	16000	-0.5089697144452834	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ERIODICTIN	Fruit	--	--		
0	ETHYL-DODECANOATE	Fruit	--	--		
0	ETHYL-OCTANOATE	Fruit	--	--		
0	ETHYL-TETRADECANOATE	Fruit	--	--		
0	FAT	Fruit	1000	16320	-0.5166012425337018	
0	FAT	Seed	100000	150000	-0.6077877171137942	
61	FERULIC-ACID	Fruit	--	--		
15	FIBER	Fruit	18000	146880	0.04910384821470623	
15	FOLACIN	Fruit	--	2	-0.019192793995839758	USDA's Ag Handbook 8 and sequelae)
0	FOLIAXANTHIN	Fruit	--	--		
1	GALACTOSE	Fruit	--	--		
2	GERANYL-ACETONE	Fruit	--	--		
7	GLUCOSE	Fruit	--	--		
8	GLUTAMIC-ACID	Fruit	2640	21542	0.6462527347442002	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Fruit	740	6038	0.9413380636653274	USDA's Ag Handbook 8 and sequelae)
0	HENEICOSANE	Fruit	--	--		
0	HEPTADECANE	Fruit	--	--		
0	HEPTANOIC-ACID	Fruit	--	--		
31	HESPERIDIN	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEXADECANE	Fruit	--	--		
2	HEXANOIC-ACID	Fruit	--	--		
7	HISTIDINE	Fruit	410	3346	1.1452024426776553	USDA's Ag Handbook 8 and sequelae)
0	HOMOCAPSAICIN	Fruit	2	90		
0	HOMODIHYDROCAPSAICIN	Fruit	2	90		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	HOMODIHYDROCAPSAICIN-I	Fruit	--	--		
0	HYDROXY-ALPHA-CAROTENE	Fruit	--	--		
6	IRON	Fruit	7	135	0.008020432056497481	
2	ISOBUTYRIC-ACID	Resin, Exudate, Sap	--	--		
0	ISOHEXANOIC-ACID	Resin, Exudate, Sap	--	--		
0	ISOHEXYL-ISOCAPROATE	Fruit	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	ISOLEUCINE	Fruit	650	5304	0.5004334014218573	USDA's Ag Handbook 8 and sequelae)
0	ISOTHUJONE	Fruit	--	--		
5	ISOVALERIC-ACID	Resin, Exudate, Sap	--	--		
75	KAEMPFEROL	Anther	--	--		
0	LATOXANTHIN	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	LAURIC-ACID	Resin, Exudate, Sap	--	--		
2	LEUCINE	Fruit	1050	8568	0.7370114428537464	USDA's Ag Handbook 8 and sequelae)
60	LIMONENE	Fruit	--	--		
27	LINOLEIC-ACID	Fruit	1040	8486	-0.2356752831952287	USDA's Ag Handbook 8 and sequelae)
11	LITHIUM	Fruit	--	--		
15	LUTEIN	Fruit	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	LUTEOLIN-7-MONOGLUCOSIDE	Fruit	--	--		
4	LYSINE	Fruit	890	7262	0.8151903697542972	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Fruit	230	2203	0.033925098678476644	USDA's Ag Handbook 8 and sequelae)
1	MALONIC-ACID	Leaf	--	--		
14	MANGANESE	Fruit	2	20	-0.271660098949806	USDA's Ag Handbook 8 and sequelae)
0	MARGARIC-ACID	Fruit	--	--		
15	METHIONINE	Fruit	240	1958	1.2307904104780838	USDA's Ag Handbook 8 and sequelae)
0	METHYL-8-METHYL-6-NONANOATE	Fruit	--	--		
0	METHYL-BETA-PHENYLPROPIONATE	Fruit	--	--		
0	METHYL-DECANOATE	Fruit	--	--		
0	METHYL-DODECANOATE	Fruit	--	--		
0	METHYL-HEPTANOATE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	METHYL-HEXADECANOATE	Fruit	--	--		
0	METHYL-HEXANOATE	Fruit	--	--		
2	METHYL-NONANOATE	Fruit	--	--		
0	METHYL-OCTADECANOATE	Fruit	--	--		
0	METHYL-OCTANOATE	Fruit	--	--		
0	METHYL-PENTANOATE	Fruit	--	--		
2	METHYL-PHENYLACETATE	Fruit	--	--		
0	METHYL-TETRADECANOATE	Fruit	--	--		
0	MEVALONIC-ACID	Fruit	0.5	0.5	-0.6071834425016228	
22	MYRCENE	Fruit	--	--		
6	MYRISTIC-ACID	Fruit	10	82	-0.26527528291125785	USDA's Ag Handbook 8 and sequelae)
6	MYRISTIC-ACID	Seed	--	--		
0	N-(13-METHYLTETRADECYL)ACETAMIDE	Fruit	--	--		
0	N-HEXANAL	Fruit	--	--		
0	NEO-BETA-CAROTENE	Plant	--	--		
2	NEOXANTHIN	Fruit	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
39	NIACIN	Fruit	9	158	1.3007573647495265	
3	NICKEL	Fruit	1	1.5	-0.3232802458858994	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NIGROXANTHIN	Fruit	--	--		
0	NONADECANE	Fruit	--	--		
2	NONANOIC-ACID	Fruit	--	--		
0	NONANOIC-ACID-VANILLYLAMIDE	Fruit	2	45		
0	NORCAPSAICIN	Fruit	--	--		
0	NORDIHYDROCAPSAICIN	Fruit	15	335		
0	NOVIVAMIDE	Fruit	--	--		
5	OCTANOIC-ACID	Fruit	--	--		
0	OCTOPAMINE	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
18	OLEIC-ACID	Fruit	110	898	-0.47382397454953795	USDA's Ag Handbook 8 and sequelae)
18	OLEIC-ACID	Seed	--	--		
9	OXALIC-ACID	Fruit	--	--		
25	P-COUMARIC-ACID	Fruit	540	540	2.293291804958545	
2	P-METHYL-ACETOPHENONE	Fruit	--	--		
0	P-XYLENE	Fruit	--	--		
13	PALMITIC-ACID	Resin, Exudate, Sap	--	--		
13	PALMITIC-ACID	Fruit	150	1224	-0.34648051868331636	USDA's Ag Handbook 8 and sequelae)
13	PALMITIC-ACID	Seed	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PALMITOLEIC-ACID	Fruit	--	--		USDA's Ag Handbook 8 and sequelae)
11	PANTOTHENIC-ACID	Fruit	1	5	-0.8358850147292255	USDA's Ag Handbook 8 and sequelae)
0	PENTADECANE	Fruit	--	--		
1	PENTADECANOIC-ACID	Fruit	--	--		
0	PENTANOIC-ACID	Fruit	--	--		
7	PHENYLALANINE	Fruit	620	5059	0.6010935599540774	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Fruit	455	3794	0.17556322196778232	USDA's Ag Handbook 8 and sequelae)
5	PHYLLOQUINONE	Fruit	0.02	0.06	-0.22359887323159108	
2	PHYTOSTEROLS	Fruit	90	130	-1.0504327164506866	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
14	POTASSIUM	Fruit	2600	34272	1.4470297437511566	
0	PROLINE	Fruit	870	7099	0.8487973914288358	
0	PROTEIN	Fruit	11000	163200	0.7198914229242388	
28	PULEGONE	Fruit	--	--		
176	QUERCETIN	Fruit	63	63	-0.4638273342549432	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).
15	RIBOFLAVIN	Fruit	1	8	0.6405083179917069	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
87	RUTIN	Fruit	--	487	-0.597969170419332	Varnaite, R. 1988. Rutin Content in Capsicum, Capsella, Urtica, Primula, Lepidium, Lactuca, Brassica, Anethum, Beta, Petroselinum, Allium Genera Representatives. Liet Tsr Mokslu Akad Darb Ser C, 4: 29-32.
7	SALICYLATES	Fruit	6	2000	5.398186266809645	
44	SCOPOLETIN	Fruit	--	--		
1	SERINE	Fruit	800	6528	1.0185542864155581	USDA's Ag Handbook 8 and sequelae)
4	SILICON	Fruit	--	--		
1	SODIUM	Fruit	50	734	-0.11434639079607677	
5	SOLANIDINE	Fruit	--	--		
26	SOLANINE	Fruit	--	--		
18	SOLASODINE	Fruit	--	--		
8	STEARIC-ACID	Fruit	30	245	-0.2629735334438446	USDA's Ag Handbook 8 and sequelae)
8	STEARIC-ACID	Seed	--	--		
12	STIGMASTEROL	Fruit	10	20	-0.8951703667819086	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
23	TERPINEN-4-OL	Fruit	--	--		
0	TETRADECANE	Fruit	--	--		
31	THIAMIN	Fruit	--	8	0.3414272755878574	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	THREONINE	Fruit	740	6038	1.2555161590514035	USDA's Ag Handbook 8 and sequelae)
17	THUJONE	Fruit	--	--		
0	TITANIUM	Fruit	--	--		
93	TOCOPHEROL	Fruit	24	24	-0.48930868112103443	
1	TOLUENE	Fruit	--	--		
0	TRANS-2-HEXEN-1-OL	Fruit	--	--		
29	TRYPTOPHAN	Fruit	260	2122	1.784557457132048	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Fruit	420	3427	0.41780296779908704	USDA's Ag Handbook 8 and sequelae)
9	VALERIC-ACID	Resin, Exudate, Sap	--	--		
3	VALINE	Fruit	840	6854	0.49539259309480443	USDA's Ag Handbook 8 and sequelae)
0	VANILLYL-AMIDE	Fruit	--	--		
1	VANILLYL-AMINE	Fruit	--	--		
2	VIOLAXANTHIN	Fruit	--	--		
0	VIT-B-6	Fruit	3	23	2.4870709072099877	USDA's Ag Handbook 8 and sequelae)
0	WATER	Fruit	70000	889550	0.5173112338666463	
0	XANTHOPHYLL-EPOXIDE	Fruit	--	--		
3	XYLOSE	Fruit	--	--		
5	ZEAXANTHIN	Fruit	--	--		
77	ZINC	Fruit	3	24	-0.1895875891620866	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ZUCAPSAICIN	Fruit	--	--		