

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Pimenta dioica*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	1,8-CINEOL	Leaf Essent. Oil				--
67	1,8-CINEOLE	Fruit		142.0	-0.4152844919391697	--
67	1,8-CINEOLE	Leaf		51.0	-0.523664583248735	--
0	1-OCTEN-3-OLE	Fruit				--
0	10-(ALPHA)-CADINOL	Fruit	66.0	1000.0	-1.0	--
0	10-EPI-(ALPHA)-CADINOL	Plant				--
0	10-EPIZONARENE	Plant				--
0	2-METHYL-BUTANOL	Plant				--
0	2-METHYL-BUTYL-ACETATE	Fruit		3.0		--
0	3-OCTANON	Fruit				--
0	4,8-EPOXYTERPINOLENE	Plant				--
3	ACETONE	Plant				--
0	ALLO-AROMADENDRENE	Leaf Essent. Oil				--
0	ALLO-AROMADENDRENE	Leaf		12.0	-0.19965840557965248	--
0	ALLO-AROMADENDRENE	Fruit		204.0	-0.6431371812176149	--
0	ALPHA-CADINENE	Plant				--
0	ALPHA-COPAENE	Leaf Essent. Oil				--
0	ALPHA-GURJUNENE	Fruit		42.0		--
0	ALPHA-GURJUNENE	Leaf Essent. Oil				--
0	ALPHA-GURJUNENE	Leaf		5.0	-0.5838617665778135	--
2	ALPHA-HUMULENE	Leaf Essent. Oil				--
2	ALPHA-HUMULENE	Fruit		405.0	-0.3953664035391883	--
0	ALPHA-MAALIENE	Plant				--
0	ALPHA-MUUROLENE	Leaf Essent. Oil				--
0	ALPHA-MUUROLENE	Fruit		315.0	-0.3848573067824942	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	ALPHA-MUUROLENE	Leaf		45.0	1.6512122064976056	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-P-DIMETHYL-STYRENE	Leaf		9.0	-0.004343651602302643	--
0	ALPHA-P-DIMETHYL-STYRENE	Fruit		15.0	-1.162476387438193	--
0	ALPHA-PALUSTRINE	Plant				--
11	ALPHA-PHELLANDRENE	Fruit		6.0	-0.5736201696885931	--
11	ALPHA-PHELLANDRENE	Leaf		59.0	-0.2724798984020604	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil				--
28	ALPHA-PINENE	Fruit		14.0	-0.7151283547486822	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	ALPHA-PINENE	Leaf		20.0	-0.22324603244709168	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	ALPHA-PINENE	Leaf Essent. Oil				--
0	ALPHA-SANTALENE	Plant				--
3	ALPHA-SELINENE	Leaf		45.0	0.10833579294760737	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	ALPHA-SELINENE	Fruit		315.0	-0.17833371703484516	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	ALPHA-SELINENE	Leaf Essent. Oil				--
13	ALPHA-TERPINENE	Leaf		11.0	-0.30667825501370594	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Fruit		3.0	-0.44374837770622017	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	ALPHA-TERPINEOL	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-THUJENE	Fruit		14.0	-0.5835458707004604	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-THUJENE	Leaf		20.0	-0.4177673825705209	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	ALUMINUM	Plant		110.0	-0.5382991405371662	--
3	AR-CURCUMENE	Plant				--
3	AROMADENDRENE	Plant				--
112	ASCORBIC-ACID	Fruit		426.0	-0.2580016065709841	--
112	ASCORBIC-ACID	Leaf	2012.0	2067.0	-0.2521288359523834	--
0	ASH	Leaf	76000.0	89000.0	-0.525950170714926	--
0	BARIUM	Plant		20.0	-1.3760690147148127	--
53	BETA-CAROTENE	Leaf	103.0	120.0	-0.6153455669506752	--
53	BETA-CAROTENE	Fruit		4.0	-0.1430687011995372	--
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil				--
0	BETA-COPAENE	Plant				--
5	BETA-ELEMENE	Plant				--
0	BETA-HUMULENE	Fruit		405.0		--
3	BETA-PHELLANDRENE	Fruit				--
3	BETA-PHELLANDRENE	Plant				--
13	BETA-PINENE	Plant				--
3	BETA-SELINENE	Plant				--
47	BETA-SITOSTEROL	Fruit	570.0	590.0	-0.01905127369053271	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
4	BORON	Fruit	9.0	25.0	-0.3005608385286328	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).

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	CADMIUM	Plant		0.05	-0.8187470214027749	--
0	CALAMANENE	Fruit		90.0		--
0	CALAMENENE	Fruit		90.0	-0.5866732935178128	--
28	CALCIUM	Fruit	7224.0	8000.0	0.9562048951774965	--
28	CALCIUM	Leaf	10056.0	11166.0	-0.4968226526695569	--
4	CALCIUM-OXALATE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	CAMPESTEROL	Fruit		10.0	-0.574497534390022	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	CARBOHYDRATE	Plant	749000.0	757000.0	0.7647883491334662	--
0	CARBOHYDRATES	Plant	749000.0	757000.0	0.544740122808857	--
31	CARYOPHYLLENE	Fruit		1341.0	-0.3560842600409065	--
31	CARYOPHYLLENE	Leaf		760.0	-0.24358897993110573	--
1	CARYOPHYLLENE-ALCOHOL	Plant				--
0	CARYOPHYLLENE-ALDEHYDE	Plant				--
8	CARYOPHYLLENE-OXIDE	Plant				--
1	CATECHINS	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	CHAVICOL	Leaf				--
3	CHAVICOL	Fruit	1400.0	2400.0	1.3851806567213685	--
24	CHROMIUM	Plant		5.0	-0.39700126313461825	--
0	CINEOLE	Plant		690.0	-0.5510004014017486	--
60	CINNAMALDEHYDE	Plant				--
1	CIS-3-HEXENOL	Plant				--
0	CIS-ALPHA-BERGAMOTENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-BETA-OCIMENE	Leaf Essent. Oil				--
3	CIS-OCIMENE	Plant				--
2	COBALT	Plant		0.05	-0.47578028445391224	--
0	CONIFERALDEHYDE	Fruit Essent. Oil				--
0	CONIFERALDEHYDE	Leaf Essent. Oil				--
1	COPAENE	Leaf		9.0	-0.626454859293784	--
1	COPAENE	Fruit		15.0	-0.7078723703089148	--
12	COPPER	Bud	5.0	10.0		USDA's Ag Handbook 8 and sequelae)
0	CUBENENE	Plant				--
0	CYCLOSATIVENE	Plant				--
8	DELTA-3-CARENE	Fruit		30.0	-0.5630094212434373	--
9	DELTA-CADINENE	Leaf Essent. Oil				--
9	DELTA-CADINENE	Fruit		51.0	-0.4598385498757147	--
9	DELTA-CADINENE	Leaf		50.0	-0.24641334861755498	--
0	DELTA-SELINENE	Plant				--
0	DOCOSANE	Plant				--
0	DODECANE	Plant				--
0	EICOSANE	Plant				--
0	EIXOSANE	Plant				--
0	EO	Leaf	7500.0	12500.0	0.0848785007274081	--
0	EO	Fruit	20000.0	50000.0	0.1518886748253213	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EPICUBENOL	Plant				--
0	EPIGLOBULOL	Plant				--
1	ETHYL-BENZOATE	Plant				--
76	EUGENOL	Flower Essent. Oil		543000.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
76	EUGENOL	Leaf Essent. Oil		792400.0	1.1351063586498586	--
76	EUGENOL	Leaf	8348.0	12000.0	0.593677045891266	--
76	EUGENOL	Fruit	3500.0	36000.0	1.4142135623730538	--
5	EUGENOL-METHYL-ETHER	Fruit	8000.0	22500.0		--
5	EUGENOL-METHYL-ETHER	Leaf Essent. Oil				--
0	FAT	Leaf	36000.0	41000.0	-0.3081101927392882	--
15	FIBER	Leaf	175000.0	179000.0	0.2159757383407224	--
0	FLUORINE	Plant		5.0	-0.8232345301786249	--
0	FUFUROL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	FURFURALDEHYDE	Plant				--
0	GAMMA-CADINENE	Leaf		50.0	0.07376501614150445	--
0	GAMMA-CADINENE	Fruit		51.0	-0.08104963530490027	--
11	GAMMA-TERPINENE	Leaf Essent. Oil				--
11	GAMMA-TERPINENE	Fruit		35.0	-0.64488354510724	--
11	GAMMA-TERPINENE	Leaf		17.0	-0.33914517533266125	--
5	GERANYL-ACETATE	Plant				--
0	GLOBULOL	Fruit		33.0	1.0	--
0	GLYCOSIDES	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	HEPTADECANE	Plant				--
0	HEPTANAL	Plant				--
0	HEXADECANE	Plant				--
3	HEXANOL	Plant				--
0	HUMULENE-EPOXIDE-I	Plant				--
0	HUMULENE-EPOXIDE-II	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	INTERMEDIOL	Plant				--
6	IRON	Leaf	76.0	95.0	-0.6797780759383169	--
6	IRON	Fruit	60.0	85.0	-0.19031609195369079	--
1	ISOCARYOPHYLLENE	Plant				--
16	ISOEUGENOL	Leaf Essent. Oil				--
16	ISOEUGENOL	Plant				--
22	ISOQUERCITRIN	Fruit				--
1	ISOVALERALDEHYDE	Plant				--
0	LEAD	Plant		0.8	-0.5492766752904812	--
0	LEDENE	Fruit		237.0		--
0	LEDOL	Plant				--
60	LIMONENE	Leaf Essent. Oil				--
60	LIMONENE	Leaf		15.0	-0.43200420914823834	--
60	LIMONENE	Fruit		28.0	-0.7461881384241233	--
0	LINALOL	Leaf		5.0	-0.43963782112961997	--
53	LINALOOL	Leaf Essent. Oil				--
53	LINALOOL	Leaf		5.0	-0.6439814140923522	--
53	LINALOOL	Fruit		42.0	-0.5740281838590767	--
65	MAGNESIUM	Fruit	1200.0	1480.0	-0.3008659074610599	--
15	MALIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
14	MANGANESE	Bud	29.0	70.0		USDA's Ag Handbook 8 and sequelae)
1	MERCURY	Plant		0.05	-0.5015252885658961	--
4	METHYL-BENZOATE	Plant				--
6	METHYL-CHAVICOL	Fruit		60.0	-0.8934789720128694	--
6	METHYL-CHAVICOL	Leaf		3.0	-0.7020598486430413	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
20	METHYL-EUGENOL	Fruit		1500.0	-1.0	--
20	METHYL-EUGENOL	Leaf		190.0	-0.7828372252747813	--
22	MYRCENE	Fruit		45.0	-0.3775565865925302	--
22	MYRCENE	Leaf		20.0	-0.1654584943659963	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
39	NIACIN	Leaf	1.4	1.8	-1.1640648502813271	--
39	NIACIN	Fruit		3.1	-0.7699868154684664	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	NONADECANE	Plant				--
0	OCTADECANE	Plant				--
0	OCTANOL	Plant				--
0	P-CYMEN-8-OL	Leaf		13.0	-0.27850366661659065	--
0	P-CYMEN-8-OL	Fruit		18.0	1.0	--
16	P-CYMENE	Leaf		78.0	-0.33531133695394194	--
16	P-CYMENE	Leaf Essent. Oil				--
16	P-CYMENE	Fruit		87.0	-0.5682499633585989	--
0	PENTADECANE	Plant				--
0	PENTANOL	Plant				--
4	PHOSPHORUS	Leaf	1173.0	1399.0	-0.657285112269021	--
4	PHOSPHORUS	Fruit	1100.0	1235.0	-0.6017068965285103	--
0	PHYTOSTEROL	Fruit	610.0	665.0		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		666.0	-0.35991370861065225	--
0	PIMENTOL	Fruit		800.0		--
0	POTASIUUM	Fruit	11000.0	11410.0	-0.550554488479228	--
14	POTASSIUM	Fruit	11000.0	11410.0	-0.5756542738198089	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
34	PROANTHOCYANIDINS	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	PROTEIN	Fruit	117000.0	134000.0	0.328452725551993	--
0	QUERCETIN-3-O-BETA-D-XYLOSIDE	Fruit				--
44	QUERCITRIN	Fruit				--
15	RIBOFLAVIN	Fruit		0.7	-0.9229081816681621	--
15	RIBOFLAVIN	Leaf	2.3	3.5	-0.1614553235659462	--
5	SABINENE	Plant				--
5	SABINENE	Leaf Essent. Oil				--
7	SALICYLATES	Fruit	5.0	55.0	-0.1790315119116865	--
60	SELENIUM	Plant		0.04	-0.42573678426264966	--
0	SELINA-3,11-DIENE	Plant				--
0	SELINA-4,11-DIENE	Plant				--
0	SELINA-4(14),11-DIENE	Plant				--
1	SODIUM	Fruit	800.0	842.0	-0.10410487208848104	--
0	SPATHULENOL	Fruit		60.0	1.0	--
12	STIGMASTEROL	Fruit		30.0	-0.7564559504417369	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	STRONTIUM	Plant		20.0	-0.8782466666743383	--
0	T-MUUROLOL	Plant				--
0	TERPIN-1-EN-4-OL	Leaf Essent. Oil				--
23	TERPINEN-4-OL	Fruit		1260.0	-0.1674917163075372	--
9	TERPINOLENE	Fruit		42.0	-0.47960566955795886	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	TERPINOLENE	Leaf		27.0	-0.1976999894416478	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	Leaf Essent. Oil				--
0	TETRACOSANE	Plant				--
0	TETRADECANE	Plant				--
31	THIAMIN	Leaf	1.1	1.7	-1.3764356884885183	--
31	THIAMIN	Fruit		1.1	-0.5418092366178694	--
1	TOLUENE	Plant				--
4	TRANS-2-HEXENAL	Plant				--
8	TRANS-ANETHOLE	Plant				--
0	TRANS-BETA-OCIMENE	Leaf Essent. Oil				--
0	TRANS-OCIMENE	Fruit		35.0	-1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-OCIMENE	Leaf		17.0	-0.8927086392311695	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	TRANS-P-MENTHA-1(10),5,DIENE-2-OL	Plant				--
0	TRICOSANE	Plant				--
0	TRIDECANE	Plant				--
0	UNDECANE	Plant				--
0	VALERALDEHYDE	Plant				--
16	VANADIUM	Plant		0.2	1.0000000000000002	--
77	ZINC	Fruit	11.0	20.0	-0.30993109880344666	--
0	ZONARENE	Plant				--