

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Pimenta dioica*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	UNDECANE	Plant				--
0	OCTADECANE	Plant				--
0	FLUORINE	Plant		5.0	-0.8232345301786249	--
0	ALPHA-THUJENE	Fruit		14.0	-0.5835458707004604	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LINALOL	Leaf		5.0	-0.43963782112961997	--
0	CARBOHYDRATE	Plant	749000.0	757000.0	0.7647883491334662	--
0	ALLO-AROMADENDRENE	Leaf		12.0	-0.19965840557965248	--
0	DODECANE	Plant				--
0	ALPHA-SANTALENE	Plant				--
0	TRIDECANE	Plant				--
0	NONADECANE	Plant				--
0	CIS-ALPHA-BERGAMOTENE	Plant				--
0	LEDOL	Plant				--
0	TERPIN-1-EN-4-OL	Leaf Essent. Oil				--
0	FAT	Leaf	36000.0	41000.0	-0.3081101927392882	--
0	GAMMA-CADINENE	Leaf		50.0	0.07376501614150445	--
0	CIS-BETA-OCIMENE	Leaf Essent. Oil				--
0	DOCOSANE	Plant				--
0	BARIUM	Plant		20.0	-1.3760690147148127	--
0	1-OCTEN-3-OLE	Fruit				--
0	PROTEIN	Fruit	117000.0	134000.0	0.328452725551993	--
0	HEXADECANE	Plant				--
0	TRICOSANE	Plant				--
0	CONIFERALDEHYDE	Fruit Essent. Oil				--
0	LEDENE	Fruit		237.0		--
0	P-CYMEN-8-OL	Fruit		18.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	EICOSANE	Plant				--
0	CALAMANENE	Fruit		90.0		--
0	4,8-EPOXYTERPINOLENE	Plant				--
0	T-MUUROLOL	Plant				--
0	DELTA-SELINENE	Plant				--
0	ASH	Leaf	76000.0	89000.0	-0.525950170714926	--
0	POTASIAM	Fruit	11000.0	11410.0	-0.550554488479228	--
0	HEPTANAL	Plant				--
0	TRANS-P-MENTHA-1(10),5,DIENE-2-OL	Plant				--
0	CONIFERALDEHYDE	Leaf Essent. Oil				--
0	LEAD	Plant		0.8	-0.5492766752904812	--
0	2-METHYL-BUTYL-ACETATE	Fruit		3.0		--
0	STRONTIUM	Plant		20.0	-0.8782466666743383	--
0	3-OCTANON	Fruit				--
0	HEPTADECANE	Plant				--
0	ALPHA-PALUSTRINE	Plant				--
0	TRANS-OCIMENE	Leaf		17.0	-0.8927086392311695	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil				--
0	CINEOLE	Plant		690.0	-0.5510004014017486	--
0	QUERCETIN-3-O-BETA-D-XYLOSIDE	Fruit				--
0	CALAMENENE	Fruit		90.0	-0.5866732935178128	--
0	2-METHYL-BUTANOL	Plant				--
0	SPATHULENOL	Fruit		60.0	1.0	--
0	TRANS-OCIMENE	Fruit		35.0	-1.0	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	GLOBULOL	Fruit		33.0	1.0	--
0	ALPHA-P-DIMETHYL-STYRENE	Leaf		9.0	-0.004343651602302643	--
0	ALPHA-P-DIMETHYL-STYRENE	Fruit		15.0	-1.162476387438193	--
0	ALPHA-COPAENE	Leaf Essent. Oil				--
0	PIMENTOL	Fruit		800.0		--
0	10-EPIZONARENE	Plant				--
0	ALPHA-MUUROLENE	Leaf Essent. Oil				--
0	CYCLOSATIVENE	Plant				--
0	PENTANOL	Plant				--
0	ALPHA-MUUROLENE	Fruit		315.0	-0.3848573067824942	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALLO-AROMADENDRENE	Leaf Essent. Oil				--
0	ALPHA-MUUROLENE	Leaf		45.0	1.6512122064976056	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EPIGLOBULOL	Plant				--
0	10-EPI-(ALPHA)-CADINOL	Plant				--
0	SELINE-4(14),11-DIENE	Plant				--
0	CUBENENE	Plant				--
0	ZONARENE	Plant				--
0	PENTADECANE	Plant				--
0	ALPHA-GURJUNENE	Fruit		42.0		--
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.)
0	ALPHA-MAALIENE	Plant				--
0	EPICUBENOL	Plant				--
0	10-(ALPHA)-CADINOL	Fruit	66.0	1000.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SELINA-4,11-DIENE	Plant				--
0	ALPHA-GURJUNENE	Leaf Essent. Oil				--
0	ALPHA-THUJENE	Leaf		20.0	-0.4177673825705209	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GAMMA-CADINENE	Fruit		51.0	-0.08104963530490027	--
0	ALLO-AROMADENDRENE	Fruit		204.0	-0.6431371812176149	--
0	CARYOPHYLLENE-ALDEHYDE	Plant				--
0	EO	Leaf	7500.0	12500.0	0.0848785007274081	--
0	BETA-HUMULENE	Fruit		405.0		--
0	SELINA-3,11-DIENE	Plant				--
0	INTERMEDIOL	Plant				--
0	P-CYMEN-8-OL	Leaf		13.0	-0.27850366661659065	--
0	FURFURALDEHYDE	Plant				--
0	TETRADECANE	Plant				--
0	ALPHA-GURJUNENE	Leaf		5.0	-0.5838617665778135	--
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	HUMULENE-EPOXIDE-II	Plant				--
0	VALERALDEHYDE	Plant				--
0	OCTANOL	Plant				--
0	FUFUROL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TETRACOSANE	Plant				--
0	TRANS-BETA-OCIMENE	Leaf Essent. Oil				--
0	1,8-CINEOL	Leaf Essent. Oil				--
0	CARBOHYDRATES	Plant	749000.0	757000.0	0.544740122808857	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-CADINENE	Plant				--
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	EIXOSANE	Plant				--
0	BETA-COPAENE	Plant				--
0	HUMULENE-EPOXIDE-I	Plant				--
1	CIS-3-HEXENOL	Plant				--
1	COPAENE	Fruit		15.0	-0.7078723703089148	--
1	ISOVALERALDEHYDE	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.
1	ETHYL-BENZOATE	Plant				--
1	SODIUM	Fruit	800.0	842.0	-0.10410487208848104	--
1	ISOCARYOPHYLLENE	Plant				--
1	TOLUENE	Plant				--
1	MERCURY	Plant		0.05	-0.5015252885658961	--
1	COPAENE	Leaf		9.0	-0.626454859293784	--
1	CARYOPHYLLENE-ALCOHOL	Plant				--
2	PHYTOSTEROLS	Fruit		666.0	-0.35991370861065225	--
2	ALPHA-HUMULENE	Leaf Essent. Oil				--
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.)
2	ALPHA-HUMULENE	Fruit		405.0	-0.3953664035391883	--
2	COBALT	Plant		0.05	-0.47578028445391224	--
3	CIS-OCIMENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	ALPHA-SELINENE	Leaf		45.0	0.10833579294760737	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	HEXANOL	Plant				--
3	ACETONE	Plant				--
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				--
3	CHAVICOL	Fruit	1400.0	2400.0	1.3851806567213685	--
3	CADMIUM	Plant		0.05	-0.8187470214027749	--
3	AROMADENDRENE	Plant				--
3	BETA-SELINENE	Plant				--
3	AR-CURCUMENE	Plant				--
3	CHAVICOL	Leaf				--
3	BETA-PHELLANDRENE	Plant				--
3	BETA-PHELLANDRENE	Fruit				--
4	PHOSPHORUS	Leaf	1173.0	1399.0	-0.657285112269021	--
4	CALCIUM-OXALATE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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).
4	PHOSPHORUS	Fruit	1100.0	1235.0	-0.6017068965285103	--
4	TRANS-2-HEXENAL	Plant				--
4	METHYL-BENZOATE	Plant				--
5	EUGENOL-METHYL-ETHER	Leaf Essent. Oil				--
5	SABINENE	Leaf Essent. Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	EUGENOL-METHYL-ETHER	Fruit	8000.0	22500.0		--
5	GERANYL-ACETATE	Plant				--
5	ALUMINUM	Plant		110.0	-0.5382991405371662	--
5	BETA-ELEMENE	Plant				--
5	SABINENE	Plant				--
6	METHYL-CHAVICOL	Leaf		3.0	-0.7020598486430413	--
6	METHYL-CHAVICOL	Fruit		60.0	-0.8934789720128694	--
6	IRON	Fruit	60.0	85.0	-0.19031609195369079	--
6	IRON	Leaf	76.0	95.0	-0.6797780759383169	--
7	SALICYLATES	Fruit	5.0	55.0	-0.1790315119116865	--
8	DELTA-3-CARENE	Fruit		30.0	-0.5630094212434373	--
8	TRANS-ANETHOLE	Plant				--
8	CARYOPHYLLENE-OXIDE	Plant				--
9	TERPINOLENE	Leaf		27.0	-0.1976999894416478	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	TERPINOLENE	Leaf Essent. Oil				--
9	DELTA-CADINENE	Leaf Essent. Oil				--
9	DELTA-CADINENE	Leaf		50.0	-0.24641334861755498	--
9	DELTA-CADINENE	Fruit		51.0	-0.4598385498757147	--
9	TERPINOLENE	Fruit		42.0	-0.47960566955795886	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	GAMMA-TERPINENE	Fruit		35.0	-0.64488354510724	--
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				--
11	GAMMA-TERPINENE	Leaf		17.0	-0.33914517533266125	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	GAMMA-TERPINENE	Leaf Essent. Oil				--
12	COPPER	Bud	5.0	10.0		USDA's Ag Handbook 8 and sequelae)
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.)
13	ALPHA-TERPINENE	Fruit		3.0	-0.44374837770622017	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Plant				--
13	ALPHA-TERPINENE	Leaf		11.0	-0.30667825501370594	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
14	POTASSIUM	Fruit	11000.0	11410.0	-0.5756542738198089	--
14	MANGANESE	Bud	29.0	70.0		USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Fruit		0.7	-0.9229081816681621	--
15	FIBER	Leaf	175000.0	179000.0	0.2159757383407224	--
15	MALIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	RIBOFLAVIN	Leaf	2.3	3.5	-0.1614553235659462	--
16	P-CYMENE	Fruit		87.0	-0.5682499633585989	--
16	ISOEUGENOL	Plant				--
16	P-CYMENE	Leaf		78.0	-0.33531133695394194	--
16	VANADIUM	Plant		0.2	1.0000000000000002	--
16	P-CYMENE	Leaf Essent. Oil				--
16	ISOEUGENOL	Leaf Essent. Oil				--
20	METHYL-EUGENOL	Leaf		190.0	-0.7828372252747813	--
20	METHYL-EUGENOL	Fruit		1500.0	-1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	MYRCENE	Leaf		20.0	-0.1654584943659963	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	MYRCENE	Fruit		45.0	-0.3775565865925302	--
22	ISOQUERCITRIN	Fruit				--
23	TERPINEN-4-OL	Fruit		1260.0	-0.1674917163075372	--
23	ALPHA-TERPINEOL	Plant				--
24	CHROMIUM	Plant		5.0	-0.39700126313461825	--
28	CALCIUM	Fruit	7224.0	8000.0	0.9562048951774965	--
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	CALCIUM	Leaf	10056.0	11166.0	-0.4968226526695569	--
28	ALPHA-PINENE	Leaf Essent. Oil				--
31	CARYOPHYLLENE	Leaf		760.0	-0.24358897993110573	--
31	THIAMIN	Leaf	1.1	1.7	-1.3764356884885183	--
31	CARYOPHYLLENE	Fruit		1341.0	-0.3560842600409065	--
31	THIAMIN	Fruit		1.1	-0.5418092366178694	--
34	PROANTHOCYANIDINS	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
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.
44	QUERCITRIN	Fruit				--
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.)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
53	BETA-CAROTENE	Leaf	103.0	120.0	-0.6153455669506752	--
53	LINALOOL	Leaf Essent. Oil				--
53	LINALOOL	Fruit		42.0	-0.5740281838590767	--
53	LINALOOL	Leaf		5.0	-0.6439814140923522	--
53	BETA-CAROTENE	Fruit		4.0	-0.1430687011995372	--
60	CINNAMALDEHYDE	Plant				--
60	LIMONENE	Fruit		28.0	-0.7461881384241233	--
60	LIMONENE	Leaf Essent. Oil				--
60	LIMONENE	Leaf		15.0	-0.43200420914823834	--
60	SELENIUM	Plant		0.04	-0.42573678426264966	--
65	MAGNESIUM	Fruit	1200.0	1480.0	-0.3008659074610599	--
67	1,8-CINEOLE	Leaf		51.0	-0.523664583248735	--
67	1,8-CINEOLE	Fruit		142.0	-0.4152844919391697	--
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	--
76	EUGENOL	Flower Essent. Oil		543000.0		--
77	ZINC	Fruit	11.0	20.0	-0.30993109880344666	--
112	ASCORBIC-ACID	Leaf	2012.0	2067.0	-0.2521288359523834	--
112	ASCORBIC-ACID	Fruit		426.0	-0.2580016065709841	--