

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Pimenta dioica*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	ZINC	Fruit	11.0	20.0	-0.30993109880344666	--
16	VANADIUM	Plant		0.2	1.0000000000000002	--
8	TRANS-ANETHOLE	Plant				--
4	TRANS-2-HEXENAL	Plant				--
1	TOLUENE	Plant				--
31	THIAMIN	Leaf	1.1	1.7	-1.3764356884885183	--
31	THIAMIN	Fruit		1.1	-0.5418092366178694	--
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	TERPINOLENE	Fruit		42.0	-0.47960566955795886	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
23	TERPINEN-4-OL	Fruit		1260.0	-0.1674917163075372	--
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.)
1	SODIUM	Fruit	800.0	842.0	-0.10410487208848104	--
60	SELENIUM	Plant		0.04	-0.42573678426264966	--
7	SALICYLATES	Fruit	5.0	55.0	-0.1790315119116865	--
5	SABINENE	Plant				--
5	SABINENE	Leaf Essent. Oil				--
15	RIBOFLAVIN	Leaf	2.3	3.5	-0.1614553235659462	--
15	RIBOFLAVIN	Fruit		0.7	-0.9229081816681621	--
44	QUERCITRIN	Fruit				--
34	PROANTHOCYANIDINS	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
14	POTASSIUM	Fruit	11000.0	11410.0	-0.5756542738198089	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHYTOSTEROLS	Fruit		666.0	-0.35991370861065225	--
4	PHOSPHORUS	Leaf	1173.0	1399.0	-0.657285112269021	--
4	PHOSPHORUS	Fruit	1100.0	1235.0	-0.6017068965285103	--
16	P-CYMENE	Fruit		87.0	-0.5682499633585989	--
16	P-CYMENE	Leaf Essent. Oil				--
16	P-CYMENE	Leaf		78.0	-0.33531133695394194	--
39	NIACIN	Fruit		3.1	-0.7699868154684664	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
39	NIACIN	Leaf	1.4	1.8	-1.1640648502813271	--
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.
20	METHYL-EUGENOL	Leaf		190.0	-0.7828372252747813	--
20	METHYL-EUGENOL	Fruit		1500.0	-1.0	--
6	METHYL-CHAVICOL	Fruit		60.0	-0.8934789720128694	--
6	METHYL-CHAVICOL	Leaf		3.0	-0.7020598486430413	--
4	METHYL-BENZOATE	Plant				--
1	MERCURY	Plant		0.05	-0.5015252885658961	--
14	MANGANESE	Bud	29.0	70.0		USDA's Ag Handbook 8 and sequela)
15	MALIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
65	MAGNESIUM	Fruit	1200.0	1480.0	-0.3008659074610599	--
53	LINALOOL	Leaf Essent. Oil				--
53	LINALOOL	Fruit		42.0	-0.5740281838590767	--
53	LINALOOL	Leaf		5.0	-0.6439814140923522	--
60	LIMONENE	Fruit		28.0	-0.7461881384241233	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	LIMONENE	Leaf Essent. Oil				--
60	LIMONENE	Leaf		15.0	-0.43200420914823834	--
1	ISOVALERALDEHYDE	Plant				--
22	ISOQUERCITRIN	Fruit				--
16	ISOEUGENOL	Plant				--
16	ISOEUGENOL	Leaf Essent. Oil				--
1	ISOCARYOPHYLLENE	Plant				--
6	IRON	Leaf	76.0	95.0	-0.6797780759383169	--
6	IRON	Fruit	60.0	85.0	-0.19031609195369079	--
3	HEXANOL	Plant				--
5	GERANYL-ACETATE	Plant				--
11	GAMMA-TERPINENE	Leaf		17.0	-0.33914517533266125	--
11	GAMMA-TERPINENE	Fruit		35.0	-0.64488354510724	--
11	GAMMA-TERPINENE	Leaf Essent. Oil				--
15	FIBER	Leaf	175000.0	179000.0	0.2159757383407224	--
5	EUGENOL-METHYL-ETHER	Leaf Essent. Oil				--
5	EUGENOL-METHYL-ETHER	Fruit	8000.0	22500.0		--
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		--
76	EUGENOL	Leaf Essent. Oil		792400.0	1.1351063586498586	--
1	ETHYL-BENZOATE	Plant				--
9	DELTA-CADINENE	Leaf		50.0	-0.24641334861755498	--
9	DELTA-CADINENE	Fruit		51.0	-0.4598385498757147	--
9	DELTA-CADINENE	Leaf Essent. Oil				--
8	DELTA-3-CARENE	Fruit		30.0	-0.5630094212434373	--
12	COPPER	Bud	5.0	10.0		USDA's Ag Handbook 8 and sequelae)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	COPAENE	Fruit		15.0	-0.7078723703089148	--
1	COPAENE	Leaf		9.0	-0.626454859293784	--
2	COBALT	Plant		0.05	-0.47578028445391224	--
3	CIS-OCIMENE	Plant				--
1	CIS-3-HEXENOL	Plant				--
60	CINNAMALDEHYDE	Plant				--
24	CHROMIUM	Plant		5.0	-0.39700126313461825	--
3	CHAVICOL	Leaf				--
3	CHAVICOL	Fruit	1400.0	2400.0	1.3851806567213685	--
1	CATECHINS	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
8	CARYOPHYLLENE-OXIDE	Plant				--
1	CARYOPHYLLENE-ALCOHOL	Plant				--
31	CARYOPHYLLENE	Fruit		1341.0	-0.3560842600409065	--
31	CARYOPHYLLENE	Leaf		760.0	-0.24358897993110573	--
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.)
4	CALCIUM-OXALATE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	CALCIUM	Leaf	10056.0	11166.0	-0.4968226526695569	--
28	CALCIUM	Fruit	7224.0	8000.0	0.9562048951774965	--
3	CADMIUM	Plant		0.05	-0.8187470214027749	--
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
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.)
3	BETA-SELINENE	Plant				--
13	BETA-PINENE	Plant				--
3	BETA-PHELLANDRENE	Plant				--
3	BETA-PHELLANDRENE	Fruit				--
5	BETA-ELEMENE	Plant				--
53	BETA-CAROTENE	Leaf	103.0	120.0	-0.6153455669506752	--
53	BETA-CAROTENE	Fruit		4.0	-0.1430687011995372	--
112	ASCORBIC-ACID	Leaf	2012.0	2067.0	-0.2521288359523834	--
112	ASCORBIC-ACID	Fruit		426.0	-0.2580016065709841	--
3	AROMADENDRENE	Plant				--
3	AR-CURCUMENE	Plant				--
5	ALUMINUM	Plant		110.0	-0.5382991405371662	--
23	ALPHA-TERPINEOL	Plant				--
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.
3	ALPHA-SELINENE	Leaf Essent. Oil				--
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.
28	ALPHA-PINENE	Leaf		20.0	-0.22324603244709168	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

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28	ALPHA-PINENE	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.
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	ALPHA-PHELLANDRENE	Fruit		6.0	-0.5736201696885931	--
2	ALPHA-HUMULENE	Leaf Essent. Oil				--
2	ALPHA-HUMULENE	Fruit		405.0	-0.3953664035391883	--
3	ACETONE	Plant				--
67	1,8-CINEOLE	Fruit		142.0	-0.4152844919391697	--
67	1,8-CINEOLE	Leaf		51.0	-0.523664583248735	--