

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Syzygium aromaticum*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ZONARENE	Flower		1.0		--
0	ZONARENE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
77	ZINC	Flower	10.0	30.0	-0.18495922224483477	--
77	ZINC	Fruit	10.0	30.0	-0.009072324700046541	--
3	XYLOSE	Essential Oil				--
0	WATER	Flower	69000.0	252000.0	-3.65016767114962	--
0	WATER	Fruit	69000.0	252000.0	-2.2548158431429384	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	VANILLIN	Fruit				--
28	VANILLIN	Flower				--
0	VALONEIC ACID BISLACTONE	Leaf		180.0		--
0	TRANS-ISOEUGENOL	Fruit				--
8	TRANS-ANETHOLE	Flower				--
8	TRANS-ANETHOLE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	THIAMIN	Fruit		1.0	-0.5546097657802712	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
31	THIAMIN	Flower		1.0	-1.2611424689255089	--
23	TERPINEN-4-OL	Essential Oil				--
1	TELLIMAGRANIN-II	Leaf				--
7	TELLIMAGRANIN-I	Leaf				--
7	TELLIMAGRANIN-I	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	TANNINS	Fruit		100000.0	0.1858330724301565	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
35	TANNIN	Plant				--
0	SYZYGININ-B	Leaf		131.0		--
0	SYZYGININ-A	Leaf		98.0		--
0	STYRALYL-ACETATE	Flower		1.0		--
0	STYRALYL-ACETATE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	STRONTIUM	Flower	30.0	60.0		--
0	STRONTIUM	Fruit	30.0	60.0	-0.10634151712424286	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	STRICTININ	Leaf		100.0	0.09053574604251853	--
0	STIGMASTEROL-GLUCOSIDE	Plant				--
0	STIGMASTEROL-3-O-BETA-D-GLUCOSIDE	Fruit				--
12	STIGMASTEROL	Plant				--
12	STIGMASTEROL	Fruit		140.0	0.7694026293001529	--
0	STEARIC ACID METHYL ESTER	Fruit				--
1	SODIUM	Flower	200.0	3250.0	1.2911423278705607	--
1	SODIUM	Fruit	200.0	3250.0	0.12424306354013467	--
0	SALICYLIC ACID BENZYL ESTER	Fruit				--
7	SALICYLATES	Fruit	6.0	60.0	-0.16469419114376535	--
2	RUGOSIN-E	Leaf		975.0		--
8	RUGOSIN-D	Leaf		1925.0		--
1	RUGOSIN-A	Leaf		16.2		--
15	RIBOFLAVIN	Flower	1.0	2.0	-0.9879472837456319	--
15	RIBOFLAVIN	Fruit	1.0	2.0	-0.6444915447424321	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	RHAMNOCITRIN	Fruit		50.0		--
18	RHAMNETIN	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	RHAMNETIN	Plant				--
0	RESIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	QUERCITRIN-3,4'-DI-O-GLYCOSIDE	Fruit				--
0	QUERCETIN-3,4'-DI-O-BETA-D-GLUCOSIDE	Fruit				--
176	QUERCETIN	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	PTEROCARININ A	Leaf		21.5		--
0	PROTEIN	Fruit	52000.0	70000.0	-0.5294951043049843	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Flower	52000.0	70000.0	-0.8446468010457023	--
1	PRODELPHINIDIN	Leaf				--
11	PROCYANIDIN	Leaf				--
14	POTASSIUM	Flower	11020.0	16200.0	-0.3149478902442045	--
14	POTASSIUM	Fruit	11020.0	16200.0	-0.15186560947876587	--
2	PHYTOSTEROLS	Fruit		2560.0	2.080091889988275	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
0	PHTHALIC ACID DIBUTYL DIESTER	Essential Oil				--
4	PHOSPHORUS	Fruit	1000.0	1337.0	-0.5707254381124798	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Flower	1000.0	1337.0	-0.9975269050748918	--
0	PHENYLETHYL-ACETATE	Flower		1.0	-1.1565845346367642	--
0	PHENYLETHYL-ACETATE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	PEDUNCULAGIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PALUSTROL	Fruit				--
0	PALUSTROL	Leaf				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	PALMITIC-ACID-METHYL-ESTER	Fruit				--
0	ORSELLINIC-ACID-2-O-BETA-D-GLUCOSIDE	Seed		27.0		--
64	OLEANOLIC-ACID	Seed		7.0	-1.0	--
64	OLEANOLIC-ACID	Flower		20000.0	1.4118875102795632	--
64	OLEANOLIC-ACID	Fruit	35.0	20000.0	-1.0	--
64	OLEANOLIC-ACID	Essential Oil		10000.0		--
0	OCTAN-2-ONE	Fruit				--
0	NONAN-2-ONE	Fruit				--
3	NICKEL	Flower		2.4	-0.9999999999999997	--
3	NICKEL	Fruit		2.4	-0.04957166517347313	--
1	NAPHTHALENE	Stem				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	NAPHTHALENE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	NAPHTHALENE	Flower				--
1	NAPHTHALENE	Fruit		0.0		--
1	NAPHTHALENE	Essential Oil		1000.0	-1.0	--
34	MYRICETIN	Leaf				--
34	MYRICETIN	Fruit		20.0	1.79780110304311	--
3	MUCILAGE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
21	METHYL-SALICYLATE	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.
21	METHYL-SALICYLATE	Flower				--
0	METHYL-OCTANOATE	Plant				--
0	METHYL-N-HEPTYL-KETONE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	METHYL-N-HEPTYL-KETONE	Flower				--
2	METHYL-N-AMYLKETONE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	METHYL-N-AMYLKETONE	Flower				--
0	METHYL-FURFURYL-ALCOHOL	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	METHYL-FURFURYL-ALCOHOL	Plant				--
20	METHYL-EUGENOL	Fruit		1890.0	1.0	--
20	METHYL-EUGENOL	Leaf	18.0	29.0	-0.807121771184076	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
20	METHYL-EUGENOL	Flower	310.0	340.0	1.0	--
6	METHYL-CHAVICOL	Plant				--
4	METHYL-BENZOATE	Plant				--
0	METHYL-ALCOHOL	Plant				--
0	METHYL-ALCOHOL	Fruit				Wealth of India.
6	MASLINIC-ACID	Flower				--
6	MASLINIC-ACID	Essential Oil		1500.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	MASLINIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	MASLIC-ACID	Fruit		1500.0		--
14	MANGANESE	Flower	100.0	1200.0	3.8497155611333613	--
14	MANGANESE	Fruit	100.0	1200.0	7.509105970380378	--
65	MAGNESIUM	Fruit	2640.0	3020.0	0.4122435661971507	--
65	MAGNESIUM	Flower	2640.0	3020.0	0.15016470805298793	--
0	LINOLEIC-ACID-METHYL-ESTER	Fruit				--
53	LINALOOL	Fruit		1.0	-0.5854958813390855	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	LINALOL	Flower		1.0	-0.3900304526992942	--
0	LEDOL	Leaf				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
75	KAEMPFEROL	Flower				--
75	KAEMPFEROL	Fruit		29.0	-0.5731869083869251	--
5	KAEMPFERIDE	Fruit				--
22	ISOQUERCITRIN	Fruit				--
16	ISOEUGENOL	Plant				--
0	ISOEUGENITENE	Plant				--
0	ISOBIFLORIN	Fruit		510.0		--
6	IRON	Fruit	45.0	150.0	0.06752138925955396	--
6	IRON	Flower	45.0	150.0	-0.11737283974721074	--
30	HYPEROSIDE	Fruit				--
0	HUMULENE-EPOXIDE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	HUMULENE-EPOXIDE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HUMULENE-1,2-OXIDE	Leaf	18.0	90.0		Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	HUMULENE-1,2-OXIDE	Fruit		95.0		Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	HUMULEN-7-OL	Flower				--
0	HUMULEN-7-OL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	HEXAN-2-ONE	Fruit				--
0	HEXAN-2-ONE	Essential Oil				--
0	HEXAN-1-AL	Fruit				--
0	HEPTAN-2-ONE	Fruit				--
13	GERANIAL	Fruit				--
1	GEMIN-D	Leaf	1125.0	1175.0		--
0	GAMMA-MUUROLENE	Fruit				--
0	GAMMA-MUUROLENE	Leaf	11.0	18.0	-0.6643448015717212	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
3	GAMMA-DECALACTONE	Fruit				--
0	GAMMA-CARYOPHYLLENE	Plant				--
0	GAMMA-CADINENE	Fruit				--
0	GAMMA-CADINENE	Leaf	25.0	160.0	1.3103193505890738	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	GALLOTANNIC-ACID	Plant				--
0	GALLOTANNIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
62	GALLIC-ACID	Fruit	285.0	12600.0	-0.44183433468392297	--
62	GALLIC-ACID	Flower				--
0	GALLIC ACID 3-O-BETA-D-(6'-O-GALLOYL)-GLUCOSIDE	Leaf		2.5		--
1	FURFURYL-ALCOHOL	Flower				--
1	FURFURYL-ALCOHOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	FURFURAL	Plant				--
0	FURALDEHYDE	Fruit				--
3	FLUORIDE	Fruit		2.4	0.5081285807389628	--
15	FIBER	Fruit	95000.0	100000.0	-0.39327836686010154	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Flower	95000.0	100000.0	-0.38632916081034846	--
6	FENCHONE	Fruit				--
0	FAT	Fruit	89000.0	201000.0	0.8939697424043467	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Flower	89000.0	201000.0	2.2590609005075395	--
6	EUGENYL-ACETATE	Fruit		56700.0		--
1	EUGENOL-ACETATE	Fruit				--
1	EUGENOL-ACETATE	Bark				--
0	EUGENOL-4-O-BETA-D(6'-O-GALLOYL)-GLUCOSIDE	Leaf		215.0		--
76	EUGENOL	Leaf	7920.0	26400.0	2.285513566975547	--
76	EUGENOL	Flower	108655.0	180000.0	2.6457158873560447	--
76	EUGENOL	Essential Oil	61000.0	627000.0	1.0627703935425195	--
76	EUGENOL	Leaf Essent. Oil				--
76	EUGENOL	Bark				--
76	EUGENOL	Fruit				--
76	EUGENOL	Bulb				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
76	EUGENOL	Stem	36000.0	57000.0	1.0	--
0	EUGENITINE	Flower				--
0	EUGENITINE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EUGENINE	Flower				--
0	EUGENINE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	EUGENIIN	Leaf		8950.0		--
5	EUGENIIN	Fruit		1640.0		--
0	ETHYL-OCTANOATE	Plant				--
0	ETHYL-HEXANOATE	Plant				--
2	ETHYL-CINNAMATE	Plant				--
1	ETHYL-BENZOATE	Plant				--
0	EPOXYDIHYDROCARYOPHYLLENE	Plant				--
0	EPOXYDIHYDROCARYOPHYLLENE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	EO	Fruit	150000.0	210000.0	3.261810506686991	--
0	EO	Flower	155000.0	210000.0	6.568033781616922	--
0	EO	Stem	40000.0	60000.0	2.6026342788799575	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	EO	Leaf	20000.0	32000.0	1.8000947732230574	--
8	ELLAGITANNIN	Fruit		3200.0		--
51	ELLAGIC-ACID	Fruit		21.0	-0.6877437439073045	--
51	ELLAGIC-ACID	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
51	ELLAGIC-ACID	Bark				Lowry, J. B. 1968. The Distribution and Potential Taxonomic Value of Alkylated Ellagic Acids. <i>Phytochemistry</i> 7 10: 1803-1813
0	DIMETHYL-FURFURAL	Plant				--
1	DELTA-CADINOL	Fruit				--
1	DELTA-CADINOL	Leaf	8.0	13.0	-0.10787259719937864	Charalambous, G. (Ed.). 1994. <i>Spices, Herbs and Edible Fungi</i> . Elsevier Science B. V. Amsterdam. 764 pp.
9	DELTA-CADINENE	Leaf	25.0	160.0	0.23246458505780895	Charalambous, G. (Ed.). 1994. <i>Spices, Herbs and Edible Fungi</i> . Elsevier Science B. V. Amsterdam. 764 pp.
9	DELTA-CADINENE	Fruit				--
5	DAUCOSTEROL	Fruit				--
10	CUMINALDEHYDE	Fruit				--
0	CUBENOL	Leaf				Charalambous, G. (Ed.). 1994. <i>Spices, Herbs and Edible Fungi</i> . Elsevier Science B. V. Amsterdam. 764 pp.
0	CUBENENE	Fruit				--
2	CRATEGOLIC-ACID	Seed		20.0		--
0	CRATAEGOLIC-ACID	Flower		6.0		--
0	CRATAEGOLIC-ACID	Fruit	6.0	1500.0		--
0	CRATAEGOLIC ACID METHYL ESTER	Fruit				Lawrence, B.M., <i>Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980</i> .
0	CORNUS-TANNIN-2	Plant				--
12	COPPER	Fruit	3.0	9.0	-0.2972270275515491	--
12	COPPER	Flower	3.0	9.0	-0.8371161987468383	--
0	CONIFERALDEHYDE	Leaf				--
0	CONIFERALDEHYDE	Stem				--
2	COBALT	Flower		0.7	-0.5111703686956748	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	COBALT	Fruit		0.7	-0.4503737361947928	--
0	CIS-ISOEUGENOL	Fruit				--
60	CINNAMALDEHYDE	Flower		1.0	-1.0	--
60	CINNAMALDEHYDE	Fruit		1.0		--
24	CHROMIUM	Fruit	3.0	5.0	0.19465740124831715	--
24	CHROMIUM	Flower	3.0	5.0	0.9873869417794828	--
3	CHAVICOL	Fruit	465.0	510.0	-0.44569781898926136	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	CHAVICOL	Flower	465.0	510.0		--
0	CASUARIIN	Leaf		9.7		--
5	CASUARICTIN	Leaf				--
5	CASUARICTIN	Plant				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	CARYOPHYLLINE	Fruit				--
8	CARYOPHYLLENE-OXIDE	Essential Oil				--
8	CARYOPHYLLENE-OXIDE	Leaf	75.0	712.0	2.643842620312473	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
8	CARYOPHYLLENE-OXIDE	Fruit		2455.0	1.3957687820089826	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
8	CARYOPHYLLENE-OXIDE	Plant				--
31	CARYOPHYLLENE	Essential Oil		16000.0	-0.468033109451461	--
31	CARYOPHYLLENE	Fruit	7440.0	8160.0	-0.15290356778862352	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Flower	74400.0	8160.0	1.4134608729490745	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARYOPHYLLA-4(12)-8(13)-DIEN-5-BETA-OL	Essential Oil				--
0	CARYOPHYLLA-3-8(13)-DIEN-5-BETA-OL	Essential Oil				--
0	CARYOPHYLLA-3(8)-13-DIEN-5-ALPHA-OL	Essential Oil				--
0	CARYOPHYLLA-3(12)-7(13)-DIEN-6-ALPHA-OL	Essential Oil				--
0	CARYOPHYLLA-3(12)-6-DIEN-4-OL	Essential Oil				--
19	CARVONE	Plant				--
0	CARBOHYDRATES	Bark	555000.0	612000.0	-1.3532281234725556	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CAMPESTEROL-GLUCOSIDE	Plant				--
0	CAMPESTEROL-3-O-BETA-D-GLUCOSIDE	Fruit				--
2	CAMPESTEROL	Fruit				--
2	CAMPESTEROL	Plant				--
4	CALCIUM-OXALATE	Plant				--
28	CALCIUM	Flower	6460.0	9540.0	1.0428267398370916	--
28	CALCIUM	Fruit	6460.0	9540.0	1.3115758699797868	--
0	CALAMENOL	Leaf	25.0	35.0		Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	CALAMENENE	Flower				--
0	CALAMENENE	Leaf		210.0	3.8695166003766976	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	CALAMENENE	Fruit		1265.0	-0.17527372328420673	--
0	CALACORENE	Flower				--
0	CALACORENE	Leaf	13.0	21.0	0.19023374145231275	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CALACORENE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CADALENE	Leaf	5.0	8.0		Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
4	BORON	Flower	10.0	40.0	-0.011499571648933803	--
4	BORON	Fruit	10.0	40.0	0.0014459720019340586	--
7	BIFLORIN	Fruit	70.0	1022.0		--
3	BETA-TERPINEOL	Essential Oil				--
0	BETA-SITOSTEROL-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
47	BETA-SITOSTEROL	Essential Oil		1000.0	-1.0	--
47	BETA-SITOSTEROL	Plant				--
47	BETA-SITOSTEROL	Fruit		2420.0	2.385350854149113	--
3	BETA-SELINENE	Fruit				--
13	BETA-PINENE	Fruit				--
13	BETA-PINENE	Plant				--
0	BETA-MUUROLENE	Fruit				--
0	BETA-CARYOPHYLLENE-OXIDE	Essential Oil		45000.0		--
0	BETA-CARYOPHYLLENE	Essential Oil		495000.0	2.8069272425728666	--
0	BETA-CARYOPHYLLENE	Leaf	2295.0	14520.0	6.774430907684983	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	BETA-CARYOPHYLLENE	Fruit	2230.0	69365.0	1.9999529994158691	--
0	BETA-CARYOPHYLLENE	Flower				--
53	BETA-CAROTENE	Bark	2.0	3.0	-0.6464926691482484	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-BOURBONENE	Leaf				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	BENZYL-TIGLATE	Plant				--
9	BENZYL-ALCOHOL	Plant				--
9	BENZYL-ACETATE	Plant				--
0	BENZOIC-ACID-PROPYL-ESTER	Fruit				--
0	BENZOIC-ACID-METHYL-ESTER	Fruit				--
0	BENZOIC-ACID-ETHYL-ESTER	Fruit				--
0	BENZOIC ACID BENZYL ESTER	Fruit				--
24	BENZALDEHYDE	Fruit				--
24	BENZALDEHYDE	Flower				--
0	BARIUM	Flower	20.0	30.0		--
0	BARIUM	Fruit	20.0	30.0	0.23749286365790012	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	ASTRAGALIN	Fruit				--
112	ASCORBIC-ACID	Bark		810.0	1.9840107880269489	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ARABINOSE	Essential Oil				--
5	ALUMINUM	Fruit	80.0	160.0	-0.17697394528100432	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	ALUMINUM	Flower	80.0	160.0	1.0835425694391705	--
1	ALPHA-ZINGIBERENE	Leaf	11.0	18.0	1.0000000000000002	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	ALPHA-YLANGENE	Plant				--
0	ALPHA-YLANGENE	Fruit	245.0	395.0	1.414158345897999	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-THUJENE	Fruit				--
0	ALPHA-TERPINYL-ACETATE	Fruit	155.0	170.0	-0.7035975831753031	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-TERPINYL-ACETATE	Flower	155.0	170.0		--
23	ALPHA-TERPINEOL	Essential Oil				--
0	ALPHA-MUUROLENE	Fruit				--
0	ALPHA-MUUROLENE	Plant				--
0	ALPHA-MUUROLENE	Leaf	3.3	5.5	-0.5120674670233037	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	ALPHA-METHYL-FURFURYL	Fruit				Wealth of India.
0	ALPHA-METHYL-FURFURYL	Plant				--
1	ALPHA-HUMULENE-EPOXIDE	Essential Oil		26000.0		--
2	ALPHA-HUMULENE	Essential Oil		30000.0	-0.20980400443514668	--
2	ALPHA-HUMULENE	Flower	775.0	850.0	1.881400128799953	--
2	ALPHA-HUMULENE	Fruit	250.0	850.0	-0.1719773217114379	--
2	ALPHA-HUMULENE	Leaf	290.0	1740.0	2.4875695628615198	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	ALPHA-CUBEBENE	Leaf	25.0	305.0	1.722385843588116	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	ALPHA-CUBEBENE	Fruit		37800.0	2.0783973463880634	--
0	ALPHA-CUBEBENE	Flower				--
0	ALPHA-COPAENE	Leaf		1135.0	6.3964083212247616	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	ALPHA-COPAENE	Fruit		1890.0	1.8816304622249802	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-COPAENE	Flower				--
0	ALPHA-CARYOPHYLLENE	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.
0	ALPHA-CARYOPHYLLENE	Flower				--
3	ALPHA-CADINOL	Leaf	5.0	8.0	-0.5496266023491511	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	ALPHA-CADINENE	Flower				--
0	ALPHA-CADINENE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-AMORPHENE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-AMORPHENE	Flower		1.0		--
0	ALLO-AROMADENDRENE	Leaf				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
5	ACETYL-EUGENOL	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.
5	ACETYL-EUGENOL	Flower				--
6	ACETOPHENONE	Fruit				--
0	6-METHYL-HEPT-5-EN-2-ONE	Fruit				--
0	5-METHYLFURALDEHYDE	Fruit				--
6	5,7-DIHYDROXY-2-METHYLCHROMONE-8-C-BETA-GLUCOPYRANOSIDE	Fruit		145.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	5,7-DIHYDROXY-2-METHYLCHROMONE-8-C-BETA-D-GLUCOSIDE	Leaf		66.0		--
0	5,7-DIHYDROXY-2-METHYLCHROMONE-8-C-BETA-D-GLUCOPYRANOSIDE	Fruit		143.0		--
0	4,4-DIMETHYLTRICYCLO[6,3,2,0]TRIDECA-8-ENE-1-OL	Essential Oil				--
0	3-METHOXYBENZALDEHYDE	Fruit				--
1	3,4-DIHYDROXYPHENYLETHANOL	Leaf				--
3	3,4-DIHYDROXYBENZOIC-ACID	Leaf				--
0	3,3'-DI-O-METHYL-ELLAGIC-ACID	Bark				Lowry, J. B. 1968. The Distribution and Potential Taxonomic Value of Alkylated Ellagic Acids. Phytochemistry 7 10: 1803-1813
3	3,3',4-TRI-O-METHYL-ELLAGIC-ACID	Bark				Lowry, J. B. 1968. The Distribution and Potential Taxonomic Value of Alkylated Ellagic Acids. Phytochemistry 7 10: 1803-1813
3	3,3',4-TRI-O-METHYL-ELLAGIC-ACID	Fruit				--
0	3'-O-METHYL-3,4-METHYLENEDIOXY-ELLAGIC ACID	Bark				Lowry, J. B. 1968. The Distribution and Potential Taxonomic Value of Alkylated Ellagic Acids. Phytochemistry 7 10: 1803-1813
0	2ALPHA-HYDROXYOLEANOLIC-ACID-METHYL-ESTER	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
4	2-UNDECANONE	Flower				--
4	2-UNDECANONE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-NONYL-ACETATE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-NONYL-ACETATE	Flower		1.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	2-NONANONE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	2-NONANONE	Flower		1.0		--
0	2-NONANOL	Plant				--
0	2-HEPTYL-BENZOATE	Flower				--
0	2-HEPTYL-BENZOATE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-HEPTYL-ACETATE	Flower				--
0	2-HEPTYL-ACETATE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-HEPTANONE	Plant				--
0	2-HEPTANOL	Flower				--
0	2-HEPTANOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-3-HEXAHYDROXY-DIPHENOYL-GLUCOSE	Leaf				--
0	2-3-DI-O-GALLOYL-GLUCOSE	Leaf		214.5		--
0	10-(ALPHA)-CADINOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	10-(ALPHA)-CADINOL	Flower				--
0	1-DEGALLOYL-EUGENIIN	Leaf		12175.0	1.0	--
0	1-BETA-O-GALLOYLPEDUNCULAGIN	Leaf		114.5		--
2	1,2,3,6-TETRA-O-GALLYOL-BETA-D-GLUCOSE	Leaf		49.7		--
2	1,2,3,4,6-PENTA-O-GALLOYL-BETA-D-GLUCOSE	Leaf		33.7		--