

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Syzygium aromaticum*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	MANGANESE	Fruit	100.0	1200.0	7.509105970380378	--
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	EO	Flower	155000.0	210000.0	6.568033781616922	--
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	CALAMENENE	Leaf		210.0	3.8695166003766976	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
14	MANGANESE	Flower	100.0	1200.0	3.8497155611333613	--
0	EO	Fruit	150000.0	210000.0	3.261810506686991	--
0	BETA-CARYOPHYLLENE	Essential Oil		495000.0	2.8069272425728666	--
76	EUGENOL	Flower	108655.0	180000.0	2.6457158873560447	--
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.
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.
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.
47	BETA-SITOSTEROL	Fruit		2420.0	2.385350854149113	--
76	EUGENOL	Leaf	7920.0	26400.0	2.285513566975547	--
0	FAT	Flower	89000.0	201000.0	2.2590609005075395	--
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.)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-CUBEBENE	Fruit		37800.0	2.0783973463880634	--
0	BETA-CARYOPHYLLENE	Fruit	2230.0	69365.0	1.9999529994158691	--
112	ASCORBIC-ACID	Bark		810.0	1.9840107880269489	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ALPHA-COPAENE	Fruit		1890.0	1.8816304622249802	--
2	ALPHA-HUMULENE	Flower	775.0	850.0	1.881400128799953	--
0	EO	Leaf	20000.0	32000.0	1.8000947732230574	--
34	MYRICETIN	Fruit		20.0	1.79780110304311	--
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-YLANGENE	Fruit	245.0	395.0	1.414158345897999	--
31	CARYOPHYLLENE	Flower	74400.0	8160.0	1.4134608729490745	--
64	OLEANOLIC-ACID	Flower		20000.0	1.4118875102795632	--
8	CARYOPHYLLENE-OXIDE	Fruit		2455.0	1.3957687820089826	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
28	CALCIUM	Fruit	6460.0	9540.0	1.3115758699797868	--
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.
1	SODIUM	Flower	200.0	3250.0	1.2911423278705607	--
5	ALUMINUM	Flower	80.0	160.0	1.0835425694391705	--
76	EUGENOL	Essential Oil	61000.0	627000.0	1.0627703935425195	--
28	CALCIUM	Flower	6460.0	9540.0	1.0428267398370916	--
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.
76	EUGENOL	Stem	36000.0	57000.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
20	METHYL-EUGENOL	Flower	310.0	340.0	1.0	--
20	METHYL-EUGENOL	Fruit		1890.0	1.0	--
0	1-DEGALLOYL-EUGENIIN	Leaf		12175.0	1.0	--
24	CHROMIUM	Flower	3.0	5.0	0.9873869417794828	--
0	FAT	Fruit	89000.0	201000.0	0.8939697424043467	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
12	STIGMASTEROL	Fruit		140.0	0.7694026293001529	--
3	FLUORIDE	Fruit		2.4	0.5081285807389628	--
65	MAGNESIUM	Fruit	2640.0	3020.0	0.4122435661971507	--
0	BARIUM	Fruit	20.0	30.0	0.23749286365790012	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	DELTA-CADINENE	Leaf	25.0	160.0	0.23246458505780895	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
24	CHROMIUM	Fruit	3.0	5.0	0.19465740124831715	--
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.
0	TANNINS	Fruit		100000.0	0.1858330724301565	--
65	MAGNESIUM	Flower	2640.0	3020.0	0.15016470805298793	--
1	SODIUM	Fruit	200.0	3250.0	0.12424306354013467	--
1	STRICTININ	Leaf		100.0	0.09053574604251853	--
6	IRON	Fruit	45.0	150.0	0.06752138925955396	--
4	BORON	Fruit	10.0	40.0	0.0014459720019340586	--
77	ZINC	Fruit	10.0	30.0	-0.009072324700046541	--
4	BORON	Flower	10.0	40.0	-0.011499571648933803	--
3	NICKEL	Fruit		2.4	-0.04957166517347313	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	STRONTIUM	Fruit	30.0	60.0	-0.10634151712424286	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	DELTA-CADINOL	Leaf	8.0	13.0	-0.10787259719937864	Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
6	IRON	Flower	45.0	150.0	-0.11737283974721074	--
14	POTASSIUM	Fruit	11020.0	16200.0	-0.15186560947876587	--
31	CARYOPHYLLENE	Fruit	7440.0	8160.0	-0.15290356778862352	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	SALICYLATES	Fruit	6.0	60.0	-0.16469419114376535	--
2	ALPHA-HUMULENE	Fruit	250.0	850.0	-0.1719773217114379	--
0	CALAMENENE	Fruit		1265.0	-0.17527372328420673	--
5	ALUMINUM	Fruit	80.0	160.0	-0.17697394528100432	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
77	ZINC	Flower	10.0	30.0	-0.18495922224483477	--
2	ALPHA-HUMULENE	Essential Oil		30000.0	-0.20980400443514668	--
12	COPPER	Fruit	3.0	9.0	-0.2972270275515491	--
14	POTASSIUM	Flower	11020.0	16200.0	-0.3149478902442045	--
15	FIBER	Flower	95000.0	100000.0	-0.38632916081034846	--
0	LINALOL	Flower		1.0	-0.3900304526992942	--
15	FIBER	Fruit	95000.0	100000.0	-0.39327836686010154	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
62	GALLIC-ACID	Fruit	285.0	12600.0	-0.44183433468392297	--
3	CHAVICOL	Fruit	465.0	510.0	-0.44569781898926136	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	COBALT	Fruit		0.7	-0.4503737361947928	--
31	CARYOPHYLLENE	Essential Oil		16000.0	-0.468033109451461	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	COBALT	Flower		0.7	-0.5111703686956748	--
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	PROTEIN	Fruit	52000.0	70000.0	-0.5294951043049843	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
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.
31	THIAMIN	Fruit		1.0	-0.5546097657802712	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	PHOSPHORUS	Fruit	1000.0	1337.0	-0.5707254381124798	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
75	KAEMPFEROL	Fruit		29.0	-0.5731869083869251	--
53	LINALOOL	Fruit		1.0	-0.5854958813390855	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	RIBOFLAVIN	Fruit	1.0	2.0	-0.6444915447424321	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	BETA-CAROTENE	Bark	2.0	3.0	-0.6464926691482484	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
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.
51	ELLAGIC-ACID	Fruit		21.0	-0.6877437439073045	--
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.
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.
12	COPPER	Flower	3.0	9.0	-0.8371161987468383	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROTEIN	Flower	52000.0	70000.0	-0.8446468010457023	--
15	RIBOFLAVIN	Flower	1.0	2.0	-0.9879472837456319	--
4	PHOSPHORUS	Flower	1000.0	1337.0	-0.9975269050748918	--
3	NICKEL	Flower		2.4	-0.9999999999999997	--
64	OLEANOLIC-ACID	Fruit	35.0	20000.0	-1.0	--
47	BETA-SITOSTEROL	Essential Oil		1000.0	-1.0	--
1	NAPHTHALENE	Essential Oil		1000.0	-1.0	--
60	CINNAMALDEHYDE	Flower		1.0	-1.0	--
64	OLEANOLIC-ACID	Seed		7.0	-1.0	--
0	PHENYLETHYL-ACETATE	Flower		1.0	-1.1565845346367642	--
31	THIAMIN	Flower		1.0	-1.2611424689255089	--
0	CARBOHYDRATES	Bark	555000.0	612000.0	-1.3532281234725556	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	WATER	Fruit	69000.0	252000.0	-2.2548158431429384	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	WATER	Flower	69000.0	252000.0	-3.65016767114962	--
0	EPOXYDIHYDROCARYOPHYLLENE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
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.
0	ALPHA-TERPINYL-ACETATE	Flower	155.0	170.0		--
8	RUGOSIN-D	Leaf		1925.0		--
16	ISOEUGENOL	Plant				--
0	CONIFERALDEHYDE	Stem				--
9	PEDUNCULAGIN	Leaf				--

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
1	PRODELPHINIDIN	Leaf				--
0	GALLIC ACID 3-O-BETA-D-(6'-O-GALLOYL)-GLUCOSIDE	Leaf		2.5		--
24	BENZALDEHYDE	Fruit				--
0	CAMPESTEROL-3-O-BETA-D-GLUCOSIDE	Fruit				--
4	2-UNDECANONE	Flower				--
1	NAPHTHALENE	Stem				Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.
6	ACETOPHENONE	Fruit				--
0	BETA-CARYOPHYLLENE	Flower				--
3	BETA-TERPINEOL	Essential Oil				--
8	TRANS-ANETHOLE	Fruit				Lawrence, B.M., <i>Essential Oils</i> 1976-1977, <i>Essential Oils</i> 1978, <i>Essential Oils</i> 1979-1980.
0	CUBENOL	Leaf				Charalambous, G. (Ed.). 1994. <i>Spices, Herbs and Edible Fungi</i> . Elsevier Science B. V. Amsterdam. 764 pp.
0	METHYL-FURFURYL-ALCOHOL	Plant				--
51	ELLAGIC-ACID	Plant				--
0	ALPHA-MUUROLENE	Plant				--
1	RUGOSIN-A	Leaf		16.2		--
35	TANNIN	Plant				--
0	ISOEUGENITENE	Plant				--
0	CONIFERALDEHYDE	Leaf				--
0	PALMITIC-ACID-METHYL-ESTER	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PALUSTROL	Fruit				--
0	5-METHYLFURALDEHYDE	Fruit				--
1	DELTA-CADINOL	Fruit				--
0	CAMPESTEROL-GLUCOSIDE	Plant				--
0	2-NONYL-ACETATE	Flower		1.0		--
1	NAPHTHALENE	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
8	ELLAGITANNIN	Fruit		3200.0		--
28	VANILLIN	Fruit				--
23	ALPHA-TERPINEOL	Essential Oil				--
0	HEXAN-2-ONE	Fruit				--
0	DIMETHYL-FURFURAL	Plant				--
0	ALPHA-METHYL-FURFURYL	Plant				--
22	ISOQUERCITRIN	Fruit				--
0	HUMULENE-EPOXIDE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	STYRALYL-ACETATE	Flower		1.0		--
2	CRATEGOLIC-ACID	Seed		20.0		--
0	CASUARIIN	Leaf		9.7		--
8	CARYOPHYLLENE-OXIDE	Essential Oil				--
0	PALUSTROL	Leaf				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	NONAN-2-ONE	Fruit				--
0	FURALDEHYDE	Fruit				--
0	GAMMA-CADINENE	Fruit				--
0	HUMULENE-EPOXIDE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CAMPESTEROL	Plant				--
2	2-NONANONE	Flower		1.0		--
64	OLEANOLIC-ACID	Essential Oil		10000.0		--
1	NAPHTHALENE	Fruit		0.0		--
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
0	STYRALYL-ACETATE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	5,7-DIHYDROXY-2- METHYLCHROMONE-8-C- BETA-GLUCOPYRANOSIDE	Fruit		145.0		--
0	BENZYL-TIGLATE	Plant				--
23	TERPINEN-4-OL	Essential Oil				--
0	HEXAN-2-ONE	Essential Oil				--
0	ALPHA-AMORPHENE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	METHYL-CHAVICOL	Plant				--
0	CRATAEGOLIC-ACID	Flower		6.0		--
0	QUERCETIN-3,4'-DI-O- BETA-D-GLUCOSIDE	Fruit				--
0	STRONTIUM	Flower	30.0	60.0		--
0	ALLO-AROMADENDRENE	Leaf				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	CRATAEGOLIC-ACID	Fruit	6.0	1500.0		--
5	CASUARICTIN	Leaf				--
0	10-(ALPHA)-CADINOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
30	HYPEROSIDE	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	DELTA-CADINENE	Fruit				--
0	HUMULEN-7-OL	Flower				--
4	CALCIUM-OXALATE	Plant				--
0	2-NONANOL	Plant				--
0	OCTAN-2-ONE	Fruit				--
3	3,3',4'-TRI-O-METHYL-ELLAGIC-ACID	Bark				Lowry, J. B. 1968. The Distribution and Potential Taxonomic Value of Alkylated Ellagic Acids. <i>Phytochemistry</i> 7 10: 1803-1813
18	RHAMNETIN	Fruit				--
0	EUGENITINE	Flower				--
0	5,7-DIHYDROXY-2-METHYLCHROMONE-8-C-BETA-D-GLUCOSIDE	Leaf		66.0		--
9	BENZYL-ALCOHOL	Plant				--
1	TELLIMAGRANIN-II	Leaf				--
0	HEXAN-1-AL	Fruit				--
0	CALAMENOL	Leaf	25.0	35.0		Charalambous, G. (Ed.). 1994. <i>Spices, Herbs and Edible Fungi</i> . Elsevier Science B. V. Amsterdam. 764 pp.
4	METHYL-BENZOATE	Plant				--
0	ALPHA-CUBEBENE	Flower				--
176	QUERCETIN	Fruit				Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	HUMULEN-7-OL	Fruit				Lawrence, B.M., <i>Essential Oils</i> 1976-1977, <i>Essential Oils</i> 1978, <i>Essential Oils</i> 1979-1980.
0	STIGMASTEROL-GLUCOSIDE	Plant				--
0	QUERCITRIN-3,4'-DI-O-GLYCOSIDE	Fruit				--
0	CIS-ISOEUGENOL	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARYOPHYLLINE	Fruit				--
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.
0	CORNUS-TANNIN-2	Plant				--
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	LEDOL	Leaf				Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
0	HEPTAN-2-ONE	Fruit				--
6	FENCHONE	Fruit				--
3	3,4-DIHYDROXYBENZOIC-ACID	Leaf				--
0	GAMMA-CARYOPHYLLENE	Plant				--
2	2-NONANONE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-HEPTYL-BENZOATE	Flower				--
34	MYRICETIN	Leaf				--
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	2-NONYL-ACETATE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EUGENINE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	5,7-DIHYDROXY-2-METHYLCHROMONE-8-C-BETA-D-GLUCOPYRANOSIDE	Fruit		143.0		--
9	BENZYL-ACETATE	Plant				--
7	TELLIMAGRANIN-I	Leaf				--
0	ALPHA-MUUROLENE	Fruit				--
0	6-METHYL-HEPT-5-EN-2-ONE	Fruit				--
19	CARVONE	Plant				--
0	METHYL-ALCOHOL	Plant				--
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	EUGENITINE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-COPAENE	Flower				--
0	PTEROCARININ A	Leaf		21.5		--
0	2-HEPTYL-ACETATE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
12	STIGMASTEROL	Plant				--
0	MASLIC-ACID	Fruit		1500.0		--
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	BETA-CARYOPHYLLENE-OXIDE	Essential Oil		45000.0		--
6	MASLINIC-ACID	Essential Oil		1500.0		--
2	CAMPESTEROL	Fruit				--

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.
1	NAPHTHALENE	Flower				--
0	EUGENOL-4-O-BETA-D(6'-O-GALLOYL)-GLUCOSIDE	Leaf		215.0		--
0	BENZOIC-ACID-METHYL-ESTER	Fruit				--
0	GALLOTANNIC-ACID	Plant				--
0	CALAMENENE	Flower				--
0	PHENYLETHYL-ACETATE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-HEPTYL-ACETATE	Flower				--
0	GAMMA-MUROLENE	Fruit				--
3	GAMMA-DECALACTONE	Fruit				--
0	ETHYL-OCTANOATE	Plant				--
3	3,3',4-TRI-O-METHYL-ELLAGIC-ACID	Fruit				--
24	BENZALDEHYDE	Flower				--
0	METHYL-N-HEPTYL-KETONE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-3-HEXAHYDROXY-DIPHENOYL-GLUCOSE	Leaf				--
0	ZONARENE	Flower		1.0		--
0	CADALENE	Leaf	5.0	8.0		Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
6	MASLINIC-ACID	Flower				--
0	ISOBIFLORIN	Fruit		510.0		--
0	ALPHA-CARYOPHYLLENE	Flower				--
11	PROCYANIDIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-HEPTANOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	SYZYGININ-B	Leaf		131.0		--
0	CARYOPHYLLA-4(12)-8(13)-DIEN-5-BETA-OL	Essential Oil				--
0	ZONARENE	Fruit		1.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	HUMULENE-1,2-OXIDE	Fruit		95.0		Charalambous, G. (Ed.). 1994. Spices, Herbs and Edible Fungi. Elsevier Science B. V. Amsterdam. 764 pp.
3	MUCILAGE	Plant				--
0	TRANS-ISOEUGENOL	Fruit				--
76	EUGENOL	Leaf Essent. Oil				--
0	BENZOIC-ACID-ETHYL-ESTER	Fruit				--
62	GALLIC-ACID	Flower				--
0	CALACORENE	Flower				--
0	2-HEPTANONE	Plant				--
0	BETA-MUUROLENE	Fruit				--
0	ETHYL-HEXANOATE	Plant				--
0	BARIUM	Flower	20.0	30.0		--
0	STIGMASTEROL-3-O-BETA-D-GLUCOSIDE	Fruit				--
0	METHYL-FURFURYL-ALCOHOL	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
13	GERANIAL	Fruit				--
6	EUGENYL-ACETATE	Fruit		56700.0		--
5	DAUCOSTEROL	Fruit				--
60	CINNAMALDEHYDE	Fruit		1.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-CADINENE	Flower				--
13	BETA-PINENE	Fruit				--
1	FURFURYL-ALCOHOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	SYZYGININ-A	Leaf		98.0		--
7	BIFLORIN	Fruit	70.0	1022.0		--
0	CARYOPHYLLA-3-8(13)-DIEN-5-BETA-OL	Essential Oil				--
21	METHYL-SALICYLATE	Flower				--
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.
76	EUGENOL	Bark				--
0	BENZOIC ACID BENZYL ESTER	Fruit				--
1	FURFURYL-ALCOHOL	Flower				--
3	XYLOSE	Essential Oil				--
0	2-HEPTANOL	Flower				--
0	LINOLEIC-ACID-METHYL-ESTER	Fruit				--
0	CALACORENE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2-HEPTYL-BENZOATE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	ETHYL-CINNAMATE	Plant				--
0	STEARIC ACID METHYL ESTER	Fruit				--
0	ALPHA-METHYL-FURFURYL	Fruit				Wealth of India.
1	GEMIN-D	Leaf	1125.0	1175.0		--

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.
1	EUGENOL-ACETATE	Fruit				--
10	CUMINALDEHYDE	Fruit				--
0	ALPHA-AMORPHENE	Flower		1.0		--
0	PHTHALIC ACID DIBUTYL DIESTER	Essential Oil				--
18	RHAMNETIN	Plant				--
2	RUGOSIN-E	Leaf		975.0		--
0	2-3-DI-O-GALLOYL-GLUCOSE	Leaf		214.5		--
0	CARYOPHYLLA-3(8)-13-DIEN-5-ALPHA-OL	Essential Oil				--
0	METHYL-OCTANOATE	Plant				--
0	3-METHOXYBENZALDEHYDE	Fruit				--
6	FURFURAL	Plant				--
0	BETA-SITOSTEROL-GLUCOSIDE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	VALONEIC ACID BISLACTONE	Leaf		180.0		--
0	10-(ALPHA)-CADINOL	Flower				--
5	KAEMPFERIDE	Fruit				--
0	ALPHA-CADINENE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	GALLOTANNIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	ETHYL-BENZOATE	Plant				--
3	BETA-SELINENE	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	METHYL-N-AMYLKETONE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	VANILLIN	Flower				--
1	EUGENOL-ACETATE	Bark				--
0	CUBENENE	Fruit				--
1	3,4-DIHYDROXYPHENYLETHANOL	Leaf				--
76	EUGENOL	Fruit				--
0	RESIN	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ORSELLINIC-ACID-2-O-BETA-D-GLUCOSIDE	Seed		27.0		--
2	1,2,3,6-TETRA-O-GALLYL-BETA-D-GLUCOSE	Leaf		49.7		--
0	CARYOPHYLLA-3(12)-7(13)-DIEN-6-ALPHA-OL	Essential Oil				--
3	CHAVICOL	Flower	465.0	510.0		--
5	ACETYL-EUGENOL	Flower				--
0	METHYL-N-HEPTYL-KETONE	Flower				--
7	RHAMNOCITRIN	Fruit		50.0		--
5	EUGENIIN	Leaf		8950.0		--
7	ASTRAGALIN	Fruit				--
47	BETA-SITOSTEROL	Plant				--
0	4,4-DIMETHYLTRICYCLO[6,3,2,0]TRIDECA-8-ENE-1-OL	Essential Oil				--
1	ALPHA-HUMULENE-EPOXIDE	Essential Oil		26000.0		--
0	EUGENINE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EPOXYDIHYDROCARYOPHYLLENE	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-YLANGENE	Plant				--
0	SALICYLIC ACID BENZYL ESTER	Fruit				--
0	METHYL-ALCOHOL	Fruit				Wealth of India.
8	TRANS-ANETHOLE	Flower				--
75	KAEMPFEROL	Flower				--
76	EUGENOL	Bulb				--
0	CRATAEGOLIC ACID METHYL ESTER	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	1-BETA-O-GALLOYLPEDUNCULAGIN	Leaf		114.5		--
2	1,2,3,4,6-PENTA-O-GALLOYL-BETA-D-GLUCOSE	Leaf		33.7		--
0	BENZOIC-ACID-PROPYL-ESTER	Fruit				--
0	CARYOPHYLLA-3(12)-6-DIEN-4-OL	Essential Oil				--
8	CARYOPHYLLENE-OXIDE	Plant				--
4	2-UNDECANONE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2ALPHA-HYDROXYOLEANOLIC-ACID-METHYL-ESTER	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	METHYL-N-AMYLKETONE	Flower				--
5	EUGENIIN	Fruit		1640.0		--
0	ARABINOSE	Essential Oil				--
13	BETA-PINENE	Plant				--
0	ALPHA-THUJENE	Fruit				--