

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Humulus lupulus*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
176	QUERCETIN	Plant				--
112	ASCORBIC-ACID	Flower	332.0	1782.0	-0.2861764494395231	--
112	ASCORBIC-ACID	Fruit		1782.0	-0.17368960442994769	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
102	CAFFEIC-ACID	Plant				--
89	URSOLIC-ACID	Stem				--
87	RUTIN	Leaf		2000.0	-0.8803806294985641	--
87	RUTIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
77	CHLOROGENIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
77	ZINC	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
77	ZINC	Flower				--
76	EUGENOL	Essential Oil				--
75	KAEMPFEROL	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
65	MAGNESIUM	Fruit		2380.0	0.11588638233919304	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
65	MAGNESIUM	Flower	443.0	2380.0	-0.3123747135433822	--
64	OLEANOLIC-ACID	Stem				--
61	FERULIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
60	LIMONENE	Essential Oil				--
60	SELENIUM	Flower	0.3	1.7	-0.5395561278850259	--
60	LIMONENE	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	SELENIUM	Fruit		1.7	0.03537263271054239	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
53	LINALOOL	Essential Oil				--
53	BETA-CAROTENE	Fruit		2.4	-0.1461614723719775	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
53	CITRAL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
53	CITRAL	Essential Oil				--
53	BETA-CAROTENE	Flower	0.5	2.4	-0.5854376351911411	--
53	LINALOOL	Fruit				--
47	BETA-SITOSTEROL	Plant				--
44	QUERCITRIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
43	CATECHIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
40	EPICATECHIN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
39	NIACIN	Fruit		435.0	5.003766647644194	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
39	NIACIN	Flower	81.0	435.0	3.352263480595522	--
38	(-)-EPICATECHIN	Fruit				--
35	GERANIOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
35	GERANIOL	Essential Oil				--
34	MYRICETIN	Plant				--
32	ALPHA-TOCOPHEROL	Strobilus				--
31	THIAMIN	Fruit		3.4	-0.24739706588262703	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	CARYOPHYLLENE	Plant				--
30	(+)-CATECHIN	Fruit				--
29	TRYPTOPHAN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	ALPHA-PINENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
28	ALPHA-PINENE	Essential Oil				--
28	CALCIUM	Fruit		6222.0	0.545912951542125	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
28	CALCIUM	Flower	1157.0	6220.0	0.12434337429806096	--
27	PROCYANIDINS	Fruit				--
25	P-COUMARIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	CHROMIUM	Flower	0.1	0.7	-1.0719973021906593	--
24	PECTIN	Fruit	120000.0	140000.0	1.0319193042672525	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
24	CHROMIUM	Fruit		0.7	-0.4093125277624259	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
23	ALPHA-TERPINEOL	Essential Oil				--
22	MYRCENE	Fruit				--
22	MYRCENE	Inflorescence				--
22	GAMMA-AMINOBUTYRIC-ACID	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
22	MYRCENE	Plant				--
22	MYRCENE	Strobilus				--
22	MYRCENE	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	ISOQUERCITRIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
20	GAMMA-LINOLENIC-ACID	Seed				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
20	CHOLINE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
17	FARNESOL	Fruit		17.0	-0.6852064014620585	--
17	FARNESOL	Essential Oil				--
16	HUMULONE	Flower				--
16	HUMULONE	Strobilus		5000.0		--
16	HUMULONE	Plant				--
16	HUMULONE	Inflorescence				--
16	HUMULONE	Fruit				--
16	P-CYMENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Fruit		10.0	1.0688416055697534	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
15	RIBOFLAVIN	Flower	2.0	10.1	0.9131195269275587	--
15	FIBER	Fruit		72000.0	-0.6574998263757718	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	MANGANESE	Fruit		8.1	-0.3501271465981358	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	ARGININE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
14	POTASSIUM	Flower	4371.0	23500.0	0.43388681236779714	--
14	SUCROSE	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
14	POTASSIUM	Fruit		23500.0	0.49399185392198836	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	MANGANESE	Flower	1.5	8.1	-0.36407539187837923	--
13	BETA-PINENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
13	BETA-EUDES MOL	Fruit		60.0		--
13	LIGNIN	Stem				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
13	BETA-PINENE	Plant				--
13	BETA-PINENE	Essential Oil				--
12	FORMALDEHYDE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
12	STIGMASTEROL	Stem				--
11	NEROLIDOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
10	PIPERIDINE	Inflorescence		2.5		--
10	NEROL	Essential Oil				--
10	NEROL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
10	PIPERIDINE	Flower		2.5		--
10	SQUALENE	Plant				--
9	LUPULONE	Fruit				--
9	LUPULONE	Inflorescence				--
9	LUPULONE	Plant				--
9	HEDERAGENIN	Stem				--
9	DELTA-CADINENE	Fruit		60.0	-0.4584564235430147	--
9	LUPULONE	Flower				--
9	DELPHINIDIN	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	LUPULONE	Strobilus		1300.0		--
8	CANNABIDIOL	Leaf				--
8	CARYOPHYLLENE-OXIDE	Essential Oil				--
8	FRUCTOSE	Fruit	15000.0	20000.0	-0.617530686348938	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
8	ESTRONE	Fruit				--
8	GENTISIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	TYROSINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	CYANIDIN	Plant				--
7	HISTIDINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	PHENYLALANINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	ASTRAGALIN	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	GLUCOSE	Fruit	15000.0	20000.0	-0.6828399338718176	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	DIPENTENE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	IRON	Flower				--
6	CARYOPHYLLENE-EPOXIDE	Fruit		24.0		--
6	MASLINIC-ACID	Stem				--
6	ISOXANTHOTHUMOL	Resin, Exudate, Sap		42500.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	ISOXANTHOTHUMOL	Fruit		1838.0		--
6	IRON	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
5	ALUMINUM	Flower	0.9	4.7	-1.6412298738578974	--
5	GERANYL-ACETATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	ISOVALERIC-ACID	Essential Oil				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
5	ALUMINUM	Fruit		4.7	-0.22215407810898732	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	PHOSPHORUS	Fruit		4760.0	0.4689758575548939	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	XANTHOTHUMOL	Fruit		15.0		--
4	TIN	Fruit		22.0	-0.2908840013040884	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	PROCYANIDIN-B-4	Fruit				--
4	THREONINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	SILICON	Fruit		4.5	-0.5938225414098025	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	SILICON	Flower	0.8	4.5	-0.5633927701595145	--
4	PHOSPHORUS	Flower	885.0	4760.0	0.44165313354460856	--
4	XANTHOTHUMOL	Resin, Exudate, Sap		78750.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	LYSINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	XANTHOMOL	Strobilus		300.0		--
4	TIN	Flower	4.0	22.0	0.9878291611472616	--
4	LUPULIN	Fruit				--
3	ALPHA-CADINOL	Fruit		15.0		--
3	ALPHA-SELINENE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	COLUPULONE	Strobilus				--
3	COLUPULONE	Plant				--
3	COLUPULONE	Fruit				--
3	VALINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ESTRADIOL	Fruit				--
3	ISOLEUCINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	METHYL-NONYL-KETONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	ACETONE	Fruit				--
3	ACETONE	Inflorescence				--
3	2-TRIDECANONE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ACETONE	Flower				--
3	BETA-SELINENE	Fruit		150.0	1.0	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	COLUPULONE	Inflorescence				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	DIMETHYL-AMINE	Flower		1.4	-0.999999999999997	--
2	TRANS-BETA-FARNESENE	Tissue Culture				--
2	PROCYANIDIN-B-3	Fruit				--
2	LEUCINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	DIETHYL-AMINE	Flower		3.1		--
2	CAMPESTEROL	Stem				--
2	GERANYL-PROPIONATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	COHUMULONE	Inflorescence				--
2	HUMULENE	Flower				--
2	ADLUPULONE	Inflorescence				--
2	ALPHA-HUMULENE	Fruit				--
2	KAEMPFEROL-3-RHAMNOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	COHUMULONE	Plant				--
2	COHUMULONE	Strobilus				--
2	ADLUPULONE	Plant				--
2	HUMULENE	Essential Oil				--
2	COBALT	Flower	0.5	2.4	-0.41850902895210695	--
2	ADLUPULONE	Strobilus				--
2	ALLO-CYMENE	Essential Oil				--
2	ADHUMULONE	Inflorescence				--
2	HUMULENE	Plant				--
2	DIMETHYL-AMINE	Inflorescence		1.4		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	FRIEDELIN	Stem				--
2	COHUMULONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	ADHUMULONE	Strobilus				--
2	ADHUMULONE	Plant				--
2	BETA-ALANINE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	MALTOSE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	COBALT	Fruit		2.4	-0.24457299524657042	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	ADLUPULONE	Fruit				--
2	ISOHUMULONE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	LEUCODELPHINIDIN	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
2	METHYL-NONANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	ADHUMULONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	LEUCODELPHINIDIN	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
2	HUMULENE	Fruit		1200.0	1.4104326443879445	--
2	FARNESENE	Essential Oil				--
2	ALPHA-HUMULENE	Essential Oil		400000.0	3.136732670792344	--
2	DIETHYL-AMINE	Inflorescence		3.1		--
2	BETA-MYRCENE	Essential Oil	420000.0	580000.0	1.706327614199298	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ASPARAGINE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	GERMACRENE-D	Fruit		15.0	-1.0	--
2	QUERCETIN-3'-GLUCOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	NEO-CHLOROGENIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	PYRROLIDINE	Flower		1.0		--
1	PROCYANIDIN-B-2	Fruit				--
1	PYRROLIDINE	Inflorescence		1.0		--
1	SODIUM	Fruit		47.0	-0.17949382924161622	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	CELLULOSE	Stem				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
1	SODIUM	Flower	9.0	47.0	-0.5922029574106819	--
1	PROCYANIDIN-B-1	Fruit				--
1	VIRIDIFLOROL	Fruit		16.0		--
1	SERINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	HEPTYLISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	RAFFINOSE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	METHYL-AMINE	Flower		3.7	-1.0	--
1	DELTA-CADINOL	Fruit		36.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	DIMETHYLVINYLCARBINOL	Flower				--
1	QUERCETIN-3-O-RHAMNOSIDE	Fruit				--
1	STACHYOSE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	LEUCOCYANIDIN	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
1	TRIMETHYLAMINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	DECAN-1-AL	Essential Oil				--
1	LEUCOCYANIDIN	Flower				Chemical Constituents of Oriental Herbs (3 diff. books)
0	S-METHYLTHIO-2-METHYLBUTANOATE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	ISOPRENE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-PENTADECANONE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GERMACRENE-B	Fruit		105.0	-1.0	--
0	METHYLDODECADIENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	THIAMINE	Flower	0.6	3.4	0.4403764280895233	--
0	ASH	Fruit	70000.0	100000.0	1.1222069856554242	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	GAMMA-EUDESOL	Fruit		18.0		--
0	HUMULENE-EPOXIDE-II	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	METHYL-GLUTAMIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CARYOPHYLLA-3-8(13)-DIEN-5-BETA-OL	Essential Oil				--
0	TRICYCLO-DEHYDRO-HUMULONE	Fruit		3000.0		--
0	LUPARONE	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
0	8,9-EPI-THIOHUMULENE	Essential Oil				--
0	2-METHYL-BUTYL-ISOVALERATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-4-METHYLHEX-2-ENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-METHYL-5-THIA-HEX-2-ENE	Essential Oil				--
0	QUERCETIN-3-RHAMNOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	SPATHULENOL	Fruit		10.0	-1.0	--
0	3-METHYLBUTYLISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	12AROMADENDRINE-EPOXIDE	Fruit		20.0		--
0	ALPHA-CADINENE	Fruit		10.0		--
0	ISOPREHUMULONE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-NONANON	Essential Oil				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
0	GERMACRATRIENE	Essential Oil				--
0	PHLOBAPHENE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	METHYLDODEC-8-EN-OATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CEROTIC-ACID	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	SUGARS	Flower	22320.0	120000.0	0.816496580927726	--
0	HUMULENE-EPOXIDE	Essential Oil				--
0	METHYL-GERANATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TRICYCLODEHYDROISOHUMULONE	Fruit				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	2-METHYL-BUT-3-EN-2-OL	Inflorescence				--
0	LUPAROL	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	6-(4-METHYL-PENT-3-ENYL)1,2,3,4-TETRATHIACYCLOCT-6-ENE	Essential Oil				--
0	HUMULOL	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	2-METHYL-BUTYL-2-METHYL-BUTYRATE	Essential Oil				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
0	GAMMA-ELEMENE	Fruit		16.0	-0.7367653332135127	--
0	CUBENOL	Fruit		17.0	-1.0	--
0	PRELUPULONE	Inflorescence				--
0	BETA-FARNESENE	Fruit		35.0	-1.0	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.
0	LEDOL	Fruit		8.0		--
0	3-METHYL-BUTANOIC-ACID	Flower				--
0	FAT	Flower	5394.0	29000.0	-0.45281178898821745	--
0	HEXYLPROPIONATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	1,2-EPI-THIOHUMULENE	Essential Oil				--
0	PROTEIN	Fruit	115000.0	240000.0	1.7494288187526115	--
0	MYRCENOL	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	METHYL-2-METHYLNONANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-AMINO-ADIPIC-ACID	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ISOPENTYL-AMINE	Flower		0.4		--
0	2-METHYLPROPYLPENTENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PHENYLETHANOL	Essential Oil				--
0	METHYLDECENOATE	Essential Oil				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
0	ETHYL-METHYL-AMINE	Flower		3.7		--
0	WATER	Fruit	60000.0	120000.0	-2.8287641988252616	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	HUMULENE-DIEPOXIDE-A	Essential Oil				--
0	OCTYLISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-DODECANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DEOXYHUMULONE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ETHYL-METHYL-AMINE	Inflorescence		3.7		--
0	LUPARENOL	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	5-ALPHA-STIGMASTAN-3-ONE	Stem				--
0	HUMULINONE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	2-METHYL-BUT-B-EN-2-OL	Fruit		1000.0		--
0	GAMMA-CALOCORENE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	NH3	Inflorescence				--
0	5-(4-METHYL-PENT-3-ENYL)-1,2,3-TRITHIACYCLOHEPT-5-ENE	Essential Oil				--
0	ALPHA-MUUROLENE	Fruit		35.0	-0.6984779293060631	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	KILOCALORIES	Fruit		2880.0	-1.1855236651643823	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	3-METHYL-BUTAN-2-ONE	Flower				--
0	FIBER(DIETARY)	Flower		342000.0	0.3333778507865993	--
0	HEXYL-ISOBUTYRATE	Plant				--
0	6-ISO-PENTENYL-NARINGENIN	Resin, Exudate, Sap		2375.0		--
0	PROLINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-2,5-DIMETHYLHEXENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ALPHA-ALANINE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ISOPENTENYL-NARANGENIN	Resin, Exudate, Sap		2375.0		--
0	2-METHYLPROPYL-ISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GERANYL-ISOBUTYRATE	Essential Oil				--
0	METHYL-UNDECENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ETHYL-HEPTANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OCTYL-ACETATE	Essential Oil				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
0	METHYL-DECANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DEOXYCOHUMULONE	Plant				--
0	M-CAMPHORENE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CALAMENENE	Fruit		2.0	-0.6174844953736063	--
0	LINALYL-PROPIONATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	5-ALPHA-STIGMAST22-EN-3-ONE	Stem				--
0	HUMULENOL-II	Fruit		15.0		--
0	2-METHYL-BUT-3-EN-2-OL	Fruit		1500.0		--
0	PREHUMULONE	Inflorescence				--
0	GAMMA-CADINENE	Fruit		60.0	0.07091843089178781	--
0	COLUPOX	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	6-(4-METHYL-PENT-3-ENYL)-1,2,3,4-TETRATHIACYCLOOCT-6-ENE	Essential Oil				--
0	BETA-CUBEBENE	Fruit		5.0	-0.7073479088132132	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	3-METHYL-BUTAN-1-OL	Flower				--
0	FIBER(CRUDE)	Flower		72000.0	-0.03302065882072333	--
0	HEPTYLPROPIONATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	3-(4-METHYL-PENT-3-ENYL)-3-THIOPHENE	Fruit				--
0	PRODELPHINIDIN-B-3	Fruit				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	METHYLUNDECADIENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METACAMPHORENE	Essential Oil				--
0	ISOPARAFFIN	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-METHYLPROPYL-2-METHYL-BUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	HUMULENOL-II	Essential Oil				--
0	PENTYLISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-UNDECANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ETHYL-AMINE	Flower		5.2		--
0	VIRIDIFLORENE	Fruit		60.0		--
0	RESINS	Fruit	30000.0	300000.0	1.0	--
0	ALLOAROMADENDRENE-EPOXIDE	Fruit		12.0		--
0	NONANYL	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-DECA-4-ENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DEMETHYL-XANTHOL	Fruit				--
0	TETRADEC-9-EN-2-ON	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LINALYL-ISONONYLATE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	5-ALPHA-ERGOSTAN-3-ONE	Stem				--
0	HUMULENE-MONOEOXIDE-I	Fruit				--
0	2-METHYL-5-PENTENYLFURAN	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	POSTHUMULONE	Inflorescence				--
0	COLUPDOX	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ISOPENTYL-AMINE	Inflorescence		0.4		--
0	BETA-CARYOPHYLLENE	Fruit		520.0	-0.4871544215252672	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	SELINA-4(14),7(11)-DIENE	Fruit				--
0	ALPHA-GUAIENE	Fruit		16.0		--
0	KAEMPFEROL-3-RHAMNODIGLUCOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	3-METHYL-BUT-2-EN-1-AL	Flower				--
0	2,3,4-TRITHIAPENTANE	Essential Oil				--
0	METHYLTRIDECENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ISOMALTOSE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-METHYLBUTYLPROPIONATE	Essential Oil				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
0	DEOXYHUMULONE	Plant				--
0	PENTOSAN	Stem				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	METHYL-THIO-HUMULONE	Essential Oil				--
0	CARYOPHYLLA-4(12)-8(13)-DIEN-5-BETA-OL	Essential Oil				--
0	METHYL-DECA-4,8-DIENOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELTA-SELINENE	Fruit		55.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	GALLOCATECHIN	Plant				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	CADALENE	Fruit		2.0		--
0	TANNINS	Fruit	20000.0	40000.0	-0.45457956903500574	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	AROMADENDRINE	Fruit		98.0		--
0	LINALOL	Fruit				--
0	5-(4-METHYL-5-PENT-3-ENYL)1,2,3-TRITHIACYCLOHEPT-5-ENE	Essential Oil				--
0	HUMULENE-EPOXIDE-II	Fruit		71.0		--
0	2-DODECANONE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	SELINA-3,7-DIENE	Fruit		195.0		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ALPHA-EUDESOL	Fruit		65.0		--
0	KAEMPFEROL-3-O-RUTINOSIDE	Fruit				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	3-(4-METHYL-PENT-3-ENYL)-3-THIOPHENE	Essential Oil				--
0	HELUPONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	PRELUPULONE	Fruit				--
0	METHYLTHIOISOHEPTANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-METHYLBUTYLISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GERANIC-ACID-METHYL-ESTER	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	4-DEOXYHUMULONE	Inflorescence				--
0	PENTENYLISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-OCTANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CARYOPHYLLA-3(8)-13-DIEN-5-OL	Essential Oil				--
0	PROTEIN	Flower	21390.0	115000.0	-0.322653241355452	--
0	ALLO-AROMADENDRENE	Fruit		77.0	-0.679784818689129	--
0	NERYLPROPIONATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELTA-GUAIENE	Fruit		20.0		--
0	EO	Seed	10000.0	30000.0	-0.17124289278893168	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BUTYLISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	T-CADINOL	Fruit		9.0		--
0	4-DEOXYHUMULONE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	HUMULENE-EPOXIDE-I	Fruit		7.0		--
0	2-DECANONE	Plant				--
0	BUTYLATED-HYDROXY-TOLUENE	Strobilus				--
0	AMMONIA	Flower		10660.0		--
0	SELINA-3,7(11)-DIENE	Fruit				--
0	ALPHA-CUBEBENE	Plant		15.0	-0.508000508000762	--
0	3'(ISOPRENYL)-2',4'-DIHYDROXY-4,6'-DIMETHOXY-CHALCONE	Fruit		28.0		--
0	CARBOHYDRATES	Flower	143220.0	770000.0	0.5901036049686585	--
0	PREHUMULONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	METHYLTHIOHEXANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-METHYLBUTYLHEXANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DEMETHYL-XANTHOL	Strobilus				--
0	4-DEOXYHUMULONE	Plant				--
0	PENTADECA-6,9-DIEN-2-ON	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EPIGLOBULOL	Fruit		5.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARYOPHYLLA-3(8)-13-DIEN-5-ALPHA-OL	Essential Oil				--
0	UNDECAN-2-AL	Essential Oil				--
0	QUERCETIN-3-RHAMNODIGLUCOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-9-METHYLDECANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EO	Fruit	3000.0	10000.0	-0.625591783140096	Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	BICYCLOGERMACRENE	Fruit		10.0		--
0	AMMONIA(NH3)	Flower		10660.0	-0.02903630467319503	--
0	4-DEOXYCOHUMULONE	Plant				--
0	HUMULENE-DIEPOXIDE-A	Fruit				--
0	2,3,5-TRITHIAHEXANE	Essential Oil				--
0	NERYLISOBUTYRATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	SELIN-11-EN-OL	Fruit		29.0		--
0	ALPHA-CORACALENE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	JUNIPER-CAMPHOR	Fruit		13.0		--
0	2-UNDECANON	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYLTHIOHEPTANOATE	Essential Oil				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
0	2-METHYLBUTYLHEPTANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GAMMA-MUUROLENE	Fruit		170.0	1.0	--
0	METHYL-THIO-HUMULENE	Essential Oil				--
0	EPICUBENOL	Fruit		13.0	-1.0	--
0	CARYOPHYLLA-3(12)-6-DIEN-4-OL	Essential Oil				--
0	QUERCETIN-3-O-RUTINOSIDE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ISOCOCHUMULONE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	METHYL-8-METHYLNONANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	4-(4-METHYL-PENT-3-ENYL)3,6-DIHYDRO-1,2-DITHIINE	Fruit				--
0	2,3,4-TRITHIAPENTANE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	ASPARAGINIC-ACID	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ALPHA-COPAENE	Fruit		15.0	-0.6690795871823009	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	GLOBULOL	Fruit		27.0	-1.0	--
0	POSTHUMULONE	Fruit				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	METHYLNONENOATE	Essential Oil				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
0	WATER	Flower		814000.0	0.012271942343700371	--
0	PALUSTROL	Fruit		7.0		--
0	METHYL-HEXANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	EO	Flower	2000.0	10000.0	-0.09040057685018825	--
0	BETA-CARYOPHYLLENE	Essential Oil				--
0	CARYOLAN-1-OL	Fruit		5.0		--
0	ADHULUPONE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	ISOADHUMULONE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-METHYL-THIA-5-HEX-2-ENE	Essential Oil				--
0	METHYL-6-METHYL-HEPTANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ACYLPHLOROGLUCIDES	Fruit				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	BETA-SELINENE-EPOXIDE-I	Fruit		2.0		--
0	ALPHA-YLANGENE	Fruit		5.0	-0.6962565325467188	--
0	4-(4-METHYL-PENT-3-ENYL)1,2-DITHIACYCLOHEX-4-ENE	Essential Oil				--
0	HULUPONE	Fruit	21000.0	39000.0		--
0	2,2-DIMETHYL-5-OXO-2,5-DIHYDRO-FURAN	Flower				--
0	ETHYL-AMINE	Inflorescence		5.2		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	S-METHYLTHIO-4-METHYLPENTANOATE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	ALPHA-CARYOPHYLLENE	Essential Oil				Chemical Constituents of Oriental Herbs (3 diff. books)
0	2-TETRADECANON	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ASH	Flower	15996.0	86000.0	0.3979087975090442	--
0	METHYLGLUTAMINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	FAT	Fruit		29000.0	-0.4197524224718951	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	GAMMA-IONONE	Essential Oil				--
0	HUMULENE-MONOEOXIDE-I	Essential Oil				--
0	METHYL-HEPTANOATE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	TRANS-ISOHUMULONE	Flower				--
0	4,5-EPITHIOCARYOPHYLLENE	Essential Oil				--
0	CARBOHYDRATES	Fruit		770000.0	-0.06888495104483651	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	2-METHYL-PROPAN-1-OL	Flower				--
0	TRICYCLOISOHUMULONE	Inflorescence				--
0	METHYL-5-METHYLHEXANOATE	Essential Oil				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	2-METHYL-PROPANIC-ACID	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	4,5-EPITHIOCARYOPHYLLENE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	HULUPINIC-ACID	Plant				J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.
0	2',6'-DIMETHOXY-4,4'-DIHYDROXY-CHALCONE	Fruit		75.0		--
0	AMMONIA	Inflorescence				--