

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Vitex agnus-castus*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	SABINENE	Leaf Essent. Oil		191600.0	2.583535625809881	Jim Duke's personal files.
12	BORNYL-ACETATE	Fruit	80.0	800.0	1.4141989490302305	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
60	LIMONENE	Fruit Essent. Oil		1036500.0	1.4108415138660721	Jim Duke's personal files.
0	SPATHULENOL	Leaf Essent. Oil		11600.0	1.3598761207800507	Jim Duke's personal files.
0	T-CADINOL	Leaf Essent. Oil		10700.0	1.0	Jim Duke's personal files.
0	LEDOL	Leaf Essent. Oil		5800.0	1.0	Jim Duke's personal files.
41	CAMPHOR	Fruit	80.0	800.0	0.6644584615595209	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
8	CARYOPHYLLENE-OXIDE	Leaf Essent. Oil		11700.0	0.6121610007755034	Jim Duke's personal files.
28	ALPHA-PINENE	Fruit	21.0	4000.0	0.32553830914285703	--
0	BETA-CARYOPHYLLENE	Leaf Essent. Oil		63800.0	-0.025964429521824612	Jim Duke's personal files.
13	BETA-PINENE	Fruit	600.0	4000.0	-0.1696921851991317	--
0	EO	Flower	3000.0	7600.0	-0.1703017891517936	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
22	MYRCENE	Leaf		3.0	-0.17159298783816848	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
20	AUCUBIN	Leaf	3000.0	4000.0	-0.1719118353444105	--
60	LIMONENE	Fruit	590.0	4000.0	-0.17653645241247798	--
67	1,8-CINEOLE	Fruit	600.0	4225.0	-0.1789556977792473	--
60	LIMONENE	Leaf Essent. Oil		112100.0	-0.18270097388120965	Jim Duke's personal files.
9	CAMPHENE	Leaf	0.2	14.0	-0.18740106279745042	--
0	ALLO-AROMADENDRENE	Leaf		0.5	-0.20231788970530706	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
28	ALPHA-PINENE	Leaf		21.0	-0.22318110789954515	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
23	TERPINEN-4-OL	Leaf Essent. Oil		38200.0	-0.22503871744518758	Jim Duke's personal files.
5	SABINENE	Leaf		25.0	-0.2452803744551132	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
5	SABINENE	Fruit	80.0	800.0	-0.2843328344160924	--
22	MYRCENE	Leaf Essent. Oil		18000.0	-0.2967145602434585	Jim Duke's personal files.
0	BETA-CARYOPHYLLENE	Leaf		2.0	-0.33385020306025753	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	TERPINEN-4-OL	Leaf		11.0	-0.3340416261032434	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
16	P-CYMENE	Leaf		10.0	-0.3918055201670966	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
12	BORNYL-ACETATE	Leaf		0.2	-0.41004476181606825	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
13	BETA-PINENE	Leaf		2.5	-0.42544218299211284	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
0	LINALOL	Leaf	0.5	16.0	-0.43312232047482413	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
60	LIMONENE	Leaf		6.0	-0.44147221537054576	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	CARYOPHYLLENE-OXIDE	Leaf		1.6	-0.44958649282201407	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
0	(E)-BETA-FARNESENE	Leaf		2.5	-0.455053136920818	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
3	BETA-PHELLANDRENE	Leaf		1.4	-0.4609858749166889	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
15	CITRONELLOL	Leaf		0.5	-0.47395127504006074	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
0	GAMMA-CADINENE	Leaf		0.2	-0.4860568552720314	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
67	1,8-CINEOLE	Leaf		115.0	-0.5154325408020304	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	ALPHA-PINENE	Leaf Essent. Oil		43200.0	-0.5155006741091597	Jim Duke's personal files.
2	GERMACRENE-D	Leaf		0.2	-0.5248914004803286	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
13	BETA-PINENE	Leaf Essent. Oil		9800.0	-0.5515280698255924	Jim Duke's personal files.
16	P-CYMENE	Leaf Essent. Oil		14400.0	-0.564710773279301	Jim Duke's personal files.
0	BETA-BOURBONENE	Leaf		0.2	-0.5650084487272009	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
23	ALPHA-TERPINEOL	Leaf		5.0	-0.581471880678652	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
0	EO	Fruit	4000.0	12000.0	-0.5867177602418251	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
0	ALPHA-THUJENE	Leaf		1.4	-0.604199084005542	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ALPHA-GURJUNENE	Leaf		0.2	-0.6230842706034109	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
0	ALPHA-TERPINYL-ACETATE	Leaf		1.8	-0.6353129419169833	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
53	LINALOOL	Leaf		0.5	-0.6470976105323109	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
13	BETA-PINENE	Fruit Essent. Oil		8300.0	-0.6795252003227298	Jim Duke's personal files.
0	T-CADINOL	Leaf		2.5	-0.7272372511202277	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
0	SPATHULENOL	Leaf		0.9	-0.7629459117652999	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	P-CYMEN-8-OL	Leaf		0.5	-0.8329880956974537	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
28	ALPHA-PINENE	Fruit Essent. Oil		6.6	-0.8488896734743719	Jim Duke's personal files.
0	FAT	Seed	38000.0	100000.0	-0.8711556020733713	--
0	GAMMA-ELEMENE	Leaf		0.2	-0.9090417205790984	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
0	RUBBER	Root		110.0	-0.9115981768054694	Jim Duke's personal files.
0	LEDOL	Leaf		0.5	-0.9430203471044566	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
0	ALPHA-THUJENE	Leaf Essent. Oil		7900.0	-0.9602760805888906	Jim Duke's personal files.
0	EO	Leaf		230.0	-0.9943883538121621	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
0	ALPHA-GURJUNENE	Leaf Essent. Oil		3900.0	-1.0	Jim Duke's personal files.
0	PROTEIN	Seed	54000.0	81000.0	-1.3592001503550157	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	ASCARIDOLE	Leaf		0.5	-1.376775510458338	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. J. Essential Oil Research, 2: 115-119.
78	LUTEOLIN	Root Bark				--
9	CHRYSOSPENOL-D	Fruit				--
0	(E)-CARYOPHYLLENE	Leaf				--
0	VITEAGNUSIN-G	Fruit				--
0	5,4'-DIHYDROXY-3,6,7,3'-TETRAMETHOXYFLAVONE	Root Bark				--
4	ORIENTIN	Leaf				Jim Duke's personal files.
3	3,4-DIHYDROXYBENZOIC-ACID	Plant				--
8	QUERCETAGETIN	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.
1	AGNUSIDE	Fruit				Jim Duke's personal files.
0	2-ALPHA-3-ALPHA-DIHYDROXYOLEAN-5,12-DIEN-28-OIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	CASTICINE	Seed				--
0	ALPHA-TERPINEOL ACETATE	Leaf				Jim Duke's personal files.
0	PSEUDOINDICAN	Plant				--
2	TRANS-BETA-FARNESENE	Flower				Jim Duke's personal files.
0	APIGENIN-3,8-DI-C-GLYCOSIDE	Fruit				--
7	LUTEOLIN-7-GLUCOSIDE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	SABINENE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LUTEOLIN-7-O-(6"-P-BENZOYLGLUCOSIDE)	Root Bark				--
6	CASTICIN	Seed		1000.0		Jim Duke's personal files.
0	ABIETATRIENE	Fruit Essent. Oil		4400.0		Zwavina, J. H., Bos, R. 1996. Composition of the Essential Fruit Oil of Vitex agnus-castus. Planta Medic, 62(1): 83-84.
0	VITEAGNUSIN-F	Fruit				--
22	MYRCENE	Fruit				Jim Duke's personal files.
0	6'-O-(6,7-DIHYDROFOLIAMENTHOYL)MUSSAENOSIDIC-ACID	Shoot				--
1	AGNUSIDE	Wood				Jim Duke's personal files.
0	EUROSTOSIDE	Leaf		700.0		--
6	CASTICIN	Fruit		1000.0		--
23	ALPHA-TERPINEOL	Fruit				Jim Duke's personal files.
4	PENDULETIN	Plant				--
2	TRANS-BETA-FARNESENE	Leaf				Jim Duke's personal files.
1	AGNUSIDE	Shoot				--
0	ALPHA-TERPINYL-ACETATE	Flower				--
0	LUTEOLIN-6-C-(4"-METHYL-6"-O-TRANS-CAFFEOYLGLUCOSIDE)	Root Bark				--
6	CASTICIN	Leaf				Jim Duke's personal files.
22	MYRCENE	Flower				Jim Duke's personal files.
0	6-BETA-7-BETA-DIACETOXY-13-HYDROXY-LABDA-8,14-DIEN	Fruit	200.0	1000.0		--
0	ORTHOCYMOL	Leaf Essent. Oil				Jim Duke's personal files.
0	EPITESTOSTERONE	Leaf				--
0	VITEAGNUSIN-E	Fruit				--
0	QUINONE	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	ALPHA-TERPINEOL	Flower				Jim Duke's personal files.
4	ORIENTIN	Fruit				--
0	ORTHOCYMOL	Flower Essent. Oil				Jim Duke's personal files.
0	AGNUCASTOSIDE-C	Shoot				--
0	ALPHA-TERPINYL-ACETATE	Fruit				--
0	LUTEOLIN-6-C-(2"-O-TRANS-CAFFEOYLGLUCOSIDE)	Root Bark				--
0	BETA-CARYOPHYLLENE	Fruit				Jim Duke's personal files.
0	3,3'-DIHYDROXY-5,6,7,4'-TETRAMETHOXY-FLAVON	Plant				--
4	ISOORIENTIN	Shoot		70.0		Jim Duke's personal files.
0	ALPHA-THUJENE	Fruit				Jim Duke's personal files.
0	VITEAGNUSIN-D	Fruit				--
11	GAMMA-TERPINENE	Fruit				Jim Duke's personal files.
0	MYZODENDRONE	Shoot				--
16	P-CYMENE	Fruit				Jim Duke's personal files.
0	AGNUCASTOSIDE-B	Shoot				--
0	ISOVITEXIN-XYLOSIDE	Leaf				--
4	PENDULETIN	Fruit				--
0	(E)-BETA-FARNESENE	Flower				--
0	P-HYDROXYBENZOIC-ACID	Plant				--
0	17-ALPHA-HYDROXYPROGESTERONE	Leaf				--
0	LUTEOLIN-6-C-(6"-O-TRANS-CAFFEOYLGLUCOSIDE)	Root Bark				--
0	BETA-CARYOPHYLLENE	Flower				Jim Duke's personal files.
60	LIMONENE	Flower				Jim Duke's personal files.
0	AUCUBOSIDE	Leaf				Jim Duke's personal files.
0	LEDOL	Fruit				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	P-CYMOL	Fruit				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	HOMOORIENTIN	Leaf				--
0	ALPHA-THUJENE	Flower				Jim Duke's personal files.
0	VITEAGNUSIN-C	Fruit				--
0	PROGESTERONE	Leaf				--
11	GAMMA-TERPINENE	Flower				Jim Duke's personal files.
0	MUSSAENOSIDIC-ACID	Shoot				--
16	P-CYMENE	Flower				Jim Duke's personal files.
0	AGNUCASTOSIDE-A	Shoot				--
4	ISOVITEXIN	Leaf				--
75	KAEMPFEROL	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	(E)-BETA-FARNESENE	Fruit				--
0	6'-O-P-HYDROXYBENZOYLMUSSAENOSIDIC-ACID	Shoot				--
27	LINOLEIC-ACID	Fruit				--
0	AUCUBOSIDE	Fruit				Jim Duke's personal files.
6	CASTICIN	Plant				--
0	DELTA-3-KETOSTEROIDS	Leaf				--
0	VITEAGNUSIN-B	Fruit				--
0	LEDOL	Flower				Jim Duke's personal files.
12	PINENE	Fruit				--
11	GAMMA-TERPINENE	Leaf				Jim Duke's personal files.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	METHYL-4-HYDROXYBENZOATE	Plant				--
0	AGNOSIDE	Fruit				--
4	ISOORIENTIN	Leaf				--
18	VITEXIN	Fruit				--
1	AGNUSIDE	Leaf	3000.0	6000.0		--
0	5-HYDROXY-2-METHOXYBENZOIC-ACID	Plant				--
13	BETA-PINENE	Flower				Jim Duke's personal files.
11	ISORHAMNETIN	Root Bark				--
8	CARYOPHYLLENE-OXIDE	Fruit				Jim Duke's personal files.
20	AUCUBIN	Fruit				--
6	CASTICIN	Shoot				--
0	CUMINIC-ALDEHYDE	Leaf		0.2		Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntimein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of Vitex agnus-castus L. J. Essential Oil Research, 2: 115-119.
0	EPITESTOSTERONE	Flower				Jim Duke's personal files.
0	VITEAGNUSIN-A	Fruit				--
1	METHYL-3,4-DIHYDROXYBENZOATE	Plant				--
0	1,8-CINEOL	Fruit				Jim Duke's personal files.
0	7-O-TRANS-P-COUMAROYL-6'-O-TRANS-CAFFEYOYL-8-EPILOGANIC-ACID	Shoot				--
0	HOMOOREINTIN	Leaf				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	CHRYSOPHANOL-D	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	VITEXILACTONE	Fruit				--
0	6-HYDROXYKAEMPFEROL-3,4',6,7-TRIMETHYLETHER	Fruit				--
0	BICYCLOGERMACRENE	Flower				--
0	FLAVONOIDS	Root Bark				--
8	CARYOPHYLLENE-OXIDE	Flower				Jim Duke's personal files.
20	AUCUBIN	Wood				Jim Duke's personal files.
0	TETRAHYDROXYMONOME THOXYFLAVONE-BETA-D-GLUCOSIDE	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
11	TESTOSTERONE	Flower				Jim Duke's personal files.
24	VANILLIC-ACID	Plant				--
0	6-HYDROXYKAEMPFEROL-3,6,7-TRIMETHYLETHER	Fruit				--
0	SPATHULENOL	Fruit				--
2	MANOOL	Flower				--
0	1,8-CINEOL	Flower				Jim Duke's personal files.
67	1,8-CINEOLE	Flower				--
0	3-BETA-ACETOXYOLEAN-12-EN-27-OIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	VITETRIFOLIN-C	Fruit				--
0	6-HYDROXYKAEMPFEROL-3,4',6,7-TETRAMETHYLETHER	Fruit				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	BICYCLOGERMACRENE	Fruit				--
28	ALPHA-PINENE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	EUPATORIN	Fruit				--
41	CAMPHOR	Flower				Jim Duke's personal files.
0	ALLO-AROMADENDRENE	Fruit				Jim Duke's personal files.
11	TESTOSTERONE	Leaf				--
0	CINEOLE	Fruit				--
0	DELTA-TERPINEOL	Leaf				Jim Duke's personal files.
0	SCLARENE	Leaf				--
0	ALPHA-GURJUNENE	Flower				Jim Duke's personal files.
20	AUCUBIN	Shoot				--
0	ORTHOCYNOL	Leaf				--
0	SPATHULENOL	Flower				--
2	MANOOL	Fruit				--
0	1,8-CINEOL	Leaf				Jim Duke's personal files.
0	(E)-CARYOPHYLLENE	Flower				--
0	2-BETA-3-ALPHA-DIACETOXYOLEAN-5,12-DIEN-28-OIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	VITETRIFOLIN-B	Fruit				--
0	17-HYDROXYPROGESTERONE	Leaf				--
0	BICYCLOGERMACRENE	Leaf				--
0	T-CADINOL	Fruit				Jim Duke's personal files.
41	CAMPHOR	Leaf				Jim Duke's personal files.
0	ALLO-AROMADENDRENE	Flower				Jim Duke's personal files.
3	CHRYSOSPENOL	Fruit				--
0	ALPHA-TERPINEOL ACETATE	Fruit				Jim Duke's personal files.
0	ROTUNDIFURAN	Fruit	400.0	3000.0		--
7	ARTEMETIN	Plant				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	ORIENTIN	Shoot		70.0		--
2	MANOOL	Leaf				--
0	CINEOL	Fruit Essent. Oil				Jim Duke's personal files.
0	(E)-CARYOPHYLLENE	Fruit				--
0	2-ALPHA-3-BETA-DIACETOXY-18-HYDROXYOLEAN-5,12-DIEN-28-OIC-ACID	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	VITEAGNUSIN-H	Fruit				--
0	6'-O-FOLIAMENTHOYLMUSSAE NOSIDIC-ACID	Shoot				--
0	DITERPENES	Fruit				--
0	T-CADINOL	Flower				Jim Duke's personal files.
0	VITICIN	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.
1	ANDROSTENEDIONE	Leaf				--
0	CASTINE	Fruit				--
0	ALPHA-TERPINEOL ACETATE	Flower				Jim Duke's personal files.
0	QUERCETAGETIN-3,6,7-TRIMETHYLETHER	Fruit				Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
2	TRANS-BETA-FARNESENE	Fruit				Jim Duke's personal files.
7	ARTEMETIN	Root Bark				--