

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Verbascum thapsus*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	28-NOR-OLEANA-12,17-DIEN-3-BETA-23-DIOL	Fruit				--
0	3,5-DIHYDROXY-6,7-DIMETHOXY-FLAVONE	Plant		80.0		--
0	3-ALPHA-HYDROXYDRIMMANYL-8-METHANOATE	Plant				--
0	5-ETHOXY-METHYL-FURFURAL	Fruit				--
0	6-O-(ALPHA-L-(2"-FERULOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		10.0		--
0	6-O-(ALPHA-L-(2"-ISOFERULOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		69.0		--
0	6-O-(ALPHA-L-(2"-O-CAFFEOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		6.0		--
0	6-O-(ALPHA-L-(2"-O-P-COUMAROYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		22.0		--
0	6-O-(ALPHA-L-(2"-O-P-METHOXY-CINNAOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		31.0		--
0	6-O-(ALPHA-L-(2"-O-P-METHOXY-CINNAOYL-4"-O-ACETYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		9.0		--
0	6-O-(ALPHA-L-(2"-P-METHOXY-CINNAOYL-3"-O-ACETYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		20.0		--
0	6-O-(ALPHA-L-(2,3,4-DIMETHOXY-CINNAOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		5.0		--
0	6-O-(ALPHA-L-(3"-ISOFERULOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		39.0		--
0	6-O-(ALPHA-L-(3"-O-P-COUMAROYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		37.0		--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	6-O-(ALPHA-L-(3"-O-P-METHOXY-CINNAMOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		56.0		--
0	6-O-(ALPHA-L-(3,3,4-DIEMTHOXY-CINNAMOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		9.0		--
0	6-O-(ALPHA-L-(4"-FERULOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		8.0		--
0	6-O-(ALPHA-L-(4"-O-P-COUMAROYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		17.0		--
0	6-O-(ALPHA-L-(4"-O-P-METHOXY-CINNAMOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		45.0		--
0	6-O-(ALPHA-L-(4-CAFFEOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		9.0		--
0	6-O-(ALPHA-L-ISOFERULOYL)-RHAMNOPYRANOSYL)-CATALPOL	Plant		19.0		--
0	6-O-(P-HYDROXY-BENZOYL)-AJUGOL	Plant		4.8		--
0	6-O-BETA-XYLOXYL-AUCUBIN	Plant				--
0	6-O-SYRINGOYL-AJUGOL	Plant		0.8		--
0	6-O-VANILLOYL-AJUGOL	Plant		19.0		--
0	AJUGOL	Plant		75.0		--
0	AJUGOL-ACETATE	Plant				--
10	ALPHA-AMYRIN	Root				--
10	ALPHA-AMYRIN	Stem				--
10	ALPHA-AMYRIN	Leaf				--
2	ALPHA-SPINASTEROL	Fruit				--
5	ALUMINUM	Leaf		1090.0	0.3892201259242459	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	ARABINOGLACTAN	Flower				--
0	ARACHIDIC-ACID	Seed Oil		16000.0	1.1596625611969296	--
2	ARENARIOSIDE	Plant		22.0		--
112	ASCORBIC-ACID	Leaf	341.0	776.0	-0.3719171852420888	--
0	ASH	Leaf	37840.0	86000.0	-0.5788064877331136	--
20	AUCUBIN	Root				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
20	AUCUBIN	Stem		600.0		--
20	AUCUBIN	Leaf		100.0	-1.1297063465489834	--
20	AUCUBIN	Plant		150.0	-0.3198520148637861	--
20	AUCUBIN	Shoot	25.0	13900.0		--
0	AUCUBIN-6-GLUCOSIDE	Plant				--
0	AUCUBIN-6-XYLOSIDE	Plant				--
1	BEHENIC-ACID	Seed Oil		3000.0	-1.2213893416546542	--
1	BEHENIC-ACID	Flower				--
9	BENZYL-ALCOHOL	Seed				--
9	BETA-AMYRIN	Root				--
9	BETA-AMYRIN	Seed				--
9	BETA-AMYRIN	Stem				--
9	BETA-AMYRIN	Leaf				--
53	BETA-CAROTENE	Leaf	19.0	43.0	-0.9506764482123975	--
47	BETA-SITOSTEROL	Root				--
47	BETA-SITOSTEROL	Stem				--
47	BETA-SITOSTEROL	Leaf				--
47	BETA-SITOSTEROL	Seed Oil				--
47	BETA-SITOSTEROL	Flower				--
47	BETA-SITOSTEROL	Seed				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	CALCIUM	Leaf	5852.0	13300.0	-0.3510114574130655	--
2	CAMPESTEROL	Stem				--
0	CARBOHYDRATES	Leaf	353320.0	803000.0	1.5201450259731908	--
3	CATALPOL	Plant		50.0		--
3	CATALPOL	Shoot				--
0	CATALPOL-6-O-(ALPHA-L-(3''-O-CAFFELOYL)-RHAMNOPYRANOSYL	Plant		21.0		--
24	CHROMIUM	Leaf	0.6	1.4	-0.52714700936206	--
2	COBALT	Leaf	6.0	12.8	-0.22280563230793393	--
57	COUMARIN	Leaf				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
10	CROCETIN	Flower				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	DEHYDRO-DICONIFERYL-GLUCOSIDE-D	Plant		0.6		--
0	DEHYDRO-DICONIFERYL-GLUCOSIDE-E	Plant		1.5		--
0	DEHYDRO-DICONIFERYL-GLUCOSIDE-F	Plant		2.0		--
0	DEHYDRO-DICONIFERYL-GLUCOSIDE-G	Plant		2.4		--
0	ERGOSTEROL-PEROXIDE	Flower				--
0	FAT	Leaf	5720.0	13000.0	-0.8660602512576238	--
0	FAT	Seed	35000.0	271000.0	0.029562564488382438	--
15	FIBER	Leaf		111000.0	-0.6249222392756235	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FIBER(CRUDE)	Leaf		111000.0	-0.42761482826376923	--
0	FIBER(DIETARY)	Leaf		350000.0	-0.29464124786862994	--
2	FORSYTHOSIDE-B	Plant		4.0		--
0	FUNGISTEROL	Seed Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	HARPAGIDE	Plant		70.0		--
0	HARPAGIDE-ACETATE	Plant				--
6	HARPAGOSIDE	Plant		89.0		--
0	HEPTAOSE	Root				--
31	HESPERIDIN	Plant				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	HYDROXYTHAPSUINE-A	Fruit				--
0	HYDROXYTHAPSUINE-B	Fruit				--
6	IRON	Leaf	104.0	236.0	-0.32238008504806986	--
11	ISORHAMNETIN	Flower				--
0	KILOCALORIES	Leaf		2680.0	-0.5449589251776649	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	LATERIOSIDE	Plant		5390.0		--
0	LEUCOSCEPTOSIDE-B	Plant		4.0		--
27	LINOLEIC-ACID	Seed	48000.0	613000.0	4.33441124200899	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
21	LUPEOL	Root				--
21	LUPEOL	Stem				--
21	LUPEOL	Leaf				--
65	MAGNESIUM	Leaf	1421.0	3230.0	-0.34587713524983377	--
14	MANGANESE	Leaf	5.3	12.0	-0.43993638289409226	--
3	MUCILAGE	Seed		3700.0	-1.2198632439349997	--
3	MUCILAGE	Flower				--
39	NIACIN	Leaf	42.0	95.0	-0.030418329796116125	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NONAOSE	Root				--
0	OCTAOSE	Root				--
0	OLEANA-11,13(18)-DIEN-3-BETA-23,28-TRIOL	Fruit				--
64	OLEANOLIC-ACID	Flower				--
18	OLEIC-ACID	Seed	292000.0	300000.0	1.4870759326450875	--
13	PALMITIC-ACID	Seed		309600.0	5.688451515633364	--
13	PALMITIC-ACID	Seed Oil		656000.0	3.1527427453153964	--
4	PHOSPHORUS	Leaf	2508.0	5700.0	0.13404287578502	--
14	POTASSIUM	Leaf	5808.0	13200.0	-0.7570441086555757	--
0	PROTEIN	Seed	178000.0	183000.0	-0.4518573267949109	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PROTEIN	Leaf	47520.0	108000.0	-1.035954705344622	--
15	RIBOFLAVIN	Leaf	0.5	1.1	-0.172705289047245	--
13	ROTENONE	Leaf				--
0	SAIKOGENIN-A	Fruit				--
5	SAPONINS	Plant				--
60	SELENIUM	Leaf	0.2	0.5	-0.34412954703445015	--
4	SILICON	Leaf	3.3	7.4	-0.39118183776763965	--
1	SODIUM	Leaf	334.0	760.0	-0.5123036729552699	--
8	STEARIC-ACID	Seed		164000.0	2.9928530647275444	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	STEARIC-ACID	Seed Oil		325000.0	1.7217050423196145	--
12	STIGMASTEROL	Root				--
12	STIGMASTEROL	Seed				--
12	STIGMASTEROL	Stem				--
12	STIGMASTEROL	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	SUCROSE	Seed Oil				--
2	TARAXASTEROL	Seed				--
0	THAPSIC-ACID	Flower		2300.0		--
0	THAPSUINE-A	Fruit				--
0	THAPSUINE-B	Fruit				--
31	THIAMIN	Leaf				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	THIAMINE	Leaf				--
4	TIN	Leaf	5.3	12.0	-0.4331991239429111	--
0	VERATRIC-ACID	Fruit				--
0	VERBACOSIDE	Plant		333.0		--
0	VERBASCOSAPONIN	Flower				--
1	VERBASCOSE	Root				--
20	VERBASCOSIDE	Plant				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	VERBASCUM-LIGNAN-GLYCOSIDE-13	Plant		1.0		--
0	VERBASCUM-PHENYLETHANOID-GLYCOSIDE	Plant		1.0		--
0	VERBASTEROL	Plant				--
0	WATER	Leaf		560000.0	-1.2354599137200606	--
1	XYLOGLUCAN	Flower				--
77	ZINC	Leaf	0.2	0.4	-0.524313284412666	--