

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Gentiana lutea*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
112	ASCORBIC-ACID	Root	40.0	183.0	-0.5413626409176785	--
102	CAFFEIC-ACID	Root				--
77	ZINC	Root	0.6	2.9	-0.9319328403212439	--
65	MAGNESIUM	Root	603.0	2740.0	0.09495627526651279	--
60	SELENIUM	Root	0.4	1.8	-0.2344070430977907	--
60	LIMONENE	Essential Oil		346800.0	1.2590716018100643	Abstract (See species file)
53	BETA-CAROTENE	Root	9.0	39.0	-0.18704689349928313	--
53	LINALOOL	Essential Oil				Abstract (See species file)
43	PROTOCATECHUIC-ACID	Root				--
39	NIACIN	Root	13.0	61.0	0.31188169659251	--
37	CARVACROL	Essential Oil				Abstract (See species file)
35	TANNIN	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.
31	THIAMIN	Root		4.8	-0.1667482173069163	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
28	CALCIUM	Root	1791.0	8140.0	0.0807362259091836	--
24	PECTIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	GENTIANINE	Root	6000.0	8000.0	1.0	--
24	CHROMIUM	Root	0.3	1.3	-0.30083292134545053	--
23	ALPHA-TERPINEOL	Essential Oil				Abstract (See species file)
21	LUPEOL	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

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19	INULIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
18	MANGIFERIN	Plant				Abstract (See species file)
15	RIBOFLAVIN	Root	0.5	2.1	-0.4321138905848174	--
14	SUCROSE	Root				--
14	MANGANESE	Root	0.5	2.3	-0.5184092277453715	--
14	POTASSIUM	Root	1929.0	8770.0	-0.5132071461769279	--
11	NICOTINIC-ACID	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	SINAPIC-ACID	Root				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.
9	BETA-AMYRIN	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
9	SWEROSIDE	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
8	GENTISIC-ACID	Root				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.
6	IRON	Root	8.0	37.0	-0.38789995702739277	--
6	AMAROGENTIN	Root	100.0	3300.0		--
6	SYRINGIC-ACID	Root				--
5	STARCH	Root	35200.0	160000.0	-0.6514767798388345	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	ALUMINUM	Root	64.0	291.0	-0.15634216717940302	--
4	SWERTIAMARIN	Root				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
4	PHOSPHORUS	Root	594.0	2700.0	-0.14368503617776215	--
4	GENTIOPIICOSIDE	Root	11400.0	35000.0		--
4	SILICON	Root				--
4	GENTIOPIICRIN	Root	11400.0	35000.0		--
4	TIN	Root	9.0	40.0	2.3901698461602563	--
3	GENTISEIN	Root				--
2	PHYTOSTEROLS	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
2	GENTISIN	Root		380.0		--
2	COBALT	Root	0.3	1.4	-0.5148215616573423	--
2	ISOGENTISIN	Root		380.0		--
1	SODIUM	Root	9.0	41.0	-0.49368227192150566	--
0	GENTIIN	Root				--
0	THIAMINE	Root	2.0	7.8	0.717646386075359	--
0	GENTIANOSE	Root				--
0	SUGARS	Root	22000.0	100000.0	-0.03757564189391796	--
0	ASH	Root	18040.0	82000.0	0.41237577047078894	--
0	OXYCINNAMIC-ACID	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GENTIAMARIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Root	2860.0	13000.0	-0.3294780368795451	--

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0	NICOTINIC-ACID-AMIDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GENTIALUTINE	Root				--
0	FIBER(DIETARY)	Root		420000.0	0.23558261041932288	--
0	SACCHAROSE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	FAT	Seed		260000.0	-0.028378370202724528	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FIBER(CRUDE)	Root		120000.0	0.2580364813561677	--
0	GENTIOSIDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	7-O-PRIMVEROSYL-1-OXY-3-METHOXYXANTHONE	Root				Abstract (See species file)
0	WATER	Root		780000.0	0.07039472351276986	--
0	CIS-LINALYL-OXIDE	Plant				--
0	2,3,4,6-TETRAHYDROXYBENZOPHENONE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GENTIOFLAVOSIDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	PROTEIN	Seed		310000.0	0.6778734437162001	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	1-O-PRIMVEROSYL-7-OXY-3-METHOXYXANTHONE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GENTIODISE	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Root	30360.0	138000.0	0.21995042993271519	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	LINALOL	Essential Oil				--
0	1-HYDROXY-3,7-DIMETHOXYXANTHONE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	GENTIOBIOSE	Root	50000.0	80000.0		--
0	SECO-IRIDOIDS	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	1,3,7-TRIMETHOXYXANTHONE	Root				--