

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Gentiana lutea*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHYTOSTEROLS	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
14	SUCROSE	Root				--
0	GENTIANOSE	Root				--
24	PECTIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
21	LUPEOL	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
19	INULIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	OXYCINNAMIC-ACID	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	GENTIOPICOSIDE	Root	11400.0	35000.0		--
2	GENTISIN	Root		380.0		--
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.
0	GENTIAMARIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
4	SILICON	Root				--
6	AMAROGENTIN	Root	100.0	3300.0		--
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
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.
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.
0	GENTIALUTINE	Root				--
11	NICOTINIC-ACID	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	GENTISEIN	Root				--
0	SACCHAROSE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
23	ALPHA-TERPINEOL	Essential Oil				Abstract (See species file)
0	GENTIOSIDE	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)
0	7-O-PRIMVEROSYL-1-OXY-3-METHOXYXANTHONE	Root				Abstract (See species file)
4	GENTIOPICRIN	Root	11400.0	35000.0		--
43	PROTocatechuic-ACID	Root				--
0	CIS-LINALYL-OXIDE	Plant				--
53	LINALOOL	Essential Oil				Abstract (See species file)
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.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GENTIOFLAVOSIDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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.
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
37	CARVACROL	Essential Oil				Abstract (See species file)
9	SWEROSIDE	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
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.
6	SYRINGIC-ACID	Root				--
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.
2	ISOGENTISIN	Root		380.0		--
0	1,3,7-TRIMETHOXYXANTHONE	Root				--
4	SWERTIAMARIN	Root				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	GENTIIN	Root				--

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102	CAFFEIC-ACID	Root				--
77	ZINC	Root	0.6	2.9	-0.9319328403212439	--
5	STARCH	Root	35200.0	160000.0	-0.6514767798388345	--
112	ASCORBIC-ACID	Root	40.0	183.0	-0.5413626409176785	--
14	MANGANESE	Root	0.5	2.3	-0.5184092277453715	--
2	COBALT	Root	0.3	1.4	-0.5148215616573423	--
14	POTASSIUM	Root	1929.0	8770.0	-0.5132071461769279	--
1	SODIUM	Root	9.0	41.0	-0.49368227192150566	--
15	RIBOFLAVIN	Root	0.5	2.1	-0.4321138905848174	--
6	IRON	Root	8.0	37.0	-0.38789995702739277	--
0	FAT	Root	2860.0	13000.0	-0.3294780368795451	--
24	CHROMIUM	Root	0.3	1.3	-0.30083292134545053	--
60	SELENIUM	Root	0.4	1.8	-0.2344070430977907	--
53	BETA-CAROTENE	Root	9.0	39.0	-0.18704689349928313	--
31	THIAMIN	Root		4.8	-0.1667482173069163	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
5	ALUMINUM	Root	64.0	291.0	-0.15634216717940302	--
4	PHOSPHORUS	Root	594.0	2700.0	-0.14368503617776215	--
0	SUGARS	Root	22000.0	100000.0	-0.03757564189391796	--
0	FAT	Seed		260000.0	-0.028378370202724528	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	WATER	Root		780000.0	0.07039472351276986	--
28	CALCIUM	Root	1791.0	8140.0	0.0807362259091836	--
65	MAGNESIUM	Root	603.0	2740.0	0.09495627526651279	--
0	PROTEIN	Root	30360.0	138000.0	0.21995042993271519	--
0	FIBER(DIETARY)	Root		420000.0	0.23558261041932288	--
0	FIBER(CRUDE)	Root		120000.0	0.2580364813561677	--

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39	NIACIN	Root	13.0	61.0	0.31188169659251	--
0	ASH	Root	18040.0	82000.0	0.41237577047078894	--
0	PROTEIN	Seed		310000.0	0.6778734437162001	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	THIAMINE	Root	2.0	7.8	0.717646386075359	--
24	GENTIANINE	Root	6000.0	8000.0	1.0	--
60	LIMONENE	Essential Oil		346800.0	1.2590716018100643	Abstract (See species file)
4	TIN	Root	9.0	40.0	2.3901698461602563	--