

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Gentiana lutea*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
77	ZINC	Root	0.6	2.9	-0.9319328403212439	--
0	WATER	Root		780000.0	0.07039472351276986	--
4	TIN	Root	9.0	40.0	2.3901698461602563	--
0	THIAMINE	Root	2.0	7.8	0.717646386075359	--
31	THIAMIN	Root		4.8	-0.1667482173069163	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
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.
6	SYRINGIC-ACID	Root				--
4	SWERTIAMARIN	Root				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
9	SWEROSIDE	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	SUGARS	Root	22000.0	100000.0	-0.03757564189391796	--
14	SUCROSE	Root				--
5	STARCH	Root	35200.0	160000.0	-0.6514767798388345	--
1	SODIUM	Root	9.0	41.0	-0.49368227192150566	--
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.
4	SILICON	Root				--
60	SELENIUM	Root	0.4	1.8	-0.2344070430977907	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SECO-IRIDOIDS	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
0	SACCHAROSE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	RIBOFLAVIN	Root	0.5	2.1	-0.4321138905848174	--
43	PROTOCATECHUIC-ACID	Root				--
0	PROTEIN	Seed		310000.0	0.6778734437162001	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	PROTEIN	Root	30360.0	138000.0	0.21995042993271519	--
14	POTASSIUM	Root	1929.0	8770.0	-0.5132071461769279	--
2	PHYTOSTEROLS	Root				Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
4	PHOSPHORUS	Root	594.0	2700.0	-0.14368503617776215	--
24	PECTIN	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.
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.
11	NICOTINIC-ACID	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
39	NIACIN	Root	13.0	61.0	0.31188169659251	--
18	MANGIFERIN	Plant				Abstract (See species file)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	MANGANESE	Root	0.5	2.3	-0.5184092277453715	--
65	MAGNESIUM	Root	603.0	2740.0	0.09495627526651279	--
21	LUPEOL	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
53	LINALOOL	Essential Oil				Abstract (See species file)
0	LINALOL	Essential Oil				--
60	LIMONENE	Essential Oil		346800.0	1.2590716018100643	Abstract (See species file)
2	ISOGENTISIN	Root		380.0		--
6	IRON	Root	8.0	37.0	-0.38789995702739277	--
19	INULIN	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	GENTISIN	Root		380.0		--
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.
3	GENTISEIN	Root				--
0	GENTIOSIDE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	GENTIOPIROSIDE	Root	11400.0	35000.0		--
4	GENTIOPICRIN	Root	11400.0	35000.0		--
0	GENTIOFLAVOSIDE	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

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GENTIOBIOSE	Root	50000.0	80000.0		--
0	GENTIIN	Root				--
0	GENTIANOSE	Root				--
24	GENTIANINE	Root	6000.0	8000.0	1.0	--
0	GENTIAMARIN	Root				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	GENTIALUTINE	Root				--
0	FIBER(DIETARY)	Root		420000.0	0.23558261041932288	--
0	FIBER(CRUDE)	Root		120000.0	0.2580364813561677	--
0	FAT	Root	2860.0	13000.0	-0.3294780368795451	--
0	FAT	Seed		260000.0	-0.028378370202724528	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	COBALT	Root	0.3	1.4	-0.5148215616573423	--
0	CIS-LINALYL-OXIDE	Plant				--
24	CHROMIUM	Root	0.3	1.3	-0.30083292134545053	--
37	CARVACROL	Essential Oil				Abstract (See species file)
28	CALCIUM	Root	1791.0	8140.0	0.0807362259091836	--
102	CAFFEIC-ACID	Root				--
53	BETA-CAROTENE	Root	9.0	39.0	-0.18704689349928313	--
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.
0	ASH	Root	18040.0	82000.0	0.41237577047078894	--
112	ASCORBIC-ACID	Root	40.0	183.0	-0.5413626409176785	--
6	AMAROGENTIN	Root	100.0	3300.0		--
5	ALUMINUM	Root	64.0	291.0	-0.15634216717940302	--
23	ALPHA-TERPINEOL	Essential Oil				Abstract (See species file)
0	7-O-PRIMVEROSYL-1-OXY-3-METHOXYXANTHONE	Root				Abstract (See species file)

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2,3',4,6-TETRAHYDROXYBENZOPH ENONE	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
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	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	1,3,7- TRIMETHOXYXANTHONE	Root				--