

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Gentiana lutea*

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|-----------------|---------------|---------|----------|--------|--|
| 4 | SILICON | Root | | | | -- |
| 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. |
| 24 | PECTIN | Root | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 53 | LINALOOL | Essential Oil | | | | Abstract (See species file) |
| 3 | GENTISEIN | Root | | | | -- |
| 6 | SYRINGIC-ACID | Root | | | | -- |
| 23 | ALPHA-TERPINEOL | Essential Oil | | | | Abstract (See species file) |
| 11 | NICOTINIC-ACID | 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. |
| 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. |
| 14 | SUCROSE | Root | | | | -- |
| 18 | MANGIFERIN | Plant | | | | Abstract (See species file) |
| 2 | PHYTOSTEROLS | Root | | | | Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp. |

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|------------------|---------------------|---------------|---------|----------|----------------------|--|
| 21 | LUPEOL | Root | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 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. |
| 37 | CARVACROL | Essential Oil | | | | Abstract (See species file) |
| 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. |
| 102 | CAFFEIC-ACID | Root | | | | -- |
| 43 | PROTocatechuic-ACID | Root | | | | -- |
| 19 | INULIN | Root | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 24 | CHROMIUM | Root | 0.3 | 1.3 | -0.30083292134545053 | -- |
| 2 | COBALT | Root | 0.3 | 1.4 | -0.5148215616573423 | -- |
| 60 | SELENIUM | Root | 0.4 | 1.8 | -0.2344070430977907 | -- |
| 15 | RIBOFLAVIN | Root | 0.5 | 2.1 | -0.4321138905848174 | -- |
| 14 | MANGANESE | Root | 0.5 | 2.3 | -0.5184092277453715 | -- |
| 77 | ZINC | Root | 0.6 | 2.9 | -0.9319328403212439 | -- |
| 31 | THIAMIN | Root | | 4.8 | -0.1667482173069163 | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp. |
| 6 | IRON | Root | 8.0 | 37.0 | -0.38789995702739277 | -- |
| 53 | BETA-CAROTENE | Root | 9.0 | 39.0 | -0.18704689349928313 | -- |
| 4 | TIN | Root | 9.0 | 40.0 | 2.3901698461602563 | -- |
| 1 | SODIUM | Root | 9.0 | 41.0 | -0.49368227192150566 | -- |

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|------------------|-----------------|---------------|---------|----------|----------------------|-----------------------------|
| 39 | NIACIN | Root | 13.0 | 61.0 | 0.31188169659251 | -- |
| 112 | ASCORBIC-ACID | Root | 40.0 | 183.0 | -0.5413626409176785 | -- |
| 5 | ALUMINUM | Root | 64.0 | 291.0 | -0.15634216717940302 | -- |
| 2 | GENTISIN | Root | | 380.0 | | -- |
| 2 | ISOAGENTISIN | Root | | 380.0 | | -- |
| 4 | PHOSPHORUS | Root | 594.0 | 2700.0 | -0.14368503617776215 | -- |
| 65 | MAGNESIUM | Root | 603.0 | 2740.0 | 0.09495627526651279 | -- |
| 6 | AMAROGENTIN | Root | 100.0 | 3300.0 | | -- |
| 24 | GENTIANINE | Root | 6000.0 | 8000.0 | 1.0 | -- |
| 28 | CALCIUM | Root | 1791.0 | 8140.0 | 0.0807362259091836 | -- |
| 14 | POTASSIUM | Root | 1929.0 | 8770.0 | -0.5132071461769279 | -- |
| 4 | GENTIOPICRIN | Root | 11400.0 | 35000.0 | | -- |
| 4 | GENTIOPICROSIDE | Root | 11400.0 | 35000.0 | | -- |
| 5 | STARCH | Root | 35200.0 | 160000.0 | -0.6514767798388345 | -- |
| 60 | LIMONENE | Essential Oil | | 346800.0 | 1.2590716018100643 | Abstract (See species file) |