

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in Centella asiatica

| Activities Count | Chemical        | Plant Part    | Low PPM | High PPM | StdDev               | Reference Citation   |
|------------------|-----------------|---------------|---------|----------|----------------------|--|
| 176              | QUERCETIN       | 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. |
| 112              | ASCORBIC-ACID   | Plant         |         | 138.0    | -0.5612889938563121  | --   |
| 112              | ASCORBIC-ACID   | Leaf          | 40.0    | 374.0    | -0.40921766271262444 | --   |
| 77               | ZINC            | Leaf          | 0.4     | 3.4      | -0.5059022324796413  | --   |
| 77               | ZINC            | Bark          |         | 3.4      | -0.9069023286651865  | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.  |
| 75               | KAEMPFEROL      | Leaf          |         |          |                      | Jim Duke's personal files.   |
| 75               | KAEMPFEROL      | Plant         |         |          |                      | --   |
| 65               | MAGNESIUM       | Leaf          | 342.0   | 3200.0   | -0.3574611579280929  | --   |
| 60               | LIMONENE        | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 60               | SELENIUM        | Leaf          | 0.1     | 1.2      | -0.29034536355768803 | --   |
| 53               | BETA-CAROTENE   | Leaf          | 40.0    | 369.0    | 0.46903611401255635  | --   |
| 53               | LINALOOL        | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 47               | BETA-SITOSTEROL | Plant         |         |          |                      | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.  |
| 47               | BETA-SITOSTEROL | Essential Oil |         | 2000.0   | 1.0                  | Jim Duke's personal files.   |
| 41               | CAMPHOR         | Essential Oil |         |          |                      | --   |
| 39               | NIACIN          | Leaf          | 12.0    | 112.0    | 0.17636268788895457  | --   |
| 35               | GERANIOL        | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 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         | Leaf          | 1.5     | 14.0     | 1.1869303740705777   | --   |
| 28               | ALPHA-PINENE    | Shoot         |         |          |                      | Jim Duke's personal files.   |

| Activities Count | Chemical        | Plant Part    | Low PPM | High PPM | StdDev               | Reference Citation   |
|------------------|-----------------|---------------|---------|----------|----------------------|--|
| 28               | ALPHA-PINENE    | 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. |
| 28               | ALPHA-PINENE    | Essential Oil |         | 2000.0   | -0.5424708227492797  | Jim Duke's personal files.   |
| 28               | CALCIUM         | Leaf          | 1700.0  | 15890.0  | -0.17404285585996676 | --   |
| 27               | LINOLEIC-ACID   | Plant         |         |          |                      | --   |
| 24               | CHROMIUM        | Leaf          | 0.1     | 1.0      | -0.5613457205769528  | --   |
| 24               | PECTIN          | Leaf          | 6420.0  | 60000.0  | 0.848030969096559    | --   |
| 23               | ALPHA-TERPINEOL | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 22               | BETULINIC-ACID  | Plant         |         | 1100.0   | -0.49265454919484347 | Jim Duke's personal files.   |
| 22               | ISOQUERCITRIN   | Leaf          |         |          |                      | Jim Duke's personal files.   |
| 22               | MYRCENE         | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 22               | MYRCENE         | Essential Oil |         | 6000.0   | -0.3653970753458515  | Jim Duke's personal files.   |
| 19               | ASIATICOSIDE    | Leaf          | 700.0   | 1200.0   |                      | Jim Duke's personal files.   |
| 19               | ASIATICOSIDE    | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 19               | ASIATICOSIDE    | Plant         |         |          |                      | --   |
| 18               | OLEIC-ACID      | Plant         |         |          |                      | --   |
| 17               | FARNESOL        | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 15               | FIBER           | Leaf          | 20000.0 | 187000.0 | 0.3149049121779396   | --   |
| 15               | RIBOFLAVIN      | Leaf          | 1.4     | 13.0     | -0.11692421020247182 | --   |
| 14               | POTASSIUM       | Leaf          | 414.0   | 3870.0   | -1.169036049980163   | --   |
| 14               | MANGANESE       | Leaf          | 3.0     | 27.7     | -0.41383578503505414 | --   |
| 13               | BETA-PINENE     | Essential Oil |         | 2000.0   | -0.6859771042347549  | Jim Duke's personal files.   |
| 13               | PALMITIC-ACID   | Plant         |         |          |                      | --   |
| 13               | BETA-PINENE     | 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. |

| Activities Count | Chemical        | Plant Part    | Low PPM | High PPM | StdDev              | Reference Citation  |
|------------------|-----------------|---------------|---------|----------|---------------------|---|
| 12               | GLYCINE         | Plant         |         |          |                     | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 12               | STIGMASTEROL    | Plant         |         | 40.0     | -0.8073781309648732 | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 12               | STIGMASTEROL    | Essential Oil |         | 2000.0   |                     | Jim Duke's personal files.  |
| 11               | NEROLIDOL       | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 11               | GAMMA-TERPINENE | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 11               | GAMMA-TERPINENE | Essential Oil |         | 4000.0   | -0.767502970243684  | Jim Duke's personal files.  |
| 10               | NEROL           | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 9                | CAMPHENE        | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 9                | DELTA-CADINENE  | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 8                | BRAHMINOSIDE    | Plant         |         | 1600.0   |                     | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |

| Activities Count | Chemical                | Plant Part    | Low PPM | High PPM | StdDev               | Reference Citation  |
|------------------|-------------------------|---------------|---------|----------|----------------------|---|
| 8                | GLUTAMIC-ACID           | Plant         |         |          |                      | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 8                | INOSITOL                | Plant         |         |          |                      | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.   |
| 8                | STEARIC-ACID            | Plant         |         |          |                      | --  |
| 8                | CARYOPHYLLENE-OXIDE     | Shoot         |         |          |                      | Jim Duke's personal files.  |
| 7                | BRAHMOSIDE              | Plant         |         | 3700.0   |                      | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 7                | GLUCOSE                 | Plant         |         |          |                      | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.   |
| 7                | ASTRAGALIN              | Leaf          |         |          |                      | Jim Duke's personal files.  |
| 6                | BETA-BISABOLENE         | Shoot         |         |          |                      | Jim Duke's personal files.  |
| 6                | IRON                    | Leaf          | 3.0     | 29.0     | -0.8470707525252408  | --  |
| 5                | BETA-ELEMENE            | Essential Oil |         | 30000.0  | -0.48593246550536906 | Jim Duke's personal files.  |
| 5                | ALUMINUM                | Leaf          | 220.0   | 2060.0   | 1.430229610546625    | --  |
| 5                | SAPONINS                | Leaf          | 268.0   | 2500.0   | -1.0907412926645894  | --  |
| 5                | BETA-ELEMENE            | Leaf          |         |          |                      | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.   |
| 5                | BETA-SESQUIPHELLANDRENE | Shoot         |         |          |                      | Jim Duke's personal files.  |

| Activities Count | Chemical             | Plant Part    | Low PPM | High PPM | StdDev               | Reference Citation  |
|------------------|----------------------|---------------|---------|----------|----------------------|---|
| 4                | TIN                  | Leaf          | 1.3     | 12.0     | -0.4331991239429111  | --  |
| 4                | PHOSPHORUS           | Leaf          | 300.0   | 2800.0   | -0.39951935749949974 | --  |
| 4                | SILICON              | Leaf          | 1.5     | 14.0     | -0.37155124751733193 | --  |
| 4                | PELLANDRENE          | Plant         |         |          |                      | Jim Duke's personal files.  |
| 3                | ASPARTIC-ACID        | Plant         |         |          |                      | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 3                | PYRIDINE             | Shoot         |         |          |                      | Jim Duke's personal files.  |
| 2                | OXYASIATICOSIDE      | 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.  |
| 2                | COBALT               | Leaf          | 0.8     | 7.3      | -0.2554961829884984  | --  |
| 2                | GERMACRENE-D         | Shoot         |         |          |                      | Jim Duke's personal files.  |
| 2                | ALPHA-HUMULENE       | Shoot         |         |          |                      | Jim Duke's personal files.  |
| 2                | GERMACRENE-D         | Essential Oil |         | 160000.0 | 1.0                  | Jim Duke's personal files.  |
| 2                | GERMACRENE-D         | Plant         |         |          |                      | --  |
| 2                | METHANOL             | Plant         |         |          |                      | --  |
| 2                | MADECASSOSIDE        | Shoot         |         |          |                      | Jim Duke's personal files.  |
| 2                | CAMPESTEROL          | 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.  |
| 2                | TRANS-BETA-FARNESENE | Plant         |         |          |                      | --  |
| 2                | ELAIDIC-ACID         | Plant         |         |          |                      | --  |

| Activities Count | Chemical              | Plant Part    | Low PPM | High PPM | StdDev              | Refernce Citation  |
|------------------|-----------------------|---------------|---------|----------|---------------------|--|
| 2                | CAMPESTEROL           | Essential Oil |         | 2000.0   |                     | Jim Duke's personal files.   |
| 2                | MADECASSOSIDE         | Plant         |         |          |                     | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.  |
| 1                | ASIATIC-ACID          | Plant         |         |          |                     | --   |
| 1                | LIGNOCERIC-ACID       | Plant         |         |          |                     | --   |
| 1                | RAFFINOSE             | Plant         |         |          |                     | --   |
| 1                | 2,3-DIHYDROBENZOFURAN | Shoot         |         |          |                     | Jim Duke's personal files.   |
| 1                | TOLUENE               | Shoot         |         |          |                     | Jim Duke's personal files.   |
| 1                | SODIUM                | Leaf          | 1113.0  | 10400.0  | 1.1998266498363401  | --   |
| 0                | INDOCENTOIC-ACID      | Plant         |         |          |                     | --   |
| 0                | HEPTAN-1-AL           | Shoot         |         |          |                     | Jim Duke's personal files.   |
| 0                | EO                    | Leaf          | 321.0   | 6000.0   | -0.4868602567711417 | --   |
| 0                | 3-GLUCOSYLKAEMPFEROL  | Plant         |         |          |                     | --   |
| 0                | BORNEOL-ACETATE       | Essential Oil |         | 2000.0   | -0.745653834002719  | Jim Duke's personal files.   |
| 0                | PETAN-1-AL            | Shoot         |         |          |                     | Jim Duke's personal files.   |
| 0                | RHAMNOSE              | Plant         |         |          |                     | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.  |
| 0                | ASIATICENTOIC-ACID    | 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                | MADECASSIC-ACID       | Plant         |         |          |                     | --   |
| 0                | HYDROCOTYLIN          | Plant         |         | 16.0     |                     | --   |
| 0                | HEPT-TRANS-2-EN-1-AL  | Shoot         |         |          |                     | Jim Duke's personal files.   |
| 0                | CINEOLE               | Essential Oil |         |          |                     | --   |
| 0                | BICYCLOLEMENE         | Essential Oil |         | 13000.0  |                     | Jim Duke's personal files.   |

| Activities Count | Chemical            | Plant Part    | Low PPM | High PPM | StdDev               | Reference Citation   |
|------------------|---------------------|---------------|---------|----------|----------------------|--|
| 0                | AMINOBTYRATE        | 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                | MADASIATIC-ACID     | Plant         |         |          |                      | J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.  |
| 0                | INDOCENTELLOSIDE    | Plant         |         | 4000.0   |                      | Jim Duke's personal files.   |
| 0                | THANKUNISIDE        | Plant         |         |          |                      | --   |
| 0                | ALPHA-COPAENE       | Essential Oil |         | 9000.0   | -0.36082830563118673 | Jim Duke's personal files.   |
| 0                | BRAHMIC-ACID        | Plant         |         | 970.0    |                      | --   |
| 0                | THANKUNIC-ACID      | Plant         |         |          |                      | --   |
| 0                | CENTOIC-ACID        | Plant         |         |          |                      | --   |
| 0                | BETA-CHAMIGRENE     | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 0                | N-DODECANE          | Essential Oil |         |          |                      | --   |
| 0                | ALPHA-CHAMIGRENE    | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 0                | BICYCLOELEMENE      | Plant         |         |          |                      | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.  |
| 0                | OCT-TRANS-2-EN-1-AL | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 0                | ASH                 | Leaf          | 16050.0 | 150000.0 | 0.5487949419882225   | --   |
| 0                | M-XYLENE            | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 0                | CENTELLOSIDE        | 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                | BETA-CARYOPHYLLENE  | Shoot         |         |          |                      | Jim Duke's personal files.   |
| 0                | MYO-INOSITOL        | Plant         |         |          |                      | --   |
| 0                | WATER               | Leaf          |         | 893000.0 | 0.4258710730214559   | --   |
| 0                | KILOCALORIES        | Leaf          | 340.0   | 3180.0   | 0.2609973458508899   | 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                | 2-METHYL-BUTAN-2-OL    | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 0                | PROTEIN                | Leaf          | 16050.0 | 150000.0 | -0.6169641238666383 | --  |
| 0                | NON-3-EN-2-ONE         | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 0                | FURAN-2-CARBOXALDEHYDE | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 0                | WIDDRENE               | Shoot         |         |          |                     | Jim Duke's personal files.  |
| 0                | CENTELLOSE             | Plant         |         |          |                     | --  |
| 0                | RESIN                  | 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                | BETA-CARYOPHYLLENE     | Essential Oil |         | 125000.0 | 0.1933351753509813  | Jim Duke's personal files.  |
| 0                | BETULIC-ACID           | Plant         |         | 1100.0   |                     | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 0                | THIAMINE               | Leaf          | 1.5     | 14.0     | 2.1449383339093373  | --  |
| 0                | GERMACRENE             | Leaf          |         |          |                     | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.   |
| 0                | CENTELLINIC-ACID       | 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.  |



| Activities Count | Chemical  | Plant Part | Low PPM | High PPM | StdDev               | Reference Citation  |
|------------------|---|------------|---------|----------|----------------------|---|
| 0                | MESOSINOSITAL                                     | Plant      |         |          |                      | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 0                | ISOTHANKUNISIDE                                   | Plant      |         |          |                      | --  |
| 0                | 1-METHYL-4-(1,2,2-TRIMETHYL-CYCLO-PENTYL)-BENZENE | Shoot      |         |          |                      | Jim Duke's personal files.  |
| 0                | SUGARS  | Leaf       | 9630.0  | 90000.0  | 0.3611228146781439   | --  |
| 0                | EPIGLOBULOL                                       | Shoot      |         |          |                      | Jim Duke's personal files.  |
| 0                | POLYACETYLENES                                    | Root       |         |          |                      | 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                | BETA-ACORADIENE                                   | Shoot      |         |          |                      | Jim Duke's personal files.  |
| 0                | MEDICASSIC-ACID                                   | Plant      |         |          |                      | J.S. Glasby Dict.Plis Containing 2ndary Metabolite. 1991.   |
| 0                | CENTELIC-ACID                                     | Plant      |         |          |                      | --  |
| 0                | ISOTHANKUNIC-ACID                                 | Plant      |         |          |                      | --  |
| 0                | BETA-FARNESENE                                    | Plant      |         |          |                      | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.   |
| 0                | P-VINYL-GUAIACOL                                  | Shoot      |         |          |                      | Jim Duke's personal files.  |
| 0                | WATER   | Plant      |         | 893000.0 | 0.5225843122637761   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses   |
| 0                | FAT   | Leaf       | 5992.0  | 56000.0  | -0.00920837567589425 | --  |

| Activities Count | Chemical                      | Plant Part | Low PPM | High PPM | StdDev              | Reference Citation  |
|------------------|-------------------------------|------------|---------|----------|---------------------|---|
| 0                | ALPHA-ALANINE                 | Plant      |         |          |                     | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 0                | CENTELLA-ASIATICA-COMPOUND-BK | Plant      |         |          |                     | Jim Duke's personal files.  |
| 0                | MESO-INOSITOL                 | Plant      |         | 15.0     |                     | Jim Duke's personal files.  |
| 0                | LIGNOCENE                     | 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                | CARBOHYDRATES                 | Leaf       | 70192.0 | 656000.0 | 0.35111060724486526 | --  |
| 0                | ISOBRAHMIC-ACID               | Plant      |         | 9000.0   |                     | =ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp |
| 0                | HEXAN-1-AL                    | Shoot      |         |          |                     | Jim Duke's personal files.  |
| 0                | FIBER(DIETARY)                | Leaf       |         | 302000.0 | -0.8718975702234967 | --  |
| 0                | VELLARINE                     | Plant      |         |          |                     | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.   |
| 0                | EO                            | Plant      | 3000.0  | 6000.0   | -0.2841392284469577 | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.   |
| 0                | 7-GLUCOSYLKAEMPFEROL          | Plant      |         |          |                     | --  |
| 0                | POPULNIN                      | Leaf       |         |          |                     | Jim Duke's personal files.  |
| 0                | SAPONIN                       | Plant      | 11000.0 | 80000.0  | 1.6640036208230826  | --  |

| Activities Count | Chemical            | Plant Part | Low PPM | High PPM | StdDev             | Reference Citation   |
|------------------|---------------------|------------|---------|----------|--------------------|--|
| 0                | HYDROCOTYLEGENINS   | 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                | ASIATICOSIDE-B      | Leaf       |         |          |                    | Jim Duke's personal files.   |
| 0                | BETA-CARYOPHYLLENE  | Plant      |         |          |                    | --   |
| 0                | HEX-3-EN-2-ONE      | Shoot      |         |          |                    | Jim Duke's personal files.   |
| 0                | FIBER(CRUDE)        | Leaf       |         | 187000.0 | 1.5553583414475418 | --   |
| 0                | P-CYMOL             | Plant      |         |          |                    | Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.  |
| 0                | 3-GLUCOSYLQUERCETIN | Plant      |         |          |                    | --   |
| 0                | LINAMARASE          | Leaf       |         |          |                    | Jim Duke's personal files.   |
| 0                | ASIATICOSIDE-A      | Leaf       |         |          |                    | Jim Duke's personal files.   |