

# List of All Chemicals

## **P** Nicotiana glauca (Solanaceae)

### Common name(s)

Tree Tobacco

### How used

Medicinal

\*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

| Chemical                          | Part <input type="button" value="All"/>  | Low PPM | High PPM | StdDev | *Reference |
|-----------------------------------|--|---------|----------|--------|------------|
| ALKALOIDS                         | Leaf   | --      | 11000.0  | 0.13   | *          |
| ALKALOIDS                         | Fruit  | --      | 12000.0  | 1.1    | *          |
| ANABASINE                         | Leaf   | --      | --       |        | *          |
| <b>Activities (6)</b>             |  |         |          |        |            |
| Antismoking                       |  |         |          |        |            |
| Insecticide                       | UNESCO. 1960. Medicinal Plants of the Arid Zones. eds.(botany) I.C. Chopra, B.K. Abrol and K.L. Hands; eds (pharmacology), R. Paris and G. Dillemann UNESCO, Place de Fontenoy, Paris 7E. 96 pp.   |         |          |        |            |
| Myorelaxant                       |  |         |          |        |            |
| Pesticide                         |  |         |          |        |            |
| Respirastimulant                  | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.   |         |          |        |            |
| Sialogogue                        |  |         |          |        |            |
| NICOTINE                          | Leaf   | --      | --       |        | *          |
| <b>Activities (21)</b>            |  |         |          |        |            |
| ANS-Paralytic                     | 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.   |         |          |        |            |
| ANS-Stimulant                     | 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.   |         |          |        |            |
| Addictive                         |  |         |          |        |            |
| Analgesic 2 mg/kg ipr mus         | Borchard, R. E., Barnes, C. D., and Eltherton, L. G. 1991. Drug Dosage in Laboratory Animals: A Handbook. (3rd Ed.) The Telford Press, Inc., P. O. Box 287, Caldwell NJ 07006.   |         |          |        |            |
| Anorectic                         |  |         |          |        |            |
| Antiestrogenic                    | Economic & Medicinal Plant Research, 6: 189.   |         |          |        |            |
| Antifeedant                       |  |         |          |        |            |
| Antifumitory                      | Economic & Medicinal Plant Research, 6: 189.   |         |          |        |            |
| Cardiovascular 0.25 mg/kg ivn dog | Borchard, R. E., Barnes, C. D., and Eltherton, L. G. 1991. Drug Dosage in Laboratory Animals: A Handbook. (3rd Ed.) The Telford Press, Inc., P. O. Box 287, Caldwell NJ 07006.   |         |          |        |            |
| Cholinergic                       |  |         |          |        |            |
| Dopaminogenic                     |  |         |          |        |            |
| Ectoparasiticide                  | Merck 11th Edition   |         |          |        |            |
| Epinephrinergic                   |  |         |          |        |            |
| Herbicide IC57=5 mM               | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.                       |         |          |        |            |
| Hyperglycemic                     |  |         |          |        |            |
| Insecticide IC100=1,000 ppm       | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.                       |         |          |        |            |
| Nematistat                        | Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.   |         |          |        |            |
| Neurotoxic                        | R.J. Hixtable (Huxtable, R.J. (as T. Max). 1992. This and That:The Essential Pharmacology of Herbs and Spices. Tips 13:15-20 Huxtable, R.J. 1992b. The Myth of Benificent Nature. The Risk of Herbal Preparations. Anns. Intern. Med. 117(2):165-6; Huxtable, R. |         |          |        |            |
| Pesticide                         |  |         |          |        |            |
| Serotoninerbic                    |  |         |          |        |            |
| Tranquilizer                      |  |         |          |        |            |
| NORNICOTINE                       | Leaf   | --      | --       |        | *          |
| RUTIN                             | Leaf   | 12000.0 | 21000.0  | 0.3    | *          |
| <b>Activities (87)</b>            |  |         |          |        |            |
| 5-HT-Inhibitor                    |  |         |          |        |            |

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|---|--|
| Aldehyde-Oxidase-Inhibitor IC27-52=10 uM  |  |
| Aldose-Reductase-Inhibitor 100 uM         |  |
| Aldose-Reductase-Inhibitor 4 ug/ml        | Ichikawa, K., et al. 1991. Isolation and Structure Determination of Aldose Reductase Inhibitors from Traditional Thai Medicine, and Syntheses of Their Derivatives. <i>Sankyo Kenkyusho Nempo</i> , 43: 99-110.                            |
| Allelochemic                              |  |
| AntiCVI 270 mg/man/day                    |  |
| Antiaggregant ED50=33 nmol/kg iv          |  |
| Antiallergic                              |  |
| Antiapoplectic                            |  |
| Antiatherogenic                           |  |
| Antiatherosclerotic                       |  |
| Antibacterial                             | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.  |
| Anticancer                                |  |
| Anticapillary-Fragility 20-100 mg orl man | Merck 7th Ed.  |
| Anticataract                              |  |
| Anticlastogen                             |  |
| Anticonvulsant                            | Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs.</i> CRC Press, Boca Raton, FL 388 pp.   |
| Antidementia                              | Bruneton, J. 1999. <i>Pharmacognosy, Phytochemistry, Medicinal Plants.</i> 2nd Ed. Lavoisier Publishing, Paris. 1119 pp.   |
| Antidermatitic                            | Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals.</i> CRC Press. Boca Raton, FL. 566 pp.   |
| Antidiabetic                              | Jin, G-Z., Yamagata, Y., and Tomita, K.-i. 1989. Structure of Rutin Pentamethanol. <i>Chem. Pharm. Bull.</i> 38(2): 297-300, 1990.   |
| Antiedemic 270 mg/day orl man             |  |
| Antierythemic                             |  |
| Antifeedant                               |  |
| Antiglaucomic 60 mg/day                   | Werbach, M. 1993. <i>Healing with Food.</i> Harper Collins, New York, 443 pp.  |
| Antihematuric                             |  |
| Antihemorrhoidal                          |  |
| Antihepatotoxic                           | Keeler, R.F. and Tu, A.T. eds. 1991. <i>Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6)</i> Marcel Dekker, Inc. NY. 665 pp.  |
| Antihyperptic                             | <i>Economic &amp; Medicinal Plant Research</i> , 5: 198.   |
| Antihistaminic                            |  |
| Antihypertensive                          | Huang, K. C. 1993. <i>The Pharmacology of Chinese Herbs.</i> CRC Press, Boca Raton, FL 388 pp.   |
| Antiinflammatory 20 mg/kg                 |  |
| Antimalarial IC50=>100 ug/ml              | Khalid, S.A., Farouk, A., Geary**, T.G., and Jensen, J.B. 1985. Potential Antimalarial Candidates From African Plants: An In Vitro Approach Using <i>Plasmodium falciparum</i> *. <i>Journal of Ethnopharmacology</i> , 15: 201-209, 1986. |
| Antimelanomic                             |  |
| Antimetastatic                            |  |
| Antimutagenic ID50=2-5 nM                 |  |
| Antinephritic                             |  |
| Antinociceptive                           |  |
| Antioxidant IC28=30 ppm                   |  |
| Antioxidant IC50=120 uM                   |  |
| Antioxidant IC54=10 uM                    |  |
| Antiperoxidant IC50=10-20 uM              |  |
| Antiplatelet                              |  |
| Antiproliferant 50-75 uM/l                |  |
| Antiprotozoal                             |  |
| Antipurpuric                              |  |
| Antiradicular 9 x quercetin               |  |
| Antispasmodic                             |  |
| Antisunburn                               |  |
| Antithrombogenic EC50=500 nM              |  |
| Antithyroid IC50=68 uM                    |  |
| Antitrypanosomic 100 mg/kg                | <i>Planta Medica</i> , 57: A44, 1991.  |
| Antitumor                                 |  |
| Antitumor-Promoter                        |  |
| Antiulcer                                 |  |
| Antivaricose                              |  |
| Antiviral                                 |  |
| Apoptotic 75 uM/l                         |  |
| Cancer-Preventive                         | Stitt, P. A. <i>Why George Should Eat Broccoli.</i> Dougherty Co, Milwaukee, WI, 1990, 399 pp.   |
| Capillariprotective                       | Merck 11th Edition   |

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|---|--|
| Catabolic                                   |  |
| Chemopreventive                             |  |
| Cytoprotective IC50=3<br>uM                 |  |
| Estrogenic?                                 | Economic & Medicinal Plant Research, 6: 189.   |
| Hemostat                                    |  |
| Hepatomaenic 20,000<br>ppm (diet) rat       | Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.  |
| Hepatoprotective 20<br>mg/kg rat            |  |
| Hypocholesterolemic                         | Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.  |
| Hypotensive                                 | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.  |
| Immunomodulator                             |  |
| Insecticide                                 | Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.   |
| Insectiphile                                | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.   |
| Juvabional                                  | Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.   |
| Larvostat IC95=4,000-<br>8,000 ppm diet     | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp. |
| Lipoxygenase-Inhibitor<br>IC75=2.5 mM       | Oszmianski, J. and Lee, C.Y. 1990. Inhibitory Effect of Phenolics on Carotene Bleaching in Vegetables. J. Agric. Food Chem. 38: 688-690.   |
| Mutagenic                                   | Economic & Medicinal Plant Research, 6: 189.   |
| Myoprotective                               |  |
| Myorelaxant                                 | Economic & Medicinal Plant Research, 6: 189.   |
| Oviposition-Stimulant                       | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.   |
| PAF-Inhibitor                               |  |
| Pesticide                                   |  |
| Protisticide                                |  |
| Radioprotective                             |  |
| Sunscreen                                   |  |
| Topoisomerase-II-<br>Inhibitor IC50=1 ug/ml | Bernard, F. X., Sable, S., Cameron, B., Provost, J., Desnottes, J. F., Crouzet, J., Blanche, F. 1997. Glycosylated Flavones as Selective Inhibitors of Topoisomerase IV. Antimicrobial Agents & Chemotherapy, 41: 992-998.                 |
| Vasodilator                                 |  |
| Vasopressor                                 |  |
| cAMP-Phosphodiesterase-<br>Inhibitor        | Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).   |