

# PHYTOCHEMICAL STUDIES ON THE LEAVES OF *SOLANUM NIGRUM* LINN. AND *DATURA STRAMONIUM* LINN.

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**Abstract:** Green plants synthesize and preserve a variety of biochemical products many of which are extractable and used as chemical feed stocks or as raw material for various scientific investigation. The present paper deals with the phytochemical screening of two plants of Solanaceae – *Solanum nigrum* Linn. and *Datura stramonium* Linn. Studies were carried out to explore the active constituents of leaves of both the plants which are very significant in Drug development and widely used in the traditional and folk medicines. Many plants from the Solanaceae family are considered as medicinal plants.

**Keywords:** Phytochemical, *Solanum nigrum* Linn., *Datura stramonium* Linn., Medicinal plants

## REFERENCES

- Akindele, A.J. and Adeyemi, O.O. (2007). Antiinflammatory activity of the aqueous leaf extract of *Byrsocarpus coccineus*, *Fitoterapia*, **78**: 25-28.
- Argal, A. and Pathak, A.K. (2006). CNS activity of *Calotropis gignatia* roots. *J. Ethnopharmacology*, **106**: 142-145
- Bhuiyan, M.A.; Mia, M.Y. and Rashid, M.A. (1996). Antibacterial principles of the seed of *Eugenia jambolana*, *Bang J. Botany*, **25**: 239-241.
- Harborne, J.B. (1998). Phytochemical methods. A guide to modern techniques of plant analysis. 3<sup>rd</sup> Edn., Chapman and Hall Int. Ed., New York.
- Johansen, D.A. Plant Microtechnique, MC Graw Hill Book Co., New York 1940.
- Kirtikar, K.R. and Basu, B.D. (1975). In Indian Medicinal Plants. Vol. II (Periodical Experts, New Delhi)
- C.K., Kokate (2001). Pharmacognosy. 16<sup>th</sup> Edn. Nirali Prakashan, Mumbai, India.
- Kusumoto, I.T.; Nakabayashi, T. and Kida, H. (1995). Screening of various plant extracts used in ayurvedic medicine for inhibitory effects on human immunodeficiency virus type I (HIV-I) protease, *phytother. Res.*, **12**: 488-493.
- Liu, R.H. (2003). Health benefits of fruit and vegetables and from additive and synergistic combinations of phytochemicals. *Am J. Clin. Nutr.*, **78**: 517S-520S.
- Malairajan, P.; Gopalakrishnan, Geetha; Narasimhan S. and K. Jessi Kala Veni., (2006). Analgesic activity of some Indian medicinal plants. *J. Ethnopharmacol.* **19**: 425-428.
- Nadkarni, K.M. (1954). In India Materia Medica. Vol. I (popular book depot Bombay)
- Patwardhan, B. and Hooper, M. (1992). Ayurveda and future drug development. *Int. J. Alternative complement, med* **10**: 9-12.
- Peres, M.T.L.P.; Monache, F.D.; Cruz, A.D.; Pizzolatti, M.G. and Yunes, R.A. (1997). Chemical composition and antimicrobial activity of *Croton urucurana* Baillon (Euphorbiaceae) *J. Ethnopharmacol.*, **56**: 223-226.
- Purohit, S.S. and Mathur, S.K. (1999). Drugs in Biotechnology Fundamentals and applications. S.S. Purohit Maximillan Publication, India P. 576.
- Rajan, S.; Sethuraman, M. and Mukherjee, P.K. (2002). Ethnobiology of the Niligrics Hills, India, *Phytotherapy – Research* **16**: 18-116.
- Rojas, A.; Hernandez, R.; Pereda, Miranda and Mata, R. (1992). Screening for antimicrobial activity of crude drug extracts and pure natural products from mexican medicinal plants *J. Ethnopharmacol.*, **35**: 275-283.

- Sass, J.E.** Elements of Botanical Micro-technique, Mc graw Hill Book co., New york 1940.
- Trease, G.E. and Evans, W.C.** Pharmacognosy, 10<sup>th</sup> Ed. Berilliee, Tindal, London 2002. 519-547.
- Samy, R.P., Igncimuthu, S., Sen, A.** (1998). Screening of 34 Indian medicinal plants for antibacterial properties. *J. Ethnopharmacol.* **62**: 173-81.
- Sandhy, B.; Thomas, S.; Isabel, W. and Shenbagavathai, R.** (2006). Ethnomedicinal plants used by the valaiyan community of Piranmalai hills (Reserved Forest), Tamil Nadu, India. A Pilot study, *African Journal of traditional complements and Alternative medicines.* **3**: 101-114.
- Sofowora, A.** (1982). Medicinal plants and Traditional medicine in West Africa, John wiley and Sons, PP. 256, New York.