Harshringar (*Nyctanthes arbour-tristis*): Phytochemistry, pharmacological and therapeutic potential

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Abstract

This review article presents phytochemistry, pharmacological and therapeutic potential of *Nyctanthes arbor-tristis*. In this review, various biological activities, particularly, that is, anti-protozoic, anti-microbial, anti-viral, anti-cancer, anti-inflammatory, histamine-mediated activities, anti-oxidant, anti-diabetic, hepatoprotective, anti-rheumatoid arthritis, insecticidal, immunomodulatory, wound healing and sedative. The plant contains important bioactive constituents, including iridoid glycosides, flavonoids, alkaloids, tannins, and sterols, which contribute to its therapeutic effects. The plant exhibits promising anti-cancer activity by inducing apoptosis, inhibiting cellular proliferation, and reducing oxidative stress, with compounds such as arbortristoside A, calceolarioside A, and β-sitosterol showing notable cytotoxic potential. This plant has wider therapeutic applications and is used in traditional medicine by local people for cold, cough and fever. Its hot water concoction is used for pain relief and gastrointestinal problems. No doubt, the Harshringar plant is a big depository of natural products which could be used for drug development. It is suggested that further clinical studies are required to establish its safety, efficacy and therapeutic applicability.

Key words: Harshringar, *Nyctanthes arbor-trisis*, pharmacological, therapeutic potential