Antiasthmatic Activity of Nyctanthes arboristis Leaves

Sunil A. NIRMAL 1, Subodh C. PAL 2 & Subhash C. MANDAL 3*

1 Department of Pharmacognosy, Pravara Rural College of Pharmacy, Pravaranagar, M.S., India.
2 Department of Pharmacognosy, NDMVP’s College of Pharmacy, Nasik, M.S., India.
3 Pharmacognosy and Phytochemistry Research Laboratory, Department of Pharmaceutical Technology, Jadavpur University, Kolkata, India.

SUMMARY. Nyctanthes arboristis Linn. (Oleaceae) is one of the well known medicinal plants. It is commonly known as ‘Night Jasmine’. As traditionally the plant is used in the treatment of asthma and cough it was our objective to study its antiasthmatic potential using suitable models. Various extracts of the plant were screened for antihistaminic activity by studying the effect of the extracts on clonidine and haloperidol-induced catalepsy in mice. Antiallergic effect was studied by checking effect of the extracts on milk-induced leukocytosis and eosinophilia. Mast cell stabilization by the extracts was studied in mice. Results showed that petroleum ether extract had better antihistaminic, antiallergic and mast cell stabilization property than other extracts. β-sitosterol was identified from the petroleum ether extract having antiasthmatic activity, so we can say that the antiasthmatic activity of N. arboristis leaves is may be due to presence of β-sitosterol.

KEY WORDS: Antihistaminic, Antiallergic, Mast cell stabilization, Nyctanthes arboristis, Oleaceae.

* Author to whom correspondence should be addressed. E-mail: subhashmandal@yahoo.com