



Phytochemical and Antibacterial Studies on Methanolic Flower Extracts of *Nyctanthes arbor-tristis* L

Aparna Bhardwaj¹ and Somendra Sharma^{2*}

1. Department of Chemistry, Mithibai College, Vile Parle (W), Mumbai, **INDIA**

2. Department of Botany, M.D. College, Parel, Mumbai, **INDIA**

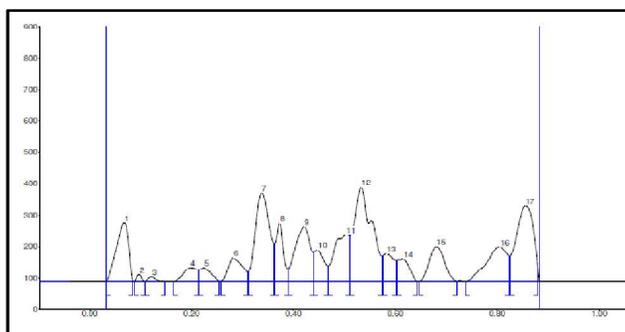
Email: dr.somendra@rediffmail.com, dr.aparna73@rediffmail.com

Accepted on 11th July, 2018

ABSTRACT

The present study was aimed to investigate the preliminary phytochemical analysis, HPTLC profiling and the antibacterial activity of *Nyctanthes arbor-tristis* methanolic flower extracts against the bacteria. The phytochemical studies on methanolic flower extract of *Nyctanthes arbor-tristis* revealed the presence of glycosides, flavonoids, phenolics, saponins, catechin and alkaloids. The HPTLC separation was achieved using toluene: chloroform: ethanol (4:4:2 v/v/v) as the mobile phase. The methanolic extract of *Nyctanthes arbor-tristis* showed four different R_f values 0.51, 0.65 and 0.74 which indicated various alkaloids, flavonoids and glycosides present in the flower extract. The methanolic extract of *Nyctanthes arbor-tristis* showed the maximum zone of inhibition against *Proteus mirabilis* followed by *Salmonella typhi*.

Graphical Abstract



HPTLC analysis of *Nyctanthes arbor-tristis* flower extract.

Keywords: *Nyctanthes arbor-tristis*, Phytochemical, HPTLC, Antibacterial activity.