Abstract

Clematis grata is belongs to the family Ranunculaceae which consists of different genera including Clematis whose different species are used for the treatment of different diseases as antimalarial, Rheumatism, goiter bone disordered etc. The extracts of Clematis grata was obtained in n-hexane, dichloromethane, ethyl acetate and methanol by soaking and soxhlet apparatus. All the extracts were evaluated for DPPH free radical, FRAP and Acetylcholinesterase enzyme inhibition assay. Phytochemical analysis wasalso done.

The phytochemical analysis of Clematis grata was done which shows the presence of Phenolic contents and Alkaloids but Tannins and Flavonoids were absent. The inhibition potential for DPPH assay for extracts of Clematis grata was in range of 1.30±0.035 -8.64±0.052 while for FRAP it was 205±0.01-671±0.01.Lipid peroxidation potential was also calculated .The maximum inhibition was at 48 hours for both TBA and FTC assay.

Twelve bromo derivatives of aromatic amines were also prepared. Sixteen thiourea derivatives TUR-1 to TUR-16 were prepared and DPPH (IC_{50}=146.9±2.34 to 838±0.23, FRAP (20188±0.01 to 7740±0.009μM FeSO4), AChE (IC_{50}=21±0.002 to 652±2.34).