

SCREENING AND EVALUATION OF BIOACTIVE COMPOUNDS IN MEDICINAL PARASITIC PLANT OF THE FAMILY LORANTHACEAE

S. Vyas, C. Bhatti, K. Gadhvi and V. Parmar

Department of Life Sciences, Bhakta Kavi Narsinh Mehta University, Junagadh,
Gujarat, India – 362263

Corresponding email: vsuhas.13@gmail.com

Abstract:

Parasitic plants are widely spread out the world and also have variety of hosts. *Dendrophthoe falcate* and *Viscum articulatum* are important medicinal plants belonging to Loranthaceae family. The plant samples were collected from the Girnar region near the Gir forest region of Gujarat, India. The parasitic plants are used in ethnomedicine for treatment of ulcer, asthma, impotence, paralysis, skin diseases, wound, cancer, leucoderma and insomnia. Chlorophyll content in *Viscum articulatum* have high concentration compared to that of *Dendrophthoe falcate* because of their morphological characteristic. Preliminary phytochemical screening in two different solvent water and methanol was performed by using standard methods. It was noted that there is significance existence of a number of bioactive compounds including alkaloids, saponins, tannins, flavanoids, steroids, reducing sugar and phenols. GC-MS analysis was executed on the methanolic extract to find out the chemical constituents. In *Viscum articulatum*, 4-O-Methylmannose, Hydroperoxide, 3-O-Methyl-D fructose covered high peak area in mass spectrum and some other bioactive chemicals like 2,2-Dimethoxybutane, 2,3-Dihydrobenzofuran, Dichloroacetic acid etc. were also found to be present. Whereas, in *Dendrophthoe falcate* parasitic plant, many bioactive compounds like 3-O-Methyl-D-fructose, 4-O methylmannose, D-Glucopyranosiduronic acid were found which were observed to be covering high peak area on mass spectra. The chromatographic results from both parasitic plants revealed some medicinally important bioactive compounds which are having antioxidant and antimicrobial activities.