

RESEARCH ARTICLE

ISOLATION AND CHARACTERIZATION OF CONSTITUENTS FROM ETHANOLIC EXTRACT OF *SCINDAPSUS OFFICINALIS* (ROXB.) SCHOTT. FRUITS

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Nature has provided abundant plant wealth for living creatures which possess medicinal virtues. The essential value of a number of plants has long been published and the large numbers of them remain unexplored so far. In the present study, 50% ethanolic extract of fruits of plant *Scindapsus officinalis* (Roxb.) Schott. (Family - Araceae), was purified by column chromatography which yielded three brownish sticky residues viz. compound A, B and C. Extracted compounds were further subjected to spectral analysis i.e. IR, UV, 1D NMR (¹H NMR and ¹³C NMR) and Mass spectroscopy for structure elucidation and characterization. The findings revealed that the compound A, B and C are piperine, mixture of glycerin and ascorbic acid, and ascorbic acid respectively. Isolation of glycerol and ascorbic acid is a new finding in the present study.

Key words: *Scindapsus officinalis* (Roxb.) Schott, Spectral analysis, Piperine, Glycerine, Ascorbic acid.

INTRODUCTION

Ayurveda stresses on the use of vegetable drugs. Plants are being used as medicine since ancient times (Ajithabai *et al* 2012; Visht and Chaturvedi, 2012). Plants used for traditional medicine, contain a wide range of bioactive constituents that can be used to treat chronic as well as infectious diseases (Duraipandiyan *et al* 2006; Jain *et al* 2011; Dey *et al* 2012; Jain and Argal, 2013; Deb *et al* 2013; Arjariya and Nema, 2014). Extraction and isolation of the bioactive plant constituents has been a challenging job for the researchers. Now a day, the researchers are emphasizing on evaluation and characterization of various plants and plant constituents against a number of diseases based on the traditional claims of the plants given in Ayurveda (Tiwari *et al* 2011). *Scindapsus officinalis* (Roxb.) Schott. (Family - Araceae) is known as Bari-pipli or Gaj-

pipli in Hindi and Anaittipilli in Tamil. The plant is a large, stout, epiphytic and perennial climber with adventitious aerial roots growing on trees and rocks (Kirtikar and Basu, 1933; Chatterjee and Pakrashi, 2001). Fruit is very important part of the plant and used in the management of a variety of ailments in both Ayurvedic and Unani system of medicine (Figure 1, Nadkarni, 2001; Voigt, 1984).



Fig. 1. Shade dried fruit of *Scindapsus officinalis*