

Mumunine - A New Carbazole Alkaloid from *Murraya koenigii* (Linn.) Spreng

M. Chakraborty*

Government Girls' General Degree College, 7, Mayurbhanj Road, Kolkata - 700023, West Bengal, India

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Abstract

The plant *Murraya koenigii*, commonly known as curry leaf tree is a rich source of carbazole alkaloids. A number of monomeric as well as dimeric carbazoles with C₁₃, C₁₈ and C₂₃ skeleton have been isolated from the plant. In my present work, a new carbazole alkaloid, designated as mumunine, was isolated from the bark of *Murraya koenigii* (Linn) Spreng, along with a known carbazole alkaloid, viz. mahanimbine. The structure of the new alkaloid 1 was elucidated on the basis of 1D and 2D NMR spectral data analysis. In this paper, the isolation and structure elucidation of the new compound will be discussed in detail.

Keywords: *Murraya koenigii*; Rutaceae; Carbazole alkaloids; Mumunine; 2D NMR.

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1. Introduction

Many of the medicinally important plant-derived pharmaceuticals have been essential in the era of modern medicine and some of these substances, such as morphine have attained the official status of strategic materials. However, despite these many important past contributions from the plant kingdom, a great number of many plant species have never been described and remain unknown to science and relatively few have been surveyed systematically to any extent for biologically active chemical constituents. Thus, it is reasonable to expect that new plant sources of pharmaceutically interesting materials remain to be discovered and developed.

India and neighbouring countries like Sri Lanka, China, Bangladesh etc. are very rich sources of medicinal plants. Many researchers from these countries are working hard in search of bioactive organic substances from their natural resources. Penu *et al.* have recently published a paper on investigation of the phytochemicals and their antioxidant, antimicrobial and thrombolytic activities and also estimated total phenolic and flavonoid contents of *Pandanus odoratissimus* (*P. odoratissimus*) leaves of methanol extract [1].

* Corresponding author: mumu_chak@yahoo.com