

**Isolation and structure elucidation of triterpenes from inflorescence of banana
(*Musa balbisiana* cv. Saba)**

Abstract

The study aimed to isolate and elucidate the chemical compounds that are found in banana (*Musa balbisiana* cv. Saba) inflorescences. Banana inflorescence buds were extracted using methanol and the resulted methanolic extract was partitioned using chloroform, ethyl acetate and butanol against deionized water. The chloroform partition was further separated into fractions using column chromatography assisted by thin layer chromatography. The structure elucidation was performed using nuclear magnetic resonance spectrometry (NMR). Three triterpenes were isolated namely 31-norcyclolaudenone (1), cycloartenol (2) and (24R)-4a,24-trimethyl-5a-cholesta-8,25(27)-dien-3b-ol (3). This is the first report on the isolation of these triterpenes from *Musa balbisiana* inflorescence. The discovery of new triterpenes from banana inflorescence should be further explored to open a new perspective that banana by-products might serve as new source of natural products for food and pharmaceutical applications.