World Academy of Science, Engineering and Technology
International Journal of Mathematical and Computational Sciences
Vol:14, No:12, 2020

Isolation and Identification of Compounds from the Leaves of Actinodaphne sesquipedalis Hook. F. Var. Glabra (Lauraceae)

Authors : O. Hanita, S. A. Ainnul Hamidah, A. H. Yang Zalila, M. R. Siti Nadiah, M. H. Najihah, M. A. Hapipah

Abstract : The crude extract of the leaves of Actinodaphne sesquipedalis Hook. F. Var. Glabra (Kochummen), was taken under phytochemical investigation. The crude methanolic extract was partitioned with a different solvent system by increasing their polarities (n-hexane, dichloromethane, and methanol). The compounds were fractionated and isolated from n-hexane partition by using column chromatography with silica gel 60 or Sephadex LH-20 as a stationary phase and preparative thin layer chromatographic technique. Isolates were characterized using TLC, FTIR, UV spectrophotometer and NMR spectroscopy. The n-hexane fractionates yielded a total of four compounds namely N-methyllaurotetanine (1), dicentrine (2), β-sitosterol (3), and stigmasterol (4). The result indicates that the leaves of Actinodaphne sesquipedalis may provide a rich source of alkaloids and triterpenoids.

Keywords : actinodaphne sesquipedalis, alkaloids, phytochemical investigation, triterpenoids
Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development
Conference Location : Chicago, United States
Conference Dates : December 12-13, 2020