

# **Gas chromatography–mass spectrometry analysis of various organic extracts of *Merremia borneensis* from Sabah**

## **Abstract**

### Objective

To analyse the chemical composition of different extracts of *Merremia borneensis* (*M. borneensis*) by gas chromatography-mass spectrometry (GC-MS).

### Methods

The dried leaves powder was extracted with methanol at room temperature by using Soxhlet extractor. Methanol crude extracts of *M. borneensis* were extracted with hexane, chloroform, ethyl acetate and butanol.

### Results

Qualitative analyses of various organic crude extracts showed that majority of these are flavonoids, terpenoids, alkaloids and glycosides. Most of the identified compounds by GC-MS are biologically important. Further the *M. borneensis* leaf possesses certain characteristics that can be ascribed to cultivation on a domestic plantation.

### Conclusions

The suitable extracts for respective compounds can be chosen on the basis of above GC-MS analysis. All the major compounds from different extracts are biologically active molecules. Thus the identification of a good number of compounds from various extracts *M. borneensis* might have some ecological significance.