

## GC-MS Analysis of *Strobilanthes crispus* Plants and Callus

### Abstract

*Strobilanthes crispus* or locally known as “bayam karang”, “pecah kaca”, “jin batu” and “pecah beling” in Malaysia, has been traditionally used to increase immune system, treating kidney stones, treatment of diabetes mellitus, treatment of high blood pressure and treatment of wound. Studies examining the phytochemical constituents reported that the leaves of this plant contain ester glycosidic compound of caffeic acid, -voumaric acid, , vanilic acid, ferulic acid, syringic acids, sitosterol, campesterol, hexadecanoic acid, methylester, lupeol, phytol, stigmasterol, flavonoid compounds such as (+)-catechin, (-)-epicatechin, rutin, and etc. While most of the literatures focused on the chemical compounds present in the leaves of *S. crispus*, none have been reported for the phytochemical constituents of the whole *S. crispus* plant including the leaf, stem, root or flower part. Besides, there is also lacking report on the tissue culture generated from this plant too. Thus, this study was carried out to profile the leaves, stems and roots and callus cultures of *S. crispus* using gas chromatography mass spectrometry (GC-MS) approach. Results revealed that this plant is rich with squalene, phytosterols such as stigmasterols and derivatives, sito-sterol, campesterols, as well as triterpenoids such as lupeol, amyryn and betulin.