

## **Chemotaxonomical markers in essential oil of *Murraya koenigii*.**

### **Abstrak**

The composition of the essential oils of *Murraya koenigii* (L.) Spreng, cultivated at six locations in Peninsula Malaysia and Borneo are presented. The oils were obtained from fresh leaves by hydrodistillation and analyzed by gas chromatography-mass spectrometry (GC-MS); 61 compounds were identified, of which eleven were present in all the specimens analyzed. The two major volatile metabolites were identified as beta-caryophyllene (16.6-26.6%) and alpha-humulene (15.2-26.7%) along with nine minor compounds identified as beta-elemene (0.3-1.3%), aromadendrene (0.5-1.5%), beta-selinene (3.8-6.5%), spathulenol (0.6-2.7%), caryophyllene oxide (0.7-3.6%), viridiflorol (1.5-5.5%), 2-naphthalenemethanol (0.7-4.8%), trivertal (0.1-1.0%) and juniper camphor (2.6-8.3%). The results suggest that beta-caryophyllene and alpha-humulene could be used as chemotaxonomical markers for Malaysian *M. koenigii*, hence these specimens could be of the same stock and different from the ones in India, Thailand and China.