Supporting Information

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Volatile Constituents of Three *Illicium Plants*

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SI : Distillation of the essential oils

About 500 g of air-dried leaves of each plant samples was shredded and their oils were obtained by hydrodistillation for 3 h at normal pressure, according to the Vietnamese Pharmacopoeia [1]. Analysis was done in triplicate.

S2 *: Gas Chromatography (GC) analysis of the oils*

The GC analysis of essential oils was carried out using an Agilent Technologies HP 6890 Plus GC which was equipped with a flame ionization detector and HP-5MS column. The dimension of the column is 30 m x 0.25 mm (film thickness 0.25 μm). The GC operating parameters based on temperature programming were as follows: a column oven- 40^{o}C, injection pot-250^{o}C while the detector temperature was 260^{o}C. Time programming: 40^{o}C for 2 min, temperature and then raise to 220^{o}C (and held isothermally for 10 min) at 4 ^{o}C/min. The carrier gas used was H_2 at a flow rate of 1 mL/min. The split ratio was 10:1 while 1.0 μL of the essential oil was injected into the GC at inlet pressure was 6.1 kPa. Each analysis was performed in triplicate. Retention indices (RI) value of each component was determined relative to the retention times of a homologous *n*-alkane series with linear interpolation on the HP-5MS column.

S3 : *Gas Chromatography-Mass spectrometry (GC-MS) analysis*

An Agilent Technologies HP 6890N Plus Chromatograph fitted with a fused silica capillary HP-5 MS column (30 m x 0.25 mm, film thickness 0.25 μm) and interfaced with a mass spectrometer HP 5973 MSD was used for the GC/MS analysis, under the same conditions as those used for GC analysis. The conditions were the same as described above with He (1 mL/min) as carrier gas. The MS conditions were as follows: ionization voltage 70 eV; emission current 40 mA; acquisitions scan mass range of 35-350 amu at a sampling rate of 1.0 scan/s.

S4 ***:*** *Identification of the constituents*

The identification of constituents was performed on the basis of retention indices (RI) determined by co-injection with reference to a homologous series of *n*-alkanes, under identical experimental conditions. Further identification was performed by comparison of their mass spectra with those from NIST [2] and the home-made MS library built up from pure substances and components of known essential oils, as well as by comparison of their retention indices with literature values [3].

S5: References

[1] Vietnamese Pharmacopoeia (1997). Medical Publishing House, Hanoi, Vietnam.

[2] R. P. Adams (2007). Identification of essential oil components by gas chromatography/mass spectrometry. 4th Edition, Allured Publishing, Carol Stream, Illinois, USA.

[3] NIST. *(*2011). Chemistry Web Book. Data from NIST Standard Reference Database 69. (http://www.nist.gov/).