Arboflorine, an Unusual Pentacyclic Monoterpenoid Indole Alkaloid Incorporating a Third Nitrogen Atom

Kuan-Hon Lim and Toh-Seok Kam*

Supporting Information
Isolation of Arboflorine (3) from *Kopsia arborea* (bark)

The ground bark material was extracted exhaustively with EtOH and the concentrated EtOH extract was then partitioned with dilute HCl to provide a basic fraction, as has been described in detail elsewhere (T. S. Kam; P. S. Tan, *Phytochemistry*, 1990, 29, 2321). The basic fraction was first chromatographed over SiO$_2$ (Vacuum, MeOH/CHCl$_3$) to furnish three main fractions. Rechromatography of the first fraction (SiO$_2$, MeOH/CHCl$_3$) gave eight pooled fractions from which a second chromatography of fraction 5 using the same solvent system provided four fractions. Centrifugal TLC (SiO$_2$, Et$_2$O-hexane, 1:1, NH$_3$-saturated) of fraction 3 gave two compounds, the more polar compound corresponding to arboflorine (3) (yield: 0.4 mg/Kg).
1H NMR