

# Chemical Composition and Antitumor Activities from *Givotia madagascariensis*

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Two new erythroxylane diterpenes, named givitin A (**1**) and givitin B (**2**) were isolated from the bark of *Givotia madagascariensis*. Their structures have been established as  $3\alpha,12\alpha$ -dihydroxy-4(19),15-erythroxyladiene (**1**) and  $3\alpha$ -hydroxy-4(19),15-erythroxyladiene (**2**), respectively, on the basis of one and two-dimensional NMR spectroscopic studies ( $^1\text{H}$ ,  $^{13}\text{C}$ , COSY, HMQC, HMBC, NOESY, NOE difference spectra) as well as on mass spectral analysis. In addition six known compounds (**3–8**) have been isolated and identified. Cleistanthol (**3**), spruceanol (**4**) and 1,2-dihydroheudeletinol (**5**) demonstrated significant antitumor activities against three tumor cell lines (HM02, Hep G2, MCF7).

**Key words:** *Givotia madagascariensis*, Euphorbiaceae, Erythroxylane Diterpenoids, Givitin,  
Antitumor Activity