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BOOK OF ABSTRACTS

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TIGLIANE DITERPENES ISOLATED FROM THE LATEX OF *EUPHORBIA LUCIDA*

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The diversity of plant species from the genus *Euphorbia* and wide variety of secondary metabolites they produce contributed to their successful use in the traditional medicine all over the world. Therapeutic applications have been attributed to different compounds such as diterpenes and triterpenes. Previous investigations revealed that *Euphorbia* diterpenes possess a variety of biological activities such as anti-inflammatory, antitumor and antiviral. Some of them showed that tigliane diterpenes, beside other potential pharmaceutical activities, inhibited wild-type HIV-1 and HIV-2 strains as well as drug resistant strains of HIV 1 and that they exhibited low cytotoxicity. Two tigliane diterpenes were isolated from the latex of *E. lucida*, using classical and instrumental chromatographic techniques. ESI-HRMS spectra showed that both isolated compounds possess the same molecular formula ($C_{31}H_{38}O_6$). 1D NMR spectra revealed benzoate and isobutanoate ester groups in both molecules, Using HMBC spectra their position was determined: C-13 for isobutanoate and C-20 for benzoate. Exact configurations were discovered by NOE correlations. It was concluded that these two molecules differ in the way of the binding the five-membered and seven-membered rings, *i.e.*, that these two molecules are C-4-epimers. Compound **1** (20-benzoyloxy-13*α*-isobutanoyloxy-4,12-dideoxyphorbol) was already described in the literature as a metabolite of *E. pannonica* [1], while compound **2** (20-benzoyloxy-13*α*-isobutanoyloxy-4-*epi*-4,12-dideoxyphorbol) represents a new tigliane derivative.

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