

# Co-Production of Bisphenylpropanoid Amides and Meroterpenes by an Endophytic *Penicillium brasilianum* Found in the Root Bark of *Melia azedarach*

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A fungus, isolated from the root bark of *Melia azedarach* (Meliaceae), from which a series of meroterpenes have been reported, was identified as *Penicillium brasilianum* based on analysis of the ITS region of ribosomal DNA. From a rice culture of this fungus, the known phenylpropanoid amides brasiliamide A and B were obtained together with and a new, slightly modified congener, along with the meroterpenoids preaustinoid A1, preaustinoid B2 and austinolide. The compounds were isolated by the use of combined chromatographic procedures and identified by physical methods, mainly 1D and 2D NMR experiments, with distinction for <sup>1</sup>H{<sup>15</sup>N} HMBC applied to brasiliamide A. The amides were tested for their antimicrobial activity and showed only weak inhibitory effects, against a set of pathogenic bacteria.

**Key words:** *Melia azedarach*, *Penicillium brasilianum*, Bisphenylpropanoid, Brasiliamide