

## RMN STUDIES AND SOLID PHASE SYNTHESIS AS A TOOL FOR STRUCTURAL ELUCIDATION OF NEW BIOACTIVE PEPTIDE FROM THE LATEX OF *JATROPHA CURCAS* L.

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In a previous study on Euphorbiaceous plant species we have isolated the cyclic peptides labaditin and biobollein from the latex of *Jatropha multifida*. In the course of our investigation, aiming new bioactive cyclic peptides from plants, we have studied the latex of *Jatropha curcas* L. The latex of this species was partitioned with ethyl acetate, fractioned on Sephadex G15, eluted in solid phase extraction; peptide fraction was detected by Cl<sub>2</sub>/o-tolidine reagent, and purified by HPLC to yield the novel jatrophidin I (**1**) and the known pohlianin A (**2**). The characterization of **1** was performed by amino acid analysis, mass spectroscopy, and 1D and 2D RMN studies, which revealed that the peptide **1** exists as two conformers of a cyclic structure GWLNLLGP. The new peptide was confirmed by synthesis using Fmoc strategy. The isolates **1-2** showed week antifungal effect against the strains of *Candida albicans*, *C. krusei*, *C. parapsilosis* and *Cryptococcus neoformans*, as well as a moderate activity as an acetylcholinesterase inhibitor, when compared with the standards. [FAPESP, CNPq, FINEP]