

# Antifungal and Antibacterial Activities of *Pentanema divaricatum* and Its Active Constituent

Nastaran Momen-Roknabadi<sup>a</sup>, Ahamd R. Gohari<sup>b</sup>, Hamid R. Monsef-Esfehani<sup>c</sup>, Farideh Attar<sup>d</sup>, Reza Hajiaghaee<sup>e</sup>, Soodabeh Saeidnia<sup>b</sup>, Hossein Jamalifar<sup>a</sup>, Golnaz Kamalinia<sup>a</sup>, and Ahamd R. Shahverdi<sup>a,\*</sup>

<sup>a</sup> Department of Pharmaceutical Biotechnology and Pharmaceutical Sciences Research Center, Faculty of Pharmacy, Medical Sciences/University of Tehran, Tehran, Iran. Fax: ++98-21-66461178. E-mail: shahverd@sina.tums.ac.ir

<sup>b</sup> Medicinal Plants Research Center, Faculty of Pharmacy, Medical Sciences/University of Tehran, Tehran, Iran

<sup>c</sup> Department of Pharmacognosy, Faculty of Pharmacy, Medical Sciences/University of Tehran, Tehran, Iran

<sup>d</sup> Central Herbarium of Tehran University, Faculty of Biology, Tehran University, Tehran, Iran

<sup>e</sup> Department of Pharmacognosy, Institute of Medicinal Plants, ACECR, Tehran, Iran

\* Author for correspondence and reprint requests

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The antimicrobial activity of ethanol and chloroform extracts of *Pentanema divaricatum* Cass. was studied using the conventional disk diffusion method. The extracts' highest antimicrobial activity was observed against *Aspergillus niger*. Bioassay-guided fractionation of the crude extract by preparative thin layer chromatography (PTLC) showed one antimicrobial fraction which was especially effective against *Aspergillus niger*. By conventional spectroscopy the active fraction was identified as 4 $\alpha$ ,5 $\alpha$ -epoxy-10 $\alpha$ ,14H-1-epi-inuviscolide. This compound represented the most potent antimicrobial candidate, with MIC values of < 25  $\mu$ g/disk against *A. niger* strains and 200  $\mu$ g/disk against *Bacillus cereus* and *Staphylococcus aureus*.

*Key words:* Antimicrobial, Inuviscolide Derivative, *Pentanema divaricatum*