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Preliminary Evaluation of Antifungal Activity of Xanthoxyline

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SUMMARY. Xanthoxyline, an active constituent isolated from leaves and stems of *Sebastiania schottiana* and *Phyllanthus sellowianus* was found to possess antifungal activity. The disk diffusion method was used for the test. The results showed that xanthoxyline inhibited 69 % of the fungi species like *Candida*, *Microsporum*, *Trichophyton*, *Aspergillus* and *Penicillium*, producing inhibition zones more than 10 mm in diameter. These effects support the popular use of these plants in folk medicine.

RESUMEN. "Evaluación Preliminar de Actividad Antifúngica de la Xantolina". Se encontró que la Xantolina, un principio activo aislado de hojas y tallos de *Sebastiania schottiana* y de *Phyllanthus sellowianus*, posee actividad antifúngica. Los resultados demostraron que la Xantoxilina inhibió el 69% de las especies de hongos de los géneros *Candida*, *Microsporum*, *Trichophyton*, *Aspergillus* y *Penicillium*, produciendo zonas de inhibición superiores a los 10 mm de diámetro. Los efectos observados apoyan el uso popular de estas plantas en medicina popular.

INTRODUCTION

2-hydroxy-4,6 dimethoxyacetophenone (xanthoxyline) is an active constituent present in leaves and stems of *Sebastiania schottiana* and *Phyllanthus sellowianus* (Euphorbiaceae), two abundant plants of the southern region of Brazil, used in folk medicine for the treatment of kidney disease and intestinal infections, hepatitis, dysentery, etc.¹⁻³

In previous studies, we have demonstrated that xanthoxyline exhibits potent antispasmodic activity in several pharmacological *in vitro* models⁴ and antibacterial effect against some bacteria frequently found in the urinary tract⁵.

Hertmann and Nienhaus⁶ reported the isolation of this compound from *Citrus limon* and its action against two plant pathogenic fungi: *Phytophthora citrophthora* and *Hendersonula toruloides*.

KEY WORDS: *Candida*, *Microsporum*, *Trichophyton*, *Aspergillus*, Xanthoxyline, Antifungal activity.

PALABRAS CLAVE: *Candida*, *Microsporum*, *Trichophyton*, *Aspergillus*, Xantonina, Actividad antifúngica.

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