



ENZYMATIC REDUCTION OF 9-METHOXYTARIACURIPYRONE BY *SACCHAROMYCES CEREVISIAE* AND ITS ANTIMYCOBACTERIAL ACTIVITY.

ABSTRACT

Biotransformation processes have been successfully utilized to obtain products of pharmaceutical, chemical, food, and agricultural interest, which are difficult to obtain by classic chemical methods. The compound with antituberculous activity, 9-methoxy-tariacuripyronone (**1**), isolated from *Aristolochia brevipes*, was submitted to biotransformation with the yeast *Saccharomyces cerevisiae* under culture, yielding 5-amino-9-methoxy-3,4-dihydro-2*H*-benzo[h]chromen-2-one (**2**). The structure of **2** was elucidated on the basis of spectroscopic analyses. The results mainly show the reduction of the double bond and the nitro group of compound **1**. Metabolite **2** demonstrated an increase in anti-tuberculous activity (MIC = 3.12 µg/mL) against the drug-sensitive *Mycobacterium tuberculosis* (H37Rv) strain, with respect to that shown by **1**.

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