P 164. Anti-candidal activity of 7-hydroxycalamenene isolated from *Croton cajucara*

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The leaves and bark from Croton cajucara Benth. (family Euphorbiaceae), a shrub from the Amazon, have been used locally used in folk medicine to treat diabetes, malaria. gastrointestinal and liver disorders [1]. A chemotype of this species was found, with an essential oil rich in 7-hydroxycalamenene [2]. 7-hydroxycalamenene is a hydroxylated sesquiterpene of molecular weight 218 found in Heritiera ornithocephala [3], Eremophila drummondii [4], Heteroscyphus planus [5], Tilia europea, Morus alba [6], Ulmus thomasii [7] and other elm species, and methanolic and dichloromethanic extracts of Bazzania trilobata. This substance is reported to have antifungal activity against Botrytis cinerea, Cladosporium cucumerinum, Phythophthora infestans, Pyricularia oryzae and Septoria tritici [8]. During our studies with C. cajucara essential oil, we isolated 7hydroxycalamenene by silicagel column chromatography. The pure compound (+98% by GC) was tested against some Candida species. Minimum inhibitory concentration (MIC) was evaluated in triplicate according standard method from the Clinical and Laboratory Standards Institute (CLSI) [9]. The calculated MIC's were 39,06 µg/mL was found to C. albicans (ATCC10231), C. dubliniensis e C. albicans (CaA), of 78,125 µg/mL to C. albicans (Cab) e C. parapsilosis and C. albicans (CaB) > 2500 µg/mL. From these data, it was observed 7-hydroxycalamenene is a compound with good activity against these Candida species.

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