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Abstract

Evaluation of Antagonistic Activity in Strains of *Micromonospora* sp. Isolated from the Gulf of California Against *Candida albicans*

Omar E. Valencia Ledezma^{*1}, Herminia I. Pérez Méndez^{*2}, Luis A. Maldonado Manjarrez³, Erika T. Quintana Cano⁴, Norberto Manjarrez Alvarez^{*2}

^{*1}Doctorado en Ciencias Biológicas y de la Salud, Universidad Autónoma Metropolitana-Xochimilco, México D. F.

^{*2}Departamento de Sistemas Biológicos, Universidad Autónoma Metropolitana-Xochimilco, México D. F.

³Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México, México D. F.

⁴Escuela Nacional de Ciencias Biológicas, Instituto Politécnico Nacional, México D. F.

Abstract: The marine ecosystem represents a rich source of metabolites of pharmacological interest, among these organisms, the actinomycetes, particularly the genus *Micromonospora* have shown to have a high biotechnological value. Antagonist activity was determined using 12 strains of *Micromonospora* sp. (M001-M012) against *Candida albicans* ATCC 10231 were grown in medium (GYM) employing various methods: a) agar disk diffusion, b) double layer, c) against disk drive, d) confrontation dual type, e) modified technique of Fleming, selection of antagonistic strains was assessed by determining zones of inhibition. *Streptomyces* sp. was used as positive control. Antagonism was positive after 60 days of growth and the technique that allowed the best measure of inhibition percentage was the modified technique of Fleming as this allows diffusion of secondary metabolites. According to the assay, the strains that showed a high inhibition percentage greater than 90% were M007, M009, M010 and M012, with an average of 3.23 ± 0.17 mm of inhibition. A positive antagonism at least by four different *Micromonospora* species against *Candida albicans* 10231 was observed. This indicates that fungal agents are produced and that are active against *Candida albicans*.

Keywords: Actinobacteria, *Micromonospora*, Secondary metabolites, antagonism

Corresponding author: Herminia I. Pérez Méndez

* hperez@correo.xoc.uam.mx