



Bactericidal Effect of Bark Extract from *Laguncularia racemosa* L.

Raúl CASANOVA-VELAZCO ¹, Raúl MARINEZ-RIZOS ¹, María G. MALDONADO-VELÁZQUEZ ²,
Selene BLUM-DOMÍNGUEZ ³, Paulino TAMAY-SEGOVIA ³ & Luis A. NÚÑEZ-OREZA ^{1*}

¹ Laboratorio de Microbiología del Centro de Investigaciones Biomédicas,

² Laboratorio de Análisis Clínicos de la Facultad de Ciencias Químico Biológicas,

³ Laboratorio de Enfermedades Tropicales del Centro de Investigaciones Biomédicas,
Universidad Autónoma de Campeche, Av. Patricio Trueba Regil s/n, Col. Lindavista.

C.P. 24090, San Francisco de Campeche, Cam., México

SUMMARY. Aqueous and ethanolic extracts of stem bark from *Laguncularia racemosa* L were analyzed to determine their metabolites through phytochemical analysis and bactericidal activity using the agar dilution method. Phytochemical analysis mainly revealed the presence of tannins, but also detected saponins, among other compounds. Both extracts showed antibacterial activity against all Gram-positive and Gram-negative microorganisms included in the study, although ethanolic extract tended to be more active than aqueous extracts. Antimicrobial activity of aqueous extracts at pH 5.0, 6.0 7.0 or 8.0 was not affected, the best antibacterial activity being founded at pH 8.0. Each bacteria tested was inhibited by stem bark extracts, even if microorganism presented resistance to one or various commercial antibiotics, suggesting that bactericidal mechanism of bioactive metabolites contained in the extracts is independent of bacterial resistance.

KEY WORDS: Bactericidal activity, *Laguncularia racemosa*, Phytochemical screening.

* Author to whom correspondence should be addressed *E-mail*: lanoreza@hotmail.com