



## ANTIBIOTIC ACTIVITY OF SEVERAL PHYTOPATHOGENIC FUNGI

Á. TRIGOS<sup>1,2</sup>, O. CASTELLANOS-ONORIO<sup>2</sup>, A. SALINAS<sup>2</sup>, C. ESPINOZA<sup>2</sup> AND M. J. YÁÑEZ-MORALES<sup>3</sup>

<sup>1</sup> Instituto de Ciencias Básicas, Universidad Veracruzana, Av. Dos Vistas s/n, Carretera Xalapa–Las Trancas, Xalapa 91000, Veracruz, México.

<sup>2</sup> Laboratorio de Alta Tecnología de Xalapa (LATEX), Calle Médicos 5, Col. Unidad del Bosque, Xalapa 91010, Veracruz, México.

<sup>3</sup> Instituto de Fitosanidad, Colegio de Postgraduados, Carretera México-Texcoco km 36.5, Montecillo 56230, Estado de México, México.

Accepted for publication October 20, 2005

### ABSTRACT

Twenty one strains of phytopathogenic fungi were screened for antibiotic activity by the microdilution method. The highest bacteriostatic activity was recorded in *Curvularia lunata*, *Phytophthora capsici*, *P. drechsleri*, *Gliocladium* spp., *Neocosmospora vasinfecta*, *Helminthosporium* spp., *Fusarium lateritium*, and *Rhizopus* spp. These strains showed activity against at least one of the following bacteria of medical interest: *Escherichia coli*, *Staphylococcus aureus*, and *Pseudomonas aeruginosa*. Likewise, against some phytopathogenic bacteria: *Pectobacterium carotovorum* subsp. *carotovorum*, *Agrobacterium tumefaciens* and *Xanthomonas vesicatoria*. Activities were recorded in the following concentrations of aqueous extracts: 62.5 µl/ml and 250 µl/ml. *Curvularia lunata*, *Fusarium lateritium* and *Rhizopus* spp. also showed bactericidal activity.

**Key words:** Antibiotic activity, bacteriostatic activity, bactericidal activity, phytopathogenic fungi.

---