

## Study of drug resistance *Mycobacterium avium-intracellulare* complex (MAC) isolated from pigs

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**Abstract** The objective of this study is to determine the Minimum Inhibitory Concentration (MIC) of five anti-tuberculous drugs to *Mycobacterium avium-intracellulare* Complex (MAC) isolated from pigs during 2006 - 2007. Sixty-four pigs isolates of MAIC from slaughter-house in Lamphun province were tested for five anti-tuberculous drugs: Isoniazid (INH), Streptomycin(SM), Rifampicin (RIF), Ethambutol (EMB), and Clarithromycin (CAM). Drug susceptibility was performed by Resazurin Microtitre Assay (REMA). The breakpoint concentrations were 1mg/L for INH and RIF, 5mg/L for EMB and SM and 16 mg/L for CAM. The result showed that drug resistance of MAC isolates were as follow: INH (100%), SM (62.50%), RIF (28.13%), EMB (76.56%) and CAM (0%). It showed that drug susceptibility to first line anti tuberculosis drugs of MAIC from pigs isolates was similar to MAC from human isolates. CAM was shown to have best activity against MAC isolated from pigs. REMA was practical for the detection of drug resistance for MAC.

**Keywords :** MAC, Drug resistant, Pigs

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