© Kamla-Raj 1999 PRINT: ISSN 0970-9274 ONLINE: 2456-6608 J Hum Ecol, 10(2): 155-156 (1999) DOI: 10.31901/24566608.1999/10.02.16

Anaerobiosis of Pathogenic *Pseudomonas aeruginosa*: Suppression of *Tox A* Gene

K.M. Elizabeth

Department of Environmental Studies, College of Engineering, GITAM, Visakhapatnam 530 045, Andhra Pradesh, India

KEY WORDS Bacterial Cell Growth. Iron. Lung Infection

ABSTRACT *Pseudomonas aeruginosa* PAO₁ and PA 103 strains were cultured in TSBD medium in the presence or absence of oxygen with low or high iron medium. Both the strains showed higher cell densities with high iron medium under aerobic and anaerobic conditions suggesting that iron is a very important factor for bacterial cell growth. The exotoxin-A assay showed that there was forty-five percent and 79.5 percent reduction in the toxin yields of PAO₁ and PA 103 strains respectively when cultured in iron restricted TSBD medium under anaerobic condition, indicating the suppression of *Tox A* gene, a situation comparable to Cystic Fibrosis (CF) lung infections of *pseudomonas*.