Abstract

The present work sought to detect the presence of Pseudomonas spp. at different stages of an effluent treatment plant using the Australian system of stabilization ponds, and to determine the susceptibility of those isolates to different antimicrobials. Thirty-four isolates of Pseudomonas spp. derived from effluent treatment station water samples were collected near the transfer ducts between the ponds in November/2008 and December/2009. Among the Pseudomonas spp. isolates, 47.05 % showed susceptibility to all antimicrobials tested, 20.58 % were resistant to cefepime, and 24 % showed intermediate resistance to streptomycin. No Pseudomonas spp. isolates were found in the final pond, or in post-treatment effluents. The Pseudomonas spp. isolates did not exhibit multiresistance to the antimicrobials tested.

Keywords

Pseudomonas, antibiotic resistance, industrial effluents, swine slaughterhouses.