BIOCONTROL OF ENTERICS ISOLATED FROM PIG MANURE USING "EFFECTIVE MICROORGANISMS" (EM)

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ABSTRACT

This study dealt on the survival of enteric pathogens isolated from pig manure treated with "Effective Microorganisms" (EM). The enteric pathogens that were used in the study were *E. coli, E. aerogenes, V. cholerae, and S. typhi*. Pre-test Post-test Control Group Design was employed as the experimental design with two treatments: T_0, the control group, was treatment of the isolated enteric bacteria with *Bacillus subtilis*; T_1, was the mixed culture of enteric bacteria with Effective Microorganisms; and T_2 was the mixed culture of the enteric bacteria with Effective Microorganism cells. Agar Well Diffusion Assay was used as a preliminary test to investigate the antagonistic effect of biocontrol agents against enteric pathogens. Miles and Misra were performed to determine the initial and final count of the enterics. Results showed that the Effective Microorganisms (EM) was able to inhibit the growth of all the enterics tested. The bacterial count decreased ($P < 0.05$) when EM was administered. Therefore, it can be concluded that the EM was effective in reducing the growth of enteric pathogens isolated from the pig manure.