#### **Beni-Suef University**

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# **Abstract**

Bacteriological examination of 250 rabbits was done for isolation and identification of bacterial strains causing enetric affections in rabbits. The isolated microorganisms were E. coli, Enterobacter cloacae, Citrobacter diversus, K. pneumoniae, Shigella sonnei, P. aeruginosa, K. oxycota, Y. enterocolitica and Serratia liquificans. Serogroups of recovered E. coli were O111 O114 and O125 . Experimental infections by most prevalent pathogenic bacteria to the rabbits such as E. coli (O111, O114 and O125), P. mirabilis and K. pneumoniae, showed that E. coli O125 was the most pathogenic inoculated species with mortality rate 100% followed by E. coli O111 and *P. mirabilis* 75% mortality for each, while *K. pneumoniae* caused 50% mortality. The inoculated rabbits expressed signs of the enteric diseases. P.M lesions as well as mortalities were described in details. The antibiogram results showed that, E. coli strains were highly resistant to penicillin G and all strains of E. coli were sensitive to norfloxacin, P. mirabilis were found to be sensitive to norfloxacin and highly resistant to most of other therapeutic agents, Enterobacter clocae examined isolates were found to be intermediately sensitive to streptomycin and highly sensitive to all other antimicrobial disks used, K. pneumoniae were found to be highly sensitive to ciprofloxacin, norfloxacin and was highly resistant to penicillin G.

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