

ABSTRACT

In the present study cockroaches collected from various areas of Lahore were subjected to bacterial analysis. The cockroaches were mentioned in laboratory conditions. They were fed with boiled eggs in sterile cages. Simple boiled eggs were used as a control. These eggs along with disinfected eggs were also used for bacterial analysis. The cockroaches were washed with sterile physiological saline. The body wash was used as external body sample to isolate bacteria. After that cockroaches were decontaminated in 90% ethanol and then they were rewashed with sterile saline. Their elementary canals were aseptically dissected for bacterial analysis. These samples were separately inoculated on nutrient agar, EMB agar, BHI agar, Blood agar, salmonella agar, shigella agar, streptococcal agar, pseudocel agar, sodium chloride agar, and MacConkey agar, for 24 hours at 37 C°.

Ten genera and nine species of bacteria were isolated during this study that include. *Acinetobacter antiratus*, *Aerococcus viridans*, *Escherichia coli*, *flavobacterium* spp, *Micrococcus varians*, *Neisseria gonorrhoeae*, *Salmonella typhimurium*, *Staphylococcus aureus*, *Streptococcus faecalis* and *Pseudomonas aeruginosa*.

The isolated bacteria were tested against the body proteins of cockroaches. The cockroach skin and gut proteins were isolated by centrifuging the cockroach skin and cockroach gut during centrifuge tissue was grinded in liquid Nitrogen and then treated with extraction media (0.175 M Tris-HCl, pH 8.8, 5% SDS, 15% glycerol) and then filtered. The tissue was centrifuged at 5000 g for 15 Minutes to collect precipitated protein. It was blot dried later it was cool in 80% acetone and again centrifuged.

The isolated proteins were mixed with in nutrient agar the isolated bacteria were inoculated on this medium and incubated the sensitivity and resistant strains were noted on the basis of growth on the proteins mixed nutrient agar. It was observed that most of the bacteria were resistant against the skin and gut proteins of cockroach.
