**ANTIBIOTIC RESISTANT BACTERIA IN THE ENVIRONMENT AND HUMAN HEALTH**

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In recent years the phenomenon of antibiotic resistance (AR) has become recognized as a global health challenge. The World Health Organization has identified antibiotic resistance as a serious threat to human health and biosecurity across the world. Determining the major sources of AR in the environment, and the pathways to prevent such spread could lead to solutions that improve human health. The aim of this study was to detect the antibiotic-resistant bacteria in different ecosystems: natural ecosystems, agroecosystems, and urboecosystems. The 468 dominating bacteria have been isolated, including 79 antibiotic-resistant bacteria. All isolates were multi-drug resistant, of which greater than 74.5% were resistant to 9 antibiotics. A study of soil samples from the primeval forests showed that the microbial community was characterized by a low content of antibiotic-resistant microorganisms. Among 78 isolated bacteria, only two of them, *Bacillus cereus*, and *Pantoea agglomerans*, demonstrated a high level of resistance to antibiotics. Totally 106 strains were isolated from the soil of medicinal plants,13 of them were antibiotic-resistant. The greatest numbers of antibiotic-resistant bacteria have been isolated from soil of urboecosystems and agroecosystems contaminated by enrofloxacin. Among the 284 tested bacteria, 64 were antibiotic-resistant. Multi-resistant were such pathogenic and conditionally pathogenic bacteria as *Enterococcus faecium*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa, Escherichia coli, Bacillus licheniformis, Serratia fonticola, Hafnia alvei*, *Bacillus cereus, Bacillus megaterium,*and *Clostridium difficile.*Humans may become directly sick or colonized by antibiotic-resistant bacteria when consuming contaminated food or water. In addition, antibiotics also provide a selection pressure for environmental bacteria to maintain antibiotic resistance mechanisms. Management of antibiotic-resistant bacteria in the environment is vitally important for safeguarding human health.

**Keywords:** antibiotic resistance, environment, health, microorganisms, soil.