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## **Antibiotic resistance of bacteria isolated from heavy metal-polluted soils with different land uses**

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### **Highlights**

- Although total number of culturable bacteria in agricultural soils was high, the relative numbers of metal and antibiotic resistant bacteria were considerably higher in intensely polluted mining wastes.
- The bacteria isolated from the studied lands had high ability to resist against different antibiotics. This ability was higher against amoxicillin, ampicillin, streptomycin, vancomycin, tetracycline and doxycycline. The susceptibility of bacteria to gentamycin was high.
- The bacteria isolated from tailings were often mono or di-antibiotic resistant but those isolated from agricultural soils were frequently multi-antibiotic resistant. The most frequent pattern of multiple resistances for this bacteria was Amo, Amp, St, Va, Te, Do.

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