



In Vitro Antibacterial Activity of Mononuclear Metal Complexes Containing a Cefotaxime Derivative Ligand

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SUMMARY. The salicydene-cefotaxime ligand (H_2L), obtained from the condensation reaction of cefotaxime antibiotic with salicylaldehyde, and the mononuclear transition metal complexes $[M(L)]$ ($M(II) = Co, Ni, Cu$ and Zn), were synthesized and characterized on the basis of analytical and spectral data. The complexes were tested for their antibacterial activity against several bacterial strains such as *Staphylococcus aureus* ATCC 25923, *Staphylococcus epidermidis* ATCC 14990, *Klebsiella pneumoniae* ATCC 700603, *Pseudomonas aeruginosa* ATCC 27853 and *Escherichia coli* ATCC 25922, and the results are compared with the activity of commercial cefotaxime. The complexes are insoluble in water and common organic solvents but soluble in dimethyl sulfoxide.

KEY WORDS: Antibacterial activity, Cefotaxime, Metal complexes.

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