



Synthesis of Some Salicylidene- β -Lactam Antibiotics and Their Antibacterial Activity

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SUMMARY. The salicylidene-amoxicillin H₂L¹, salicylidene-cefadroxil H₂L¹, salicylidene-cephradine H₂L³ and salicylidene-cefotaxime H₂L⁴ Schiff bases, obtained from the condensation reaction of salicylaldehyde with the respective β -lactam antibiotic (amoxicillin, cefadroxil, cephradine and cefotaxime), were synthesized and characterized on the basis of analytical and spectral data. The salicylidene- β -lactam Schiff bases were tested for their antibacterial activity against several bacterial strains such as *Staphylococcus aureus* ATCC 25923, *S. epidermidis* ATCC 14990, *Pseudomonas aeruginosa* ATCC 27853 and *Escherichia coli* ATCC 25922, and the results are compared with the activity of commercial antibiotics.

KEY WORDS: Amoxicillin, Cefadroxil, Cefotaxime, Cephradine, Salicylidene- β -lactam antibiotics, Salicylidene- β -lactam Schiff bases.

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