Synthesis and antimicrobial activity of complexes $O$-[2-(hydroxiamino)-2-oxoethyl]-$O$-(carboxymethyl)-(1→6)-$\alpha$-$D$-glucan with cations of some $d$-metals

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Key words: dextran derivatives, complexes of metals cations, antimicrobial activity.

Abstract

Complexes of $O$-[2-(hydroxiamino)-2-oxoethyl]-$O$-(carboxymethyl)-(1→6)-$\alpha$-$D$-glucan with cations $Fe^{3+}$, $Cu^{2+}$, $Co^{2+}$, $Ni^{2+}$, $Mn^{2+}$, $Zn^{2+}$, $Ag^{+}$ were synthesized. The compounds obtained were characterized by IR and electronic spectroscopy, their composition was determined, ways of coordination bonds formation were suggested. In vitro antimicrobial activity of these complexes against gram-positive, gram-negative bacteria and fungi was evaluated.