The invention refers to chemistry and medicine, namely to the synthesis of a series of biologically active chelate compounds of copper from the class of thiosemicarbazidates of the transition metals and may find its application in medicine and veterinary medicine.

Summary of the invention consists in that as antimicrobial preparations there are proposed the sulfanilamide-containing salcicylidenethiosemicarbazidates of copper(II) of formula:

where X = H(I - VI, VIII - XI), Br (VII); R = H(I - VII),  $C_6H_5$ - (VIII - XI);

The result of the invention consists in the synthesis of compounds I–XI, having low toxicity, manifesting antimicrobial activity about the majority of microorganisms, and in the case of gram-positive strains manifest bacteriostatic and bactericidal activity 2...160 times higher than their structural analogue.

Claims: 2 Fig.: 2