

SYNTHESIS, CHARACTERIZATION AND STUDY THE EFFECT OF (3,5DIMETHYL-1H-PYRAZOL-4- YL) MERCURY (II) CHLORIDE ON GROWTH INHIBITION OF SOME BACTERIA ,YEAST AND SOME FUNGI (IN VITRO).

ABSTRACT

The reaction of 3,5-dimethyl-1H-pyrazole with mercury (II)acetate in absolute methanol gave (3,5-dimethyl-1H-pyrazol-4-yl) mercury(II) chloride (DMPMC), which characterized by microanalysis, ¹H, and ¹³C-NMR and IR. It was found that 0.22M of (DMPMC) dissolved in ethanol/water added to Muller-Hinton Agar medium and Sabourauds-Dextrose agar medium (SDA) respectively, inhibited the growth of some gram negative bacteria [Escherichia-coli, Klebsiella-aerogenes and Pseudomonas-aeruginosa], also gram positive bacteria [Staphylococcus aureus, Streptococcus-pyogenes] and Candida-albicans as well as some fungi [Aspergillus-flavus, Aspergillus-fumigatus and Aspergillus-niger]. Higher concentrations of (DMPMC) solution in to the media inhibited growth of bacteria yeast and fungi under studies more strongly. The minimal inhibitory concentration (MIC)and the cytotoxicity of (DMPMC) were studied against human being blood , it was found that it has no haemolysis at different concentrations in vitro.
