

**SYNTHESIS AND BIOLOGICAL EVALUATION OF SOME NOVEL  
PYRAZOLINES FROM 1-(3-METHYL-4-HYDROXY PHENYL)-2-  
PROPEN-1-ONE AND 1-(3-METHYL-4-HYDROXY PHENYL-  
FURFURYL-2-PROPEN-1-ONE.**

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The reaction of *o*- cresol with acetic anhydride in the presence of zinc chloride led to the formation of 3-methyl-4-hydroxy acetophenone (I). Condensation of compound (I) with some aromatic aldehydes in methanolic KOH yielded the corresponding chalcones (IIa-k). These corresponding chalcones were reacted with thio- semicarbazide to yield N-thio carbomoyl pyrazolines (IIIa-k). Similarly the reaction of (IIa-k) with phenyl hydrazine in acetic acid led to the formation of phenyl pyrazolines (IVa-k). The newly synthesized heterocycles were characterized on the basis of their chemical properties and spectroscopic data. The newly synthesized compounds were tested for anti-bacterial and anti-fungal activities.

**Key words:** pyrazoline ,anti-bacterial , anti-fungal activity