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Synthesis and Characterization of Some New Pyrazoline and Isoxazoline Derivatives as Antibacterial Agents Ali K. Alywee Al-Naseeri Department of Chemistry, College of Education for Women, University of Anbar E-mail:d.alikareem@yahoo.com Received 3/ 8/2015 Accepted 11 /10 /2015

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NonCommercialNoDerivatives 4.0 International License Abstract: In this

paper some chalcones (C1-C8) are prepared based on the reaction of one

mole of substituted acetophenone with one mole of substituted

benzaldehydes in the presence of (40%) sodium hydroxide as a base.

Pyrazolines (P1–P8) are prepared from the reaction of chalcones (C1-C8) with hydrazine hydrate. Isoxazoline (I1-I8) is prepared from the reaction of

chalcones (C1-C8) with hydroxyl amine hydrochloride in the presence of (10%) sodium hydroxide as a base. These compounds are characterized by

using various physical and spectral methods. The compounds are screened

for their in vitro antibacterial activity using grampositive bacteria and gram-negative bacteria. Several derivatives of pyrazolines and isoxazolines are produced well to moderate activities against number of bacteria. Key

words: Chalcones, Pyrazolines, Isoxazolines, Antibacterial.