

SYNTHESIS AND CHARACTERIZATION OF SOME NOVEL 1,3-THIAZINE DERIVATIVES DERIVED FROM COUMARIN

ABDEL AMIR. M. FENJAN¹ & INAS SALIM MAHDI²

¹Department of Chemistry, College of Science for Women, University of Baghdad, Iraq

²Department of Fundamental Science, College of Agriculture, University of Baghdad, Iraq

ABSTRACT

Coumarins (2H-1-benzopyran-2-ones) are important oxygen containing fused heterocycles used in drugs and dyes. They are the family of lactones containing benzopyrone skeletal framework that have Susceptibility for isolation from plant as well as total synthesis in the laboratory. 1,3-Thiazines are six membered heterocyclic rings with N-C-S linkage which have promising pharmacological activities which have attract the attention of scientists. The present study was designed to synthesis a new Thiazine derivatives from Chalcones which are derived from Coumarin. Compound(1) (7-hdroxy-4-methyl coumarin) was fused with actamide to gives 1-acetyl-7-hydroxy-4-methyl quinolin-2(1H)-one (2).The reaction of (2) with various benzaldehyde in presence of alcoholic NaOH leads to production a new series from Chalcones (3-6). Refluxing of Chalcones with thiourea in presence of alcoholic KOH gives a new derivatives from 1,3 Thiazine (7-10).These new derivatives were characterized using various physical techniques like: FT- IR ,¹H-NMR ,GC-Mass and C.H.N.S spectra.

KEYWORDS: Coumarin, 1,3 Thiazine, Chalcon, Methylquinolin