



Synthesis and antimicrobial activity of new substituted 1,3,5-triazine derivatives

Fatma A. El-Samahy^{1*}, Mervat Elsedik², Tarek Aysha²
and Magda A. El-Bendary³

¹Department of green chemistry, Chemical Industries Division,

²Department of Dyeing, Printing and Textile Auxiliaries, Textile Industries
Research Division,

³Department of Microbial Chemistry. National Research Centre, 33 El Bohouth st,
Dokki, Giza, Egypt, P.O.12622.

Abstract : A series of di- and tri-substituted 1,3,5-triazine derivatives has been synthesized from the reaction of 2,4-dichloro-6-(trityloxy)-1,3,5-triazine with some cyclic secondary amines as morpholine, piperidine and piperazine in the presence of anhydrous potassium carbonate by nucleophilic substitution reaction. The reaction of 2,4-dichloro-6-(trityloxy)-1,3,5-triazine with 2-aminothiazole, 2-aminobenzo-thiazole, hydrazine hydrate, were also studied. The structures of the new products were characterized by common analytical and spectroscopic methods. The antimicrobial activity of prepared compounds against gram positive bacteria *Staphylococcus aureus* and *Candida albicans* were investigated.

Keywords: Synthesis, Triazine derivatives, 2-Aminothiazole, 2-Aminobenzothiazole, Secondary amines, Hydrazine hydrate, Antimicrobial activities.