**ABSTRACT**

Derivatives of pyrones were synthesized and evaluated for their antimicrobial activity. 2-hydroxy-3-acetyl-6-methyl-pyran-4-one (dehydroacetic acid) was treated with different aromatic aldehydes in the presence of base NaOH, ethanol was used as a solvent and converted into chalcone derivatives. It was further converted into flavone derivatives using the hydrogen peroxide. In another scheme chalcone derivatives were treated with ethylcyano acetate & ammonium acetate and ethanol was used as a solvent and converted into 6-substituted -2-hydroxy -6-methyl -pyran- 4-one -3-yl-2- oxo-3,5-dihydropyridine-3-carbonitrile. All synthesized compounds were characterized by IR, 1H NMR and Mass spectra. Synthesized pyrone derivatives are screened for their antimicrobial activity by cup-plate method. It is observed that the newly synthesized compounds were possessing electron withdrawing group like chloro, nitro group and exhibited good activity.

**Key words:** Dehydroacetic acid, Flavones derivatives, dihydro pyridine derivatives, Antimicrobial activity.