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ABSTRACT BOOK

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THE SYNTESIS AND CHARACTERİZATİON OF ANTIOXIDANT AND ANTIMICROBIAL POTENTIAL OF NEW PYRAZOLE DERIVATİVES

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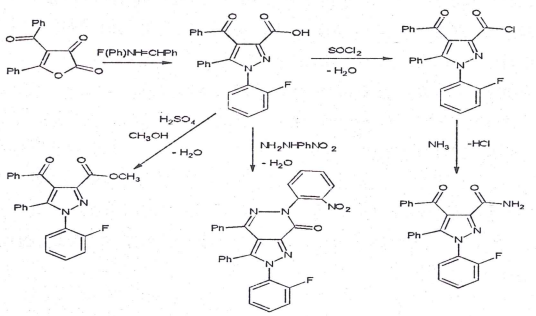
Secondary metabolites of the plants are chemical compounds that are not directly involved in the basic vital activities of the organism. Unlike primary metabolites (protein, lipid, carbonhydrate etc.) absence of secondary metabolites does not cause death, but play an important role in other fuctions of the plant like fecundity and survivability.The increasing commercial importance of secondary metabolites in pharmaceuticals has in recent years resulted in a great interest in pyrazole derivatives because of their antipyretic, analgesic and anti-inflammatory properties. In this study nucleophilic and cyclo-addition reactions of N- nucleophiles and 4-benzoyl-5-Phenyl-2,3-furandion, a new bicyclic compound of various carbonyls, were investigated respectively.



As a result, respectively, isolation of heterocyclic compounds of 4-Benzoyl-1-(2-florphenyl)-5-phenyl-1*H*-pyrazole-3-carboxylicacid, 4-Benzoyl-1-(4-florphenyl)-5-phenyl-1*H*-pyrazole-3-carboxylicacid, 4-Benzoyl-1-(2-florphenyl)-5-phenyl-1*H*-pyrazole-3-carbonyl chloride , 4-Benzoyl-1-(2-florphenyl)-5-phenyl-1*H*-pyrazole-3-carboxamide , Methyl 4-Benzoyl-1-(2-florphenyl)-5-phenyl-1*H*-pyrazole-3-carboxylate , Propyl 4-Benzoyl-1-(2-Florphenyl)-5-phenyl-1*H*-pyrazole-3-carboxylate , 2-(2-Florphenyl)-6-(2-nitrophenyl)-3,4-diphenyl-2*H*-pyrazolo[3,4-*d*]pyridazin-7(6*H*)-one , 2-(2-Florphenyl)-6-(3-nitrophenyl)-3,4-diphenyl-2*H*-pyrazolo[3,4-*d*]pyridazin-7(6*H*)-one , Benzaldehyde-2-florphenyl hydrazone were taken placed.
The structure of these compounds were revealed by IR, ^{13}C-NMR, ^{19}F-NMR ve ^{1}H-NMR spectrums.Pyrazole derivatives are used in medicine as it is known, various pharmacological studies. Therefore, through modifying the functional groups of starting materials, this work can lead to a more recent synthesis of pyrazole derivatives.

Key words: 4-Benzoyl-5-phenyl-2,3-furandion, nucleophilic addition, pyrazole, pyridazine.