Abstract

One of the most useful ring systems, which are heterocyclic chemical compounds that make up the bases of many of these compounds, Pyrazole derivatives due to their numerous applications in agriculture, pharmaceuticals and dyes are of particular importance. In this study, new derivatives of 5-amino-1- (2,4-di nitrophenyl) -1 H- pyrazole-4-carbonitril-3-substituted by a one-pot reaction of potassium carbonate was synthesized multi-component solvent glycerol autectic The distinguishing feature of this method can be used to carry out the reaction at relatively low temperatures, high efficiency and environmentally-friendly process being noted. Finally synthesized derivatives inhibitory effect on the number of gram positive and negative bacteria and three fungi were investigated.

$$CN$$
 + R H + DES O_2N O_2N

R= a: $H_3CCONH-C_2H_4$ b: 2,4- di Cl- C_6H_3 c: 2-OH-3-OMe- C_6H_3 d: 2,6- di Cl- C_6H_3 e: 4-NO₂- C_6H_4 f: 4-OMe- C_6H_4

Key words: Eutectic Solvents, Green Chemist, Pyrazole Derivatives, Antibacterial Effects, Antifungal effects



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Synthesis of new pyrazole derivatives in glycerol-potassium carbonate as eutectic solvent and study of their antibacterial effects

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