Synthesis and antimicrobial activity of some new thienopyrimidine derivatives

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Abstract:

Due to the biological activities of pyrimidine and thienopyrimidine as antimicrobial agents, so in the present work, a series of new heterocyclic compounds containing thienopyrimidine moiety were synthesized such as, tetrazolo[1"',5":1',6']pyrimido[4',5':4,5]thieno[2,3-d]pyrimidine derivatives (8-12b), pyrimido[3"',2':1',6']pyrimido[4',5':4,5]thieno[2,3-d]pyrimidine derivatives (14,16) and pyrimido[5',4':4,5]thieno[2,3-c]pyrimido[1,2-c][1,2,3]triazine derivative (15) by using 5-amino-4-phenyl-2-(p-tolylamino)thieno[2,3-d]pyrimidine-6-carbonitrile (7) as starting material. All synthesized compounds were evaluated for their antimicrobial activity. And Compounds (8-13) exhibited high antibacterial activity. Also, compounds (12b-18) exhibited high antifungal activity. Keywords:

Keywords:

Antimicrobials, thienopyrimidine, pyrimidothienopyrimidine, fused tetrazoles

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