

## Design and synthesis of some new 5-6-dihydropyrimidine-2(1*H*)-thione derivatives as antimicrobial agents

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**ABSTRACT** A series of some new 5-6-dihydropyrimidine-2(1*H*)-thione derivatives (**4a-1**) was synthesized by the reaction of *E*-1-(6-methoxynaphthalene-2-yl)-3-(substituted phenyl)prop-2-en-1-ones with thiourea. The synthesized compounds were evaluated for their antimicrobial screening and showed good to moderate activity. Compounds featuring methoxy group at *para* position **4c** and methyl group at *meta* position showed potent antibacterial activity. A moderate antifungal activity for compound **4l** having methyl group at *para* position is observed.

**KEYWORDS** Antimicrobial resistance, Microorganism, Pyrimidine, Chalcone.

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