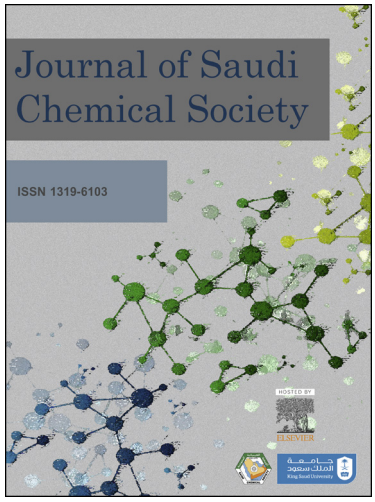

Original article

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Synthesis of 2-phenylamino-thiazole derivatives as antimicrobial agents

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Abstract

A series of 10 new *N*-phenyl-4-(4-(thiazol-2-yl)-phenyl)-thiazol-2-amine derivatives (**3a-j**) and 4 new 5-(2-(phenylamino)-thiazol-4-yl)-benzamide ethers (**3'a-d**) were synthesized from 4-(2-phenylamino)-thiazol-4-yl)-benzothioamide and 2-hydroxy-5-(2-(phenylamino)-thiazol-4-yl)-benzamide with several α-halo-ketones, by the Hantzsch reaction. All compounds were characterized by elemental analysis and spectral data (MS, FT-IR and NMR). The final 14 substances were screened for antimicrobial activity, against two Gram-positive, one Gram-negative bacterial strains, and two fungal strains. Some of the synthesized molecules were more potent than the reference drugs, against the pathogenic strains used. The antibacterial activity of compounds was more pronounced against the Gram-positive strains. Compound **3e** manifested the highest growth inhibitory effect against all