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Convenient Syntheses and Antimicrobial Screening of Some Derivatives of Complex Benzoxazinophenothiazines

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Abstract: Four angular precursors for the synthesis of the complex derivatives were prepared by one step condensation reactions of 2,3-dichloronaphthalene-1,4-dione with 2-amino-4-nitrophenol, 2-amino-4-chlorophenol, 5-amino-4,6-dihydroxylpyrimidine and 5,6-diamino-4-hydroxylpyrimidine correspondingly in base catalyzed medium. The angular precursors on further condensation with aromatic thiols gave the complex derivatives. The Structural confirmation was done using UV-Visible spectroscopy, FT-IR, ^{1}H- and ^{13}C-NMR and elemental analysis. The synthesized compounds were screened for their anti-microbial activities and the results showed that the complex derivatives were significantly active against the microorganisms.

Keywords: Condensation reactions; 2,3-dichloronaphthalene-1,4-dione; 2-amino-4-nitrophenol; 2-amino-4-chlorophenol; 5-amino-4,6-dihydroxylpyrimidine; 5,6-diamino-4-hydroxylpyrimidine; base catalyzed medium.

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