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SYNTHESIS, CHARACTERIZATION AND BIOLOGICAL EVALUATION OF N-(2-(1-BENZO [*d*] IMIDAZOL-2-YL)PHENYL)-SUBSTITUTED BENZAMINES

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A series of N-(2-(1-benzo [*d*] imidazol-2-yl) phenyl)-substituted benzamines (**3**a-**3**h) was synthesized by using *o*-phenylenediamine and salicylic acid resulting in the formation of 2-(1*H*-benzo [*d*] imidazol-2-yl) phenol (**1**). Compound (**1**) on bromination yielded 2-(2-bromophenyl)-1*H*-benzo [*d*] imidazol-2-yl (**2**) which on further reaction with aniline derivatives gave the final compounds. The structures of the synthesized compounds have been established by FTIR, ^{1}H NMR, Mass spectral and elemental analysis. Each analogue was tested *in vitro* for their antimicrobial and anthelmintic activity. Anthelmintic activity was performed against *Phaeritima posthuma* species of earthworms by the identification of paralyzing and death time by using mebendazole as standard. Antimicrobial activity was performed through disc diffusion method against *Staphylococcus aureus, Bacillus subtilis* (Gram positive) and *Escherichia coli, Pseudomonas aeruginosa* (Gram negative) bacterial strains and *Aspergillus niger* and *Candida albicans* fungal strains by using ciprofloxacin and fluconazole as standard for antibacterial and antifungal activity. Compounds **3**c, **3**d and **3**e were found to be potent for antimicrobial as well as for anthelmintic activity.