**ABSTRACT**

Benzimidazole is a fused ring heterocyclic compound and it exhibits a broad spectrum of pharmacological and biological activities. Microwave assisted synthesis, and biological activity of some novel 2-substituted benzimidazoles is reported. Condensation of o-phenylenediamine with PABA yielded 4-(1Hbenzimidazol- 2-yl)aniline which when reacted with aromatic / hetero aldehydes afforded various Schiff bases. Cyclisation of the Schiff bases with mercapto acetic acid gave various thiazolidinone-4-ones. The structures of newly synthesized compounds were confirmed by FT-IR, 1H NMR and Mass spectral data. In vitro anthelmintic, antibacterial, antifungal and antitubercular activities of the newly synthesized compounds were studied. Some of the compounds exhibited promising biological activities.

**Key words:** Benzimidazole derivatives, thiazolidinone-4-ones, in vitro anthelmintic

activity, antibacterial activity, antifungal activity, antitubercular activity.