

Abstract:

Indoles and their derivatives find a prominent place in synthetic organic chemistry, as they are found to be potent pharmacophores. They have been reported to possess a wide variety of biological properties viz. anti-inflammatory, anti cancer, anti diabetic, anti malarial, anti fungal, anti bacterial and anti convulsant activities.

Indole derivatives were synthesized by reacting substituted indoles with various types of amines in presence of formaldehyde and dimethyl formamide to form mannich bases. The newly synthesized compounds were characterized by physical constants and by spectral methods viz. FT-IR, ¹H NMR & MASS spectra.

The *in vivo* anti-inflammatory activity and the analgesic activity of the compounds were evaluated by Carrageenan-induced paw edema model in rats by measuring the paw volume and Acetic-acid induced writhing in mice by measuring the number of writhings respectively.

Some of the newly synthesized compounds showed good anti-inflammatory and analgesic activity.

Keywords: Indole; *in vivo* anti-inflammatory activity; analgesic activity.