

Synthesis and Pharmacological Activity of Some Oxyindole Derivatives

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Abstract : Indole-2,3-diones are known for their various biological activities. By suitable control of a substituent, different novel indole-2,3-diones were synthesized. In this present study, various Schiff and Mannich bases were synthesized and characterized, and evaluated their for different pharmacological activities. The compounds were prepared by reacting indole-2,3-dione with benzyl chloride and 4-substituted thiosemicarbazides. All the synthesized compounds were characterized by the TLC, MP, Elemental analysis, FTIR, ¹H-NMR and Mass spectroscopy. The compounds have been evaluated for their anticancer, antituberculosis, anticonvulsant, antiinflammatory as well as anti-SARS activity and the results are presented. Some of compounds possessed different pharmacological activity at a concentration of 200 mg/kg body weight and even at lower concentration.

Keywords : indoles, isatin, NMR, biological activities

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