



Sohag University



Chemistry Department



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The efficiency of Lufenuron analogues as insect growth regulator (IGR) on toxicological and biological aspects of *Spodoptera littoralis* (Boisd)

By

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Abstract

The present work deals with the synthesis of arylureas and arylthioureas. A novel series of hydrazine carboxamide, hydrazine carbothioamide, carboxamide, 5-imino-4,5-dihydro-1H-pyrazole, 4-arylcarbamoylaminobenzoic acid, arylcarbamothioyl)amino]benzoic acid, benzamide, 1,3,4-oxadiazole, triazine, thiazolidinone derivatives were prepared *via* the reaction of arylureas and arylthioureas with selected reagents. Toxicological activity data indicated that, synthesized Lufenuron analogues have insecticidal activity against *Spodoptera littoralis*.

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