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### **Synthesis, Characterization and Plant Growth Regulator Activity of Some Substituted 2-Amino Benzothiazole Derivatives**

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#### **ABSTRACT**

*Benzothiazole derivatives are the heterocyclic systems that have been found to exhibit diverse biological activities. Therefore, synthesis of benzothiazole derivatives as biologically active substances with various substituents in position 2 was undertaken. The title compounds were synthesized by facile synthetic procedure, starting with substituted aniline and potassium thiocyanate to give substituted 2-amino benzothiazoles, further addition of acid chlorides of substituted phenoxyacetic acid in basic condition was carried out to give the title compounds. All synthesized derivatives were characterized for structural confirmation by IR, <sup>1</sup>H NMR and Mass spectroscopy. The prepared compounds are screened for their plant growth regulator activity.*

**Keywords:** Benzothiazole, phenoxyacetic acid, plant growth regulator.

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