



**An Efficient synthesis and Biological activity of
Quinoxaline-2-Carboxylic acid and its derivatives**

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ABSTRACT

Condensation of ortho phenyldiamine with acetic acid and form 2-tetrahydroxy butyl quinoxaline which further react with hydrogen peroxide and solid sodium hydroxide form quinoxaline-2-carboxylic acid. Ethyl 3-hydroxyquinoxaline-2-carboxylate reacts with POCl₃ and to form ethyl-3-chloroquinoxaline-2-carboxylate. Ethyl-3-chloroquinoxaline-2-carboxylate reacts with sodium hydroxide, alcohol, sodium methoxide and form 3-ethoxyquinoxaline-2-carboxylic acid, 3-amino quinoxaline-2-carboxylic acid, 3-methoxy quinoxaline-2-carboxylic acid, with good yield. The structure of the compounds had been established on the basis of IR, and ¹H NMR, spectral data.

Keywords: Quinoxaline-2-carboxylic acid, Ethyl-3-chloroquinoxaline-2-carboxylate, 3-chloroquinoxaline-2-carboxylic acid, Ligands.
