

## SYNTHESIS OF QUATERNARY AMMONIUM SALTS HAVING PHENOXY ACETIC ACID MOIETY AND THEIR PLANT GROWTH RETARDANT ACTIVITY

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### ABSTRACT

Eight new quaternary salts of ammonia (1a-d and 2a-d), from different phenols were synthesized and tested as plant growth retardants. The structure of various tertiary amines and esters was established with the help of IR and NMR spectral studies. Biological activity of these compounds was tested using seed germination and seedling growth as bioassay of *Oryza sativa*. All the compounds showed plant growth retardant activity comparable to cycocel (CCC) at higher concentrations.

**KEYWORDS:** Cycocel, *Oryza Sativa*, Tertiary Amine, Quaternary Ammonium Salts