Cobalt(II) Derivatives of Cyclic Phosphazenes: Synthesis, Characterization and Fungicidal Behaviour

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Cobalt(II) Derivatives, Cyclic Phosphazenes, IR Spectra

Chlorine atoms of hexachlorocyclotriphosphazene were substituted with \(-\text{NH.C}_2\text{H}_5,\)
\(-\text{NH.CH}_2\text{C}_6\text{H}_5\) and \(-\text{OC}_2\text{H}_5\) to yield organotriphosphazene ligands. Anhydrous cobalt(II) chloride formed a number of addition complexes with these ligands in different stoichiometric ratios. On the basis of electronic and IR spectra, magnetic moment, conductivity measurements and molecular weight determination, structures of these complexes have been suggested. The complexes were screened for their antifungal activities against *Aspergillus flavus* and *Aspergillus niger*.

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