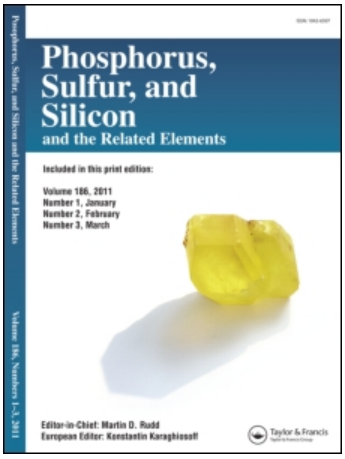

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A Convenient Synthesis of 1-(Dichloro-Pyrimidinyl Carbamyloxy)Alkyl Phosphonates

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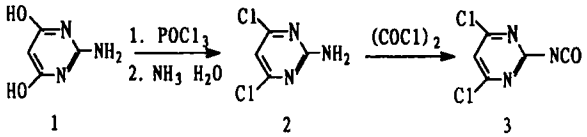
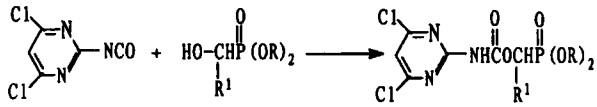
In the study of the nucleophilic addtion reaction of dialkyl 1-hydroxyphosphonate and dichloropyrimidinyl isocyanate. We found this reaction was a convenient way for the synthesis of 1-(substituted carbamyloxy)alkyl phosphonate derivative. Dialkyl 1-hydroxyphos-phonate can be easily prepared by addtion of dialkylphosphite to carbonyl compounds. 4,6-dicloro-2-isocyanato pyrimidine can be synthesized by the reaction of oxalyl chloride and 2-amino-4,6-dichloropyrimidine which can be obtained from 2-amino-4,6-dihydroxy pyrimidine.



1 2 3



3 4 5

	5a	5b	5c	5d	5e	5f	5g	5h
R	Me	Et	Et	Et	Et	i-Pr	i-Pr	i-Pr
R^1	o-ClPh	Me	Ph	o-ClPh	p-ClPh	Me	Ph	Furyl

The reaction of dichloropyrimidinyl isocyanate **3** and dialkyl 1-hydroxyphosphonate **4** in dry benzene with stirring at room temperature for 15 min occurs readily to afford the title compounds **5** in 62.0-83.0% yields.

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