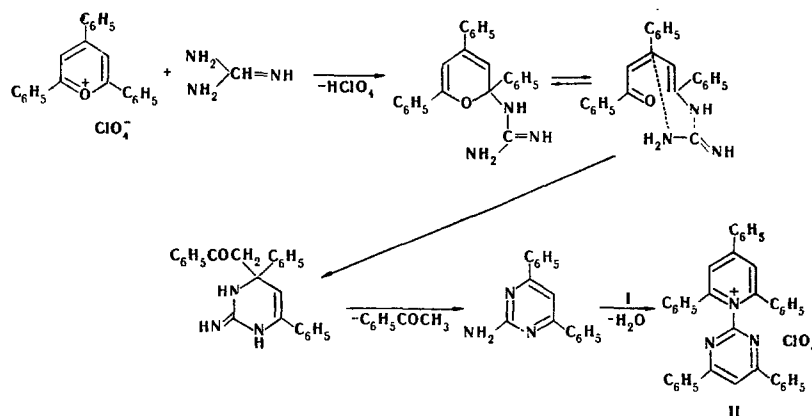


CONVERSION OF 2,4,6-TRIPHENYLPYRYLIUM  
PERCHLORATE TO A COMPOUND OF THE  
PYRIMIDINE SERIES

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We have found that the reaction of 2,4,6-triphenylpyrylium perchlorate (I) with guanidine in a ratio of 1 : 1.2 by refluxing in absolute dimethylformamide (DMFA) for 20 min gives N-(4,6-diphenyl-2-pyrimido)-2,4,6-triphenylpyridinium perchlorate (II) in 63 % yield.



A portion of starting salt I is converted to 1,3,5-triphenyl-2-pentene-1,5-dione. Perchlorate II can also be obtained in absolute ethanol in 12 % yield. 2-Amino-4,6-diphenylpyrimidine was not isolated from the reaction mixture, but traces of it were detected in an experiment carried out without heating, which gave primarily a 1,5-diketone and guanidine perchlorate.

The structure and composition of perchlorate II were proved by IR spectroscopic data, elementary analysis, and alternative synthesis from 2-amino-4,6-diphenylpyrimidine and salt I. The yield of product with mp 300-301° (from glacial acetic acid) was 94 %.

Guanidine perchlorate and a hexamer of methylenepyran were isolated from the reaction of 2,4,6-trimethylpyrylium perchlorate with guanidine.

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