

## LITERATURE CITED

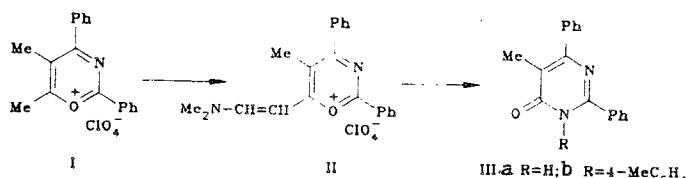
1. L. A. Ignatova, A. D. Shutalev, A. G. Shingareeva, S. F. Dymova and B. V. Unkovskii, Khim. Geterotsikl. Soedin., No. 2, 260 (1985).
2. L. A. Ignatova, A. D. Shutalev, M. T. Pagaev, and B. V. Unkovskii, Khim. Geterotsikl. Soedin., No. 2, 234 (1988).

## UNUSUAL RECYCLIZATION OF 5-METHYL-2,4-DIPHENYL-6-(2-N,N-DIMETHYLMINOVINYLY)-3-AZAPYRILUM PERCHLORATE

I. I. Nechayuk, N. V. Shibaeva,  
S. V. Borodaev, A. I. Pyshchev,  
and S. M. Luk'yanov

UDC 547.854.3'867.2.04

We have discovered a previously unknown recyclization of 3-azapyrilium salts which accompanies splitting of an exocyclic C-C bond. The 3-azapyrilium salt II, obtained by a Vilsmeier reaction from 5,6-dimethyl-2,4-diphenyl-3-azapyrilum perchlorate (I) [1], reacts with ammonium acetate or with p-toluidine upon refluxing in acetic acid to split off the N,N-dimethylaminovinyl group and to form the 4(3H)-pyrimidones IIIa, b.



2-(2-N,N-Dimethylaminovinyl)-5-methyl-4,6-diphenyl-3-azapyrilum perchlorate (II, C<sub>21</sub>H<sub>21</sub>ClN<sub>2</sub>O<sub>5</sub>). Yield 50 %, mp 26°C (from acetic acid). IR spectrum (Vaseline mull): 1627 (C=C), 1608 (3-azapyrilium cation), 1080 cm<sup>-1</sup> (ClO<sub>4</sub>). PMR spectrum (nitrobenzene-d<sub>5</sub>): 2.22 (3H, s, 5CH<sub>3</sub>); 3.49 and 3.78 (each 3H, s, NCH<sub>3</sub>); 5.75 and 8.63 (each 1H, d, j = 11 Hz, =CH); 7.20-8.35 ppm (10H, m, arom.).

5-Methyl-2,6-diphenylpyrimidin-4(3H)-one (IIIa). Yield 32 %, mp 260°C [2].

5-Methyl-3-(p-tolyl)-2,6-diphenylpyrimidin-4(3H)-one (IIIb, C<sub>24</sub>H<sub>20</sub>N<sub>2</sub>O). Yield 41%, mp 228°C (from benzene). IR spectrum (vaseline mull): 1647 cm<sup>-1</sup> (C=C). PMR spectrum (CDCl<sub>3</sub>): 2.13 and 2.19 (each 3H, s, CH<sub>3</sub>); 6.80-7.70 ppm (14H, m, arom.). M<sup>+</sup> 352.

Elemental analytical data agreed with those calculated.

## LITERATURE CITED

1. N. V. Shibaeva, S. V. Borodaev, A. I. Pyshchev, and S. M. Luk'yanov, Zh. Org. Khim., 24, 2232 (1988).
2. N. V. Kagan and Y-Heng Suen, Bull. Soc. Chim. France, No. 6, 1819 (1966).

Physical and Organic Science Research Institute, Rostov State University, Rostov-on-Don 344104. Translated from Khimiya Geterotsiklicheskikh Soedinenii, No. 1, p. 134, January 1990. Original article submitted May 4, 1989.