mp 90-91.5° (from aqueous alcohol). An intense violet coloration is produced when II is treated with an alcohol solution of ferric chloride.

The compositions of I and II were confirmed by the results of elementary analysis.

CONVERSION OF 1-ALKOXY(ARYLOXY)-5-METHYL-1,2,3,6-TETRAHYDRO-1,2,6-PHOSPHADIAZINE-1,3-DIONES TO 4-HYDROXY-6-METHYLPYRIMIDINE

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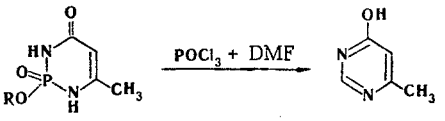
UDC 547.854:543.422.25.4.6

We have observed that treatment of 1-ethoxy- (I) and 1-phenoxy-5-methyl-1,2,3,6-tetrahydro-1,2,6-phosphadiazine-1,3-dione (II) with a twofold excess of the $POCl_3$—dimethylformamide (DMF) complex gives, instead of 4-formyl derivatives, 4-hydroxy-6-methylpyrimidine (III), which, according to the results of elementary analysis and the IR, UV, and PMR spectroscopic data, is identical to the substance obtained by desulfuration of 2-thio-6-methyluracil with Raney nickel.



I, II III

I $R=C_2H_5$; II $R=C_6H_5$

Thus a solution of 2.7 mmole of I in 7.5 ml of DMF was mixed with a solution of 0.25 ml of $POCl_3$ in 0.83 ml of DMF at 0°, after which the mixture was stirred at 20° for 6 h. It was then poured into two volumes of ice water, and the aqueous mixture was neutralized to pH 7 with Dowex-50 (1 × 8) (OH^-) and evaporated. The residue was subjected to preparative chromatography on silica gel plates [chloroform—methanol (4:3)], and the product was crystallized from benzene to give pyrimidine III, with mp 146-148°, in 36% yield. PMR spectrum (in $CDCl_3$), ppm: 8.16 (1H, s, 2-H), 6.34 (1H, s, 5-H), and 2.34 (3H, s, CH_3).

A precipitate formed after 4 h in the reaction of II with $POCl_3$—DMF under the same conditions. It was removed by filtration, washed with DMF, and vacuum dried. This intermediate (evidently a noncyclic compound) did not contain a PhOPO group. It was dissolved in alcohol, and the solution was refluxed for 10 min. It was then evaporated, and the residue was chromatographed with a column filled with silica gel [chloroform—methanol (3:1)] to give III in 64% yield.

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Translated from Khimiya Geterotsiklicheskikh Soedinenii, No. 5, pp. 704-705, May, 1977.
Original article submitted December 9, 1976.