NEW SYNTHESIS OF PYRAZOLO[1,2-a]PYRIDAZINIUM SALTS

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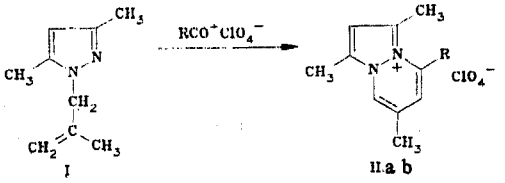
In the acylation of 1-methylallyl-3,5-dimethylpyrazole (I) with acyl perchlorates we isolated crystalline perchlorates, to which we assigned the pyrazolo[1,2-a]pyridazinium structure II on the basis of the PMR spectra.



II a R=CH_3, b R=C_2H_5

The reaction proceeds at room temperature in the course of 8-12 h.

We obtained 1,3,5,7-tetramethylpyrazolo[1,2-a]pyridazinium perchlorate (IIa) [32.4* yield, mp 175-176°C (from methanol), PMR spectrum (CF_3COOH): 2.3 (3H, s, 7-CH_3), 2.68 (3H, s, 1-CH_3), 2.9 (3H, s, 3-CH_3), 3.0 (3H, s, 5-CH_3), and 6.53, 6.9, and 7.76 ppm (3H, Ar)] and 1,3,7-trimethyl-5-ethylpyrazolo[1,2-a]pyridazinium perchlorate (IIb) [22.5% yield, mp 171-172°C (from methanol), PMR spectrum (CF_3COOH): 1.3 (3H, t, 5-CH_3), 2.3 (3H, s, 7-CH_3), 2.68 (3H, s, 1-CH_3), 2.9 (3H, s, 3-CH_3), 3.3 (2H, q, 5-CH_2), and 6.53, 6.9, and 7.76 ppm (3H, Ar)].

The results of elementary analysis were in agreement with the calculated values.

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