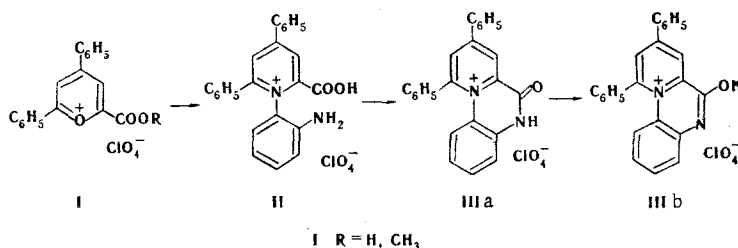


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The reaction of 2-carboxy-4,5-diphenylpyrylium perchlorate (I) with o-phenylenediamine in acetone in the cold gives yellow prisms with mp 311-312° (from ethanol) in 95% yield. The high electrophilicity of the carbon atom of the carboxyl group induced by the closeness of the pyridinium nitrogen atom promotes its electrophilic attack on the free pair of electrons of the amino group, and this readily leads to condensation (on heating in glacial acetic acid) to a new system - 1,3-diphenyl-5-hydroxypyrido[1,2-a]quinoxalinium perchlorate (III) - in 69% yield. The methyl ester (I, R = CH<sub>3</sub>) also undergoes condensation to III even under mild conditions (in acetone in the cold) to give yellow prisms with mp 319-320° (from ethanol-nitromethane) in 90% yield.



A comparison of the UV spectra of methanol solutions of III [ $\lambda_{\text{max}}$ , nm (log  $\epsilon$ ): 320 (4.53) and 470 (4.07)] and of model fixed structures - the N-methyl [ $\lambda_{\text{max}}$ , nm (log  $\epsilon$ ): 330 (4.52) and 410 (4.29)] and O-acetyl [ $\lambda_{\text{max}}$ , nm (log  $\epsilon$ ): 320 (4.47) and 470 (4.02)] derivatives of III - showed that in methanol solution III exists primarily in lactim form IIIb.

The results of elementary analysis of all of the compounds obtained are in agreement with the calculated values.

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