We found that by the action of aqueous-alcoholic alkali (KOH in 50% ethanol, concentration 3 M), at room temperature, indolizines Ia, b readily undergo recyclization, which is accompanied by a haloformic reaction with the formation of nitroindolecarboxylic acids IIa, b. We should note that compound IIa is a key intermediate in the synthesis of tranquilizers nitrazepam [1] and hypnone [2]. Acylindolizine Ic, which does not contain an NO₂ group is deacetylated* under these conditions, forming indolizine IIIc (83%).

Compounds Ia-c were obtained from indolizines IIIa-c and trifluoroacetic anhydride. Compound Ia, mp 183-185°C (from a heptane-benzene mixture), yield 96%.

Compound Ib, mp 162-165°C (from heptane-benzene mixture), yield 100%.

Compound Ic, mp 63-64°C (from hexane), yield 34%.

Compound IIa, mp 280-283°C (from alcohol), yield 85% [according to the data in [4], mp 275-295°C (dec.)]. Compound IIb, mp 268°C (from benzene), yield 80%.

The structure of the described compounds was confirmed by IR, UV, PMR and mass spectroscopy and elemental analysis data.

LITERATURE CITED

*The deacetylation of 3-acetyl-2-phenyindolizine, proceeding by the action of EtONa under rigorous conditions, has been already described in [3].