Functionalization of the pyrrol ring in naphtho[1,2,3-cd]indol-6(2H)-ones

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Abstract

The functionalization of the pyrrol ring in naphtho[1,2,3-cd]indol-6(2H)-ones was studied. The reaction of nucleophilic substitution of nitro group in 1-nitro-2-methylnaphtho[1,2,3-cd]indol-6(2H)-one under the influence of arenols, arenitiols and mercaptoacetic acid was examined. The aminometylization of naphtho[1,2,3-cd]indol-6(2H)-one to give N-substituents of naphtho[1,2,3-cd]indol-6(2H)-one proceeds by the atom of nitrogen. Based on 1-amino-2-methylnaphtho[1,2,3-cd]indol-6(2H)-one and cloroacetyl chloride we obtained 1-chloroacetylamino-2-methylnaphtho[1,2,3-cd]indol-6(2H)-one. The chlorine atom in 1-chloroacetylamino-2-methylnaphtho[1,2,3-cd]indol-6(2H)-one was substituted by secondary amines.