3rd EuroAsian Heterocyclic Meeting "Heterocycles in Organic and Combinatorial Chemistry" (EAHM-2004)
September 12-17, 2004, Novosibirsk, Russia
Poster Presentation

Tetrazolyl Derivatives of Cotarnine

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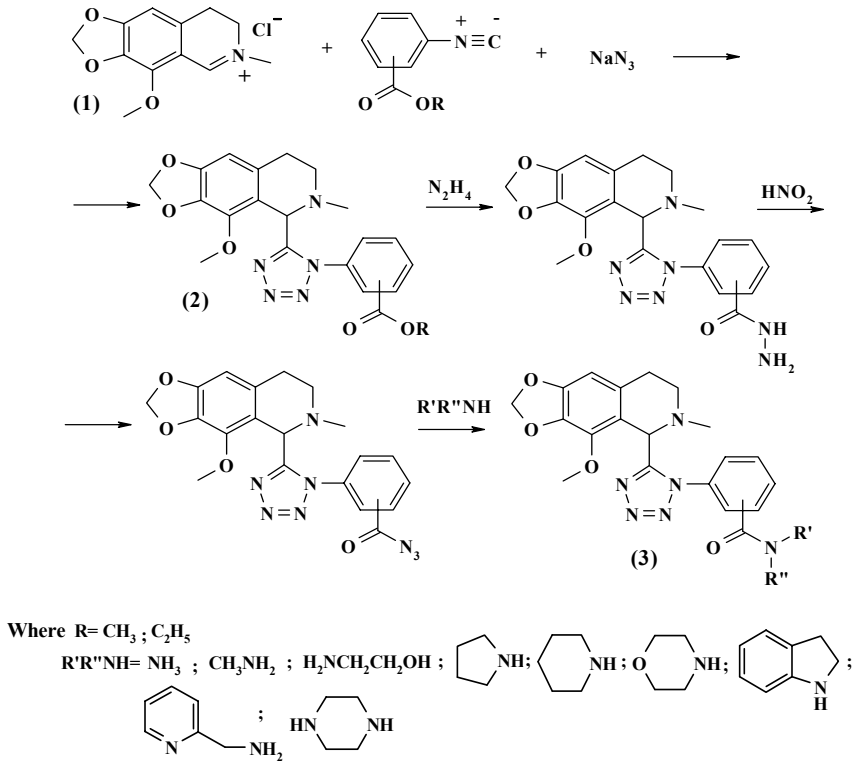
In continuation of our previous work on synthesis of the derivatives of isoquinoline alkaloids [1, 2], we worked out a new multistage procedure for preparation of cotarnine derivatives (**2**, **3**). It is based on the condensation of cotarnine (**1**), isocyanides (generated from formamides), esters of *o*-, *m*-, and *p*-aminobenzoic acids and NaN_3 leading to 1,5-disubstituted tetrazoles (**2**). The latter was then used to prepare amides (**3**) by using standard methods of the peptide chemistry as shown in the scheme.



The yield of target products (**3**) was 10–30% (in terms of cotarnine). The structure of all synthesized compounds was confirmed by NMR spectra and elemental analysis.

1. Kartsev V.G., in *Nitrogen-Containing Heterocycles and Alkaloids*, Kartsev V.G., Tolstikov G.A., Eds., Moscow: Iridium Press, 2001, vol. 1, p. 110.
2. Polyakov A.I., in *Nitrogen-Containing Heterocycles and Alkaloids*, Kartsev V.G., Tolstikov G.A., Eds., Moscow: Iridium Press, 2001, vol. 2, p. 442.