THE SYNTHESIS OF NEW SPIROCYCLIC COMPOUNDS DERIVATIVES OF N-ETHYL-1H-BENZO[c][2,1]THIAZIN-4-ON-2,2-DIOXIDE

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Among heterocyclic compounds, which are perspective for screening of new drugs, derivatives of benzo[c][2,1]thiazin-4-one-2,2-dioxide are interesting. Such compounds, containing benzothiazinone core in their structure are showing various biological activity. For example, compound with the general formula (I) displays the high antiinflammatory, analgesic, antipyretic and antitumor activities also:

The spirocyclic derivatives of benzothiazinone were obtained as it is shown on the scheme below:

R = H, Me

Starting benzothiazinone (1) was obtained by the method reported in literature. Exept benzothiazinone (1) we used 2-(2-oxoindoline-3-ylidene)ethylacetates (4) for synthesis of the target compounds (5) also. The compound (4) was obtained under heating of isatines (2) with ethylcyanoacetate (3) in the presence of base. As a result of interection of benzothiazinone (1) and ylidenes (4) under the Michael reaction conditions the target spirocyclic compounds (5) were obtained.

This research allows to enhance the range of potential bioactive compounds among derivatives of benzo[c][2,1]thiazin-4-one-2,2-dioxide.