Conclusions. Series of 7,14-dihydro-5,9-dioxa-6,8-dithia-14-aza-dibenzo[a,j]anthracene 6,6,8,8-tetraoxides were synthesized as novel 1,2-benzoxathiin 2,2-dioxide derivatives. Their oxidation by nitric acid led to aromatization with formation of corresponding condensed pyridines.

USING (±)CIS-1,2,2-TRIMETHYLCYCLOPENTANECARBOXYLIC ACID IN SYNTHESIS OF 3-ARYL-QUINAZOLIN-4(3*H*)-ONES AND 3-ARYL-2,3-DIHYDROQUINAZOLIN-4(1*H*)-ONES

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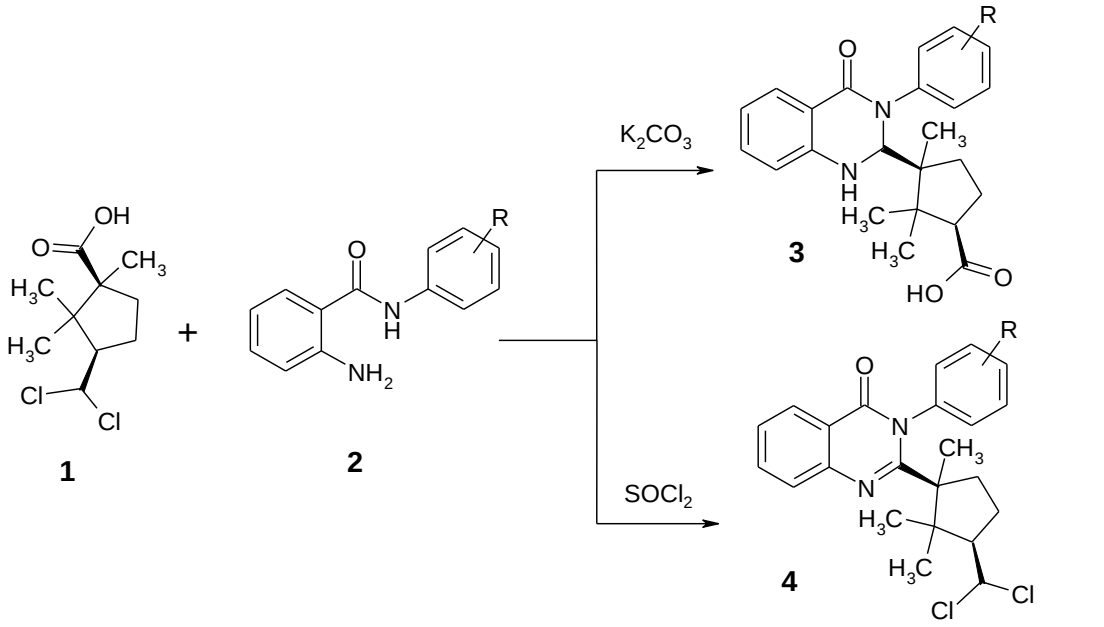
Introduction. The (±)cis-3-dichloromethyl-1,2,2-trimethylcyclopentanecarboxylic acid **1** (scheme) has two reactive centers and can be used in synthesis of heterocycles with 1,2,2-trimethylcyclopentane moiety. This work is continuation of search for biologically active substances among derivatives of quinazolin-4-one with 1,2,2-trimethylcyclopentanecarboxylic acid moiety.

Aim. The aim of this work is research of cyclization of N-arylanthranilamides **2** by acid **1** under different conditions.

Results and discussion. The interaction between acid **1** and amides **2** in ethanol in the presence of potassium carbonate leads to 2,2,3-trimethyl-3-(4-oxo-3-aryl-1,2,3,4-tetrahydro-quinazolin-2-yl)-cyclopentancarboxylic acids **3**. The acids **3** have potential to further modification by oxidation into derivatives of quinazolin-4(3H)-one.

2-(3-Dichloromethyl-1,2,2-trimethyl-cyclopenthyl)-3-aryl-quinazolin-4(3H)-ones **4** have been obtained by boiling the same reagents in dry dioxane medium in presence of thionyl chloride. Quinazolin-4-ones **3, 4** were obtained with high yields and their structures were confirmed by ^{1}H NMR spectroscopy.

Scheme



Conclusion. 3-Dichloromethyl-1,2,2-trimethylcyclopentanecarboxylic acid has been proposed as the reagent for cyclization of N-arylanthranilamides in quinazolin-4-one derivatives.