

DEVELOPMENT OF THE METHODS OF ANALYSIS OF 5-METHYLPYRIDINE-2-AMIDE 1-PENTYL-2-OXO-4-HYDROXYQUINOLINE-3-CARBOXYLIC ACID

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Introduction: Quinoline nucleus occurs in several natural compounds (Cinchona Alkaloids) and pharmacologically active substances displaying a broad range of biological activity. Among the quinoline derivatives quinoline-3-carboxylic acid are the most interesting in creation of new substances and studying of their biological activity. The quinoline-3-carboxylic acid derivatives have various kinds of biological properties: antimicrobial, anti-tubercular, antifungal activity. They can be used also for treatment against human *African trypanosomiasis*, HIV-1 integrase inhibitors and others.

During researching of anti-TB activity of newly synthesized derivatives of pyridyl-2-amides of the 1-R-2-oxo-4-hydroxy-quinoline-3-carboxylic acid substances with high level of anti-TB activity has been found.

Aim: Development of the methods of analysis of 5-methypyridine-2-amide-1-pentyl-2-oxo-4-hydroxyquinoline-3-carboxylic acid and the procedures required.

Method and materials: For identification of 5-methypyridine-2-amide-1-pentyl-2-oxo-4-hydroxyquinoline-3-carboxylic acid are:

- UV- Spectrometry
- reactions for enol hydroxyl group with heavy metals - in alkaline medium

For the quantification of 5-methypyridine-2-amide-1-pentyl-2-oxo-4-hydroxy-quinoline-3-carboxylic acid is proposed method of UV-spectrometry.

The results: The identification of 5-methypyridine-2-amide-1-pentyl-2-oxo-4-hydroxy-quinoline-3-carboxylic acid was successfully proven the results of quantitative determination were subjected to static processing as the procedure was repeated can therefore makes it possible to conclude that they are reliable, making it possible to assay the substance by the method of UV-spectrometry..

Conclusion: the analyzed substance can be quantified by the method of UV-spectrometry and can be identified by the formation of coloured products with heavy metals in alkaline medium.