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UDC 547.944

There is contradictory information in the literature about the specific rotation of anabasine [1, 2]. A. P. Orekhov et al. [1] explained the different specific rotations of anabasine by different degrees of racemization with various methods of isolation. However, it is known that anabasine racemizes only on heating in the presence of sulfuric acid. It is considered that nitrous acid has a strong racemizing influence in the isolation of anabasine, via the nitroso derivative [1]. To investigate this, we obtained the N-nitroso derivatives from anabasines with different rotations under identical conditions [1] and then recovered the initial bases from them by hydrolysis with hydrochloric acid:

$[\alpha]_D$ of the initial anabasines	$[\alpha]_D$ of the nitroso compounds	$[\alpha]_D$ of the anabasines obtained by the hydrolysis of the nitroso derivatives
-52.0	-134.0	-52.0
-64.0	-159.0	-64.0
-68.0	-175.0	-68.0
-80.0	-205.0	-80.0

Consequently, nitrous acid is not a racemizing agent.

The different specific rotations of anabasine [1-3] can be explained by the assumption that anabasine is racemized to different extents in different mixtures of alkaloids. To investigate the reasons for the production of anabasines with different specific rotations on isolation from technical anabasine sulfate, anabasine was isolated by three methods: by benzylation [1], by nitrosation [1], and by the formation of anabasine hydriodide [3].

The anabasines obtained by the benzylation and nitrosation of the base had the same specific rotation, -64° , and that obtained by the formation of the hydriodide had $[\alpha]_D -72.0^\circ$.

We have shown previously that the iodomethylation of N-benzoylanabasine forms two isomeric products - dL-N-benzoylanabasine methiodide and a methiodide formed from pure L-N-benzoylanabasine, which differ in their melting points and solubilities. It may be assumed that L- and dL-anabasines also give two hydriodides which differ in their solubilities. And, in actual fact the anabasine obtained by two recrystallizations of the hydriode had $[\alpha]_D -80.0^\circ$.

Our hypothesis that the anabasine in technical anabasine sulfate is present in the L and dL forms is also confirmed by the investigations of L. N. Utkin and A. I. Brutko [2], who, using the polybuffer method for separating the alkaloids of *Anabasis aphylla*, isolated an anabasine with a specific rotation of -83.0° and an anabasine with $[\alpha]_D -21.0^\circ$, and regarded the latter as isoanabasine.

Apparently, in the production of anabasine sulfate in industry the anabasine is partially racemized at the sulfation stage, and the degree of racemization depends on the sulfation conditions [4].

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