SEPARATE ISOLATION OF THE ALKALOIDS OF Anabasis aphylla

V. P. Zakharov, Kh. A. Aslanov, A. S. Sadykov, and A. I. Ishbaev UDC 547.944/661.2

We have previously [1] developed a method for the separate isolation of the alkaloids of Anabasis aphylla which consists in the extraction of the high-boiling bases from anabasine sulfate with chloroform and the isolation of the low-boiling alkaloids by the nitrosation of anabasine. However, in the extraction of the high-boiling alkaloids with chloroform, some low-boiling bases (10-15%) also pass into the solvent.

We have shown that the preliminary dilution of anabasine sulfate with water (4:3) and extraction with chloroform at pH 5 enables the high-boiling bases to be obtained with a very low content of anabasine (2%); simultaneously the time of extraction is shortened by a factor of 3-4. Down to pH 3.4, anabasine, lupinine, and aphylline do not pass into the solvent, and only the weak bases – aphyllidine and anabasamine – are extracted.

The very small amounts of anabasine and lupinine can be eliminated from the high-boiling fractions of the alkaloids by washing a xylene solution of the mixture of high-boiling bases with water saturated with carbon dioxide.

LITERATURE CITED

1. Kh. A. Aslanov, A. I. Ishbaev, K. Inoyatova, Sh. Yusupov, A. S. Sadykov, and V. P. Zakharov, Khim. Prirodn. Soedin., 324 (1972).

V. I. Lenin Tashkent State University. Dzerzhinskii Chimkent Pharmaceutical Chemicals Factory. Translated from Khimiya Prirodnykh Soedinenii, No. 6, p. 805, November-December 1973. Original article submitted May 14, 1973.

© 1975 Plenum Publishing Corporation, 227 West 17th Street, New York, N.Y. 10011. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission of the publisher. A copy of this article is available from the publisher for \$15.00.