I. V. Man'ko and L. G. Marchenko

UDC 547.944,945

We have shown previously [1] that the roots of Cynoglossum pictum Ait. contain two alkaloids. Their composition was not studied. We have investigated the roots of this species collected in June, 1970, on the southern shores of the Crimea in the region of the Baidar Gate.

The mixture of alkaloids obtained by dichloroethane extraction was separated on a column (d 2.5, h 12 cm) of alumina (Brockmann activity grade III) [2]. The alkaloids were eluted with mixtures of chloroform and methanol in proportions changing successively from 99:1 to 90:10. This gave two bases with R_f 0.80 and 0.09 in the chloroform—methanol (9:1) system.

The base with R_f 0.80 yielded a crystalline picrate with mp 98-100°C identical with the picrate of cynoglossophine-heliosupine [3].

Assuming that the second alkaloid was a N-oxide, we reduced it with zinc dust in 5% sulfuric acid. The reduced base had R_f 0.80 in the chloroform-methanol (9:1) system and 0.54 in the benzene-diethyl ether-methanol (10:5:2) system. On chromatography with alkaloid "markers," the R_f value of this alkaloid coincided with that of cynoglossophine-heliosupine under the same conditions.

Thus, we are the first to have established that the roots of Cynoglossum pictum Ait. contain two alkaloids - cynoglossophine-heliosupine and its N-oxide.

LITERATURE CITED

- 1. I. V. Man'ko and V. G. Marchenko, Khim. Prirodn. Soedin., 676 (1971).
- 2. E. Stahl, Thin-Layer Chromatography: A Laboratory Handbook, Allen and Unwin, London (1969).
- 3. I. V. Man'ko, Ukr. Khim. Zh., 5, 25 (1959).

Leningrad Chemical and Pharmaceutical Institute. Translated from Khimiya Prirodnykh Soedinenii, No. 6, p. 812, November-December, 1972. Original article submitted June 23, 1972.

^{• 1974} Consultants Bureau, a division of 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.