N. S. Zhuravlev

UDC 547.673/615.43

In a study of the chemical composition of the rhizomes and roots of Galium semiamictum Klok., family Rubiaceae, by paper chromatography, we found no less than fourteen substances of anthraquinone nature in it.

The raw material for the investigation was collected in the phase of the withering of the epigeal part of the plant in the environs of Khar'kov. Substances (I) and (II) were extracted and isolated by known methods [1, 2].

Substance (I), composition $C_{15}H_{10}O_4$, mp 301-302°C (from ethanol), diacetate with mp 230-231°C (from ethanol), dimethyl ether with mp 157-158°C (from methanol), $E_{1cm}^{1/6}$ at λ_{max} 281 nm = 1200, R_f 0.49 in the petroleum ether saturated with 97% methanol system.

Substance (II), composition $C_{15}H_{10}O_5$, mp 330°C (decomp., from dioxane), triacetate with mp 177-178°C (from ethanol), monoethyl ether with mp 181-182°C (from benzene), $E_{10}^{10}m$ at λ_{max} 281 nm=1210, R_f 0.12 in the system consisting of petroleum ether saturated with 97% methanol.

On the basis of their physical and chemical properties, UV and IR spectra, and a comparison with authentic samples, substances (I) and (II) were identified as rubiadin and lucidin, respectively.

LITERATURE CITED

- 1. N. S. Zhuravlev and M. I. Borisov, Khim. Prirodn. Soedin., 118 (1969).
- 2. L. H. Briggs and G. A. Nicholls, "The chemistry of the <u>Coprosma</u> genus. Part IV. The non-glycosidic anthraquinone compounds from Coprosma lucida," J. Chem. Soc., 1241 (1948).

Khar'kov State Pharmaceutical Institute. Translated from Khimiya Prirodnykh Soedinenii, No. 5, p. 656, September-October, 1974. Original article submitted March 29, 1974.

©1976 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.