DERIVATIVES OF DEHYDROABIETIC ACID WITH THE ALKALOIDS SALSOLIDINE AND CYTISINE

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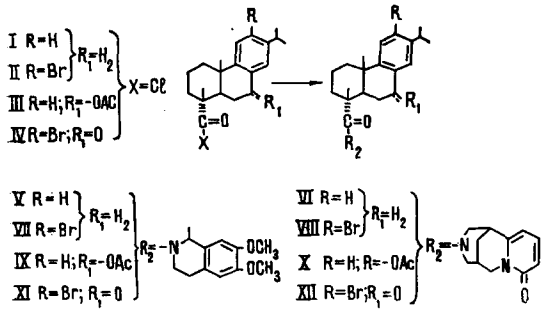
In order to obtain physiologically active compounds we have studied the products of the interaction of the chlorides of dehydroabietic acid (I) and its derivatives (II, III) with the alkaloids salsolidine and cytisine.

These compounds are of interest because individual derivatives of resin acids of the abietane series show a hormonal action. Thus, hormonal activity has been detected in the series of podocarpic acid derivatives [1-2], and salsolidine is an effective agent for reducing the blood pressure and possesses a general tranquilizing action [3]; cytisine hydrochloride is used as an exciting agent of the respiratory tracts in various types of poisoning [4].



The amides that we have obtained may have value as medicinal agents, and also as intermediates based on natural raw materials.

When the chlorides of dehydroabietic acid and its derivatives (I-IV) were boiled in absolute dioxane with the calculated amounts of the alkaloids salsolidine and cytisine, the following amides were isolated: (V), mp 161.5-162.5°; (VII), mp 197-198.5°C; (IX), mp 181-183°C; (XI) mp 186-188°C; (VI), mp 209-210°C; (VIII), mp 248-249°C; (X), mp 143-144°C; (XII), mp 155-157°C. The yields of the amides amounted to 65-70%.

The individuality of the compounds was confirmed by thin-layer chromatography. The elementary analyses of all the compounds described were satisfactory.

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