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# The Synthesis of Quaternary Salts from Alkaloid Lappaconitine

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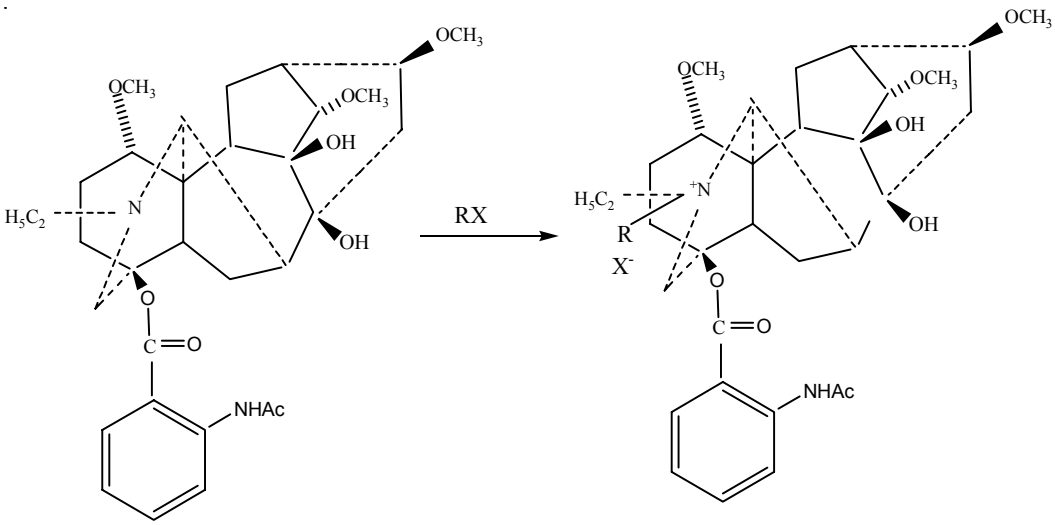
Diterpene lactones present one of the largest and important classes of natural compounds - alkaloids. Many diterpene alkaloids and their derivatives demonstrate highly expressed anti-arrhythmic and other forms of biological activity and a number of efficient medicinal products with wide spectrum of biological activity were obtained on their basis.

The aim of this work was to obtain new biologically active compounds and search for efficient medicines with the given spectrum of activity on their basis. Having this as a purpose, we studied the interaction of the alkaloid lappaconitine with a variety of haloid alkyls. As a result of the research, we found some particularities of lappaconitine's chemical behavior in the alkylation reactions and synthesized previously unknown quaternary salts potentially possessing biological activity and other practically valuable properties.




R=$CH_3$, $C_2H_5$, $C_4H_9$, $CH_2$=$CHCH_2$, $C_6H_5CH_2$,.X=J, Cl, Br

The structures of the obtained compounds were confirmed by physico-chemical techniques of analysis (IR-, NMR-spectroscopy, etc.).