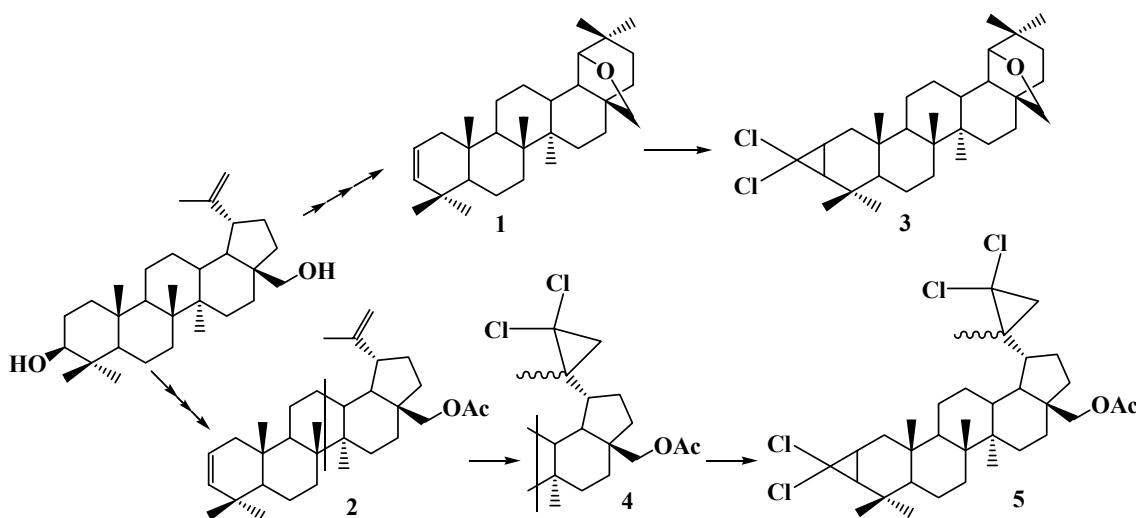


## Lupane and Oleanane Derivatives with A-fused Dichlorocyclopropane

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The cyclopropanation of produced from betulin 19 $\beta$ ,28-epoxyoleanan-2(3)-ene **1** and 28-acetoxylupan-2(3),20(29)-diene **2** under Makosza reaction conditions (CHCl<sub>3</sub>, 50% NaOH, TEBA) results in corresponding derivatives **3-5** formation with one or two dichlorocyclopropane fragments. The dichlorocarbene addition to each of double bond was found to occur highly stereoselectively.



The possibility of successive introduction of cyclopropane fragment depends on the essential difference in double bond reactivity of diene **2** and controlled by reaction time. The yields of compounds **3-5** are higher than 90%. An antiviral activity of dichlorocyclopropane oleanane and lupane derivatives obtained is being studied.

*The work was supported by Grant of Scientific School Project (#139.2003.3) and Programm of Presidium Russian Academy of Sciences. Project #36 (10002-251/P-09/118-141/010403-419).*