

## Cyclization of 3,18-O-Isopropylidenelagochilin in Conditions of Acylation

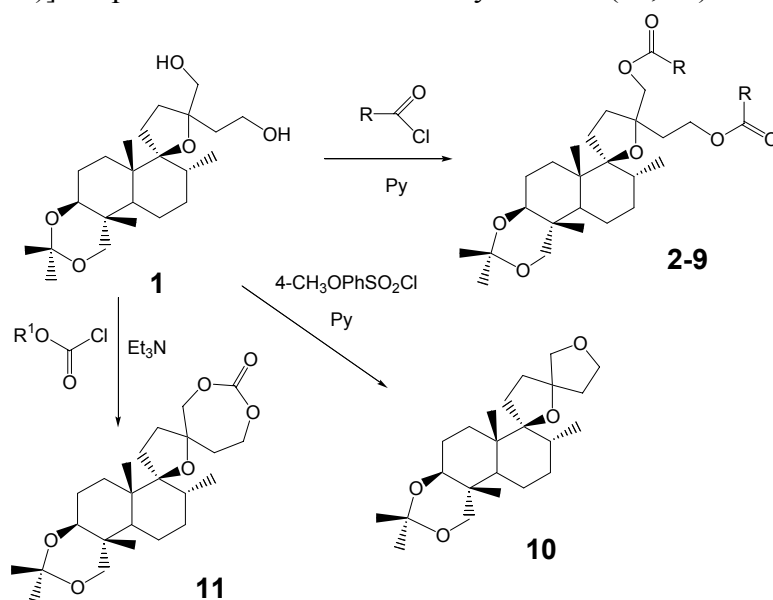
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The acylation of 3,18-O-isopropylidenelagocholin (**1**) (exhibiting hemostatic activity [1]) with acyl halides was unexpectedly found to yield [besides diacyl derivatives (**2–9**)] the products of intramolecular cyclization (**10, 11**):



R =  $COCH_2CH_2CH_2CH_2CH_2CH_2CH_2Cl$  (**2**),  $CO(CH_2)_9-i$  (**3**), 2-ClPh (**4**), 3-ClPh (**5**), 4-ClPh (**6**),  
3-NO<sub>2</sub>Ph (**7**), Fur (**8**), MeSO<sub>2</sub> (**9**)

As follows from the scheme, the structure of product depends on the type of acylation agent: acyl halides and methyl sulfochloride give normal acylation products; the reaction with *p*-methoxyphenyl sulfonylchloride leads to dehydration and cyclization into the THF cycle, while the use of alkyl chloroformates ( $R^1 = CH_3, C_2H_5$ ) gives rise to subsequent re-esterification leading to cyclic carbonate (**11**). The structure of synthesized compounds was confirmed by <sup>1</sup>H NMR and mass spectra.

[1] M.A. Safaev, U.N. Zainutdinov, Kh.A. Aslanov, *Khim. Prirodn. Soedin.*, 1995, 173.