

Monoterpenoids dithiophosphates. Synthesis and biological activity

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Abstract

O,O-Dialkyldithiophosphoric acids adds at the double bond of the racemic camphene and (+)-limonene in the presence of Lewis acids in accordance with the Markownikoff rule with the formation of Sterpenyl esters of dithiophosphoric acids. The reaction with camphene is accompanied by the rearrangement of camphane structure to that of bornane. Addition of dithiophosphoric acid to (+)-limonene proceeds with the participation of the exocyclic double bond. Toxic and genotoxic properties of the monoterpene dithiophosphates were studied. © Pleiades Publishing, Ltd., 2010.

<http://dx.doi.org/10.1134/S107036321007008X>
