THE INTERACTION OF (±)3-DICHLOROMETHYL-1,2,2-TRIMETHYLCYCLOPENTANECARBOXYLIC ACID WITH AROMATIC ACIDS HYDRAZIDES

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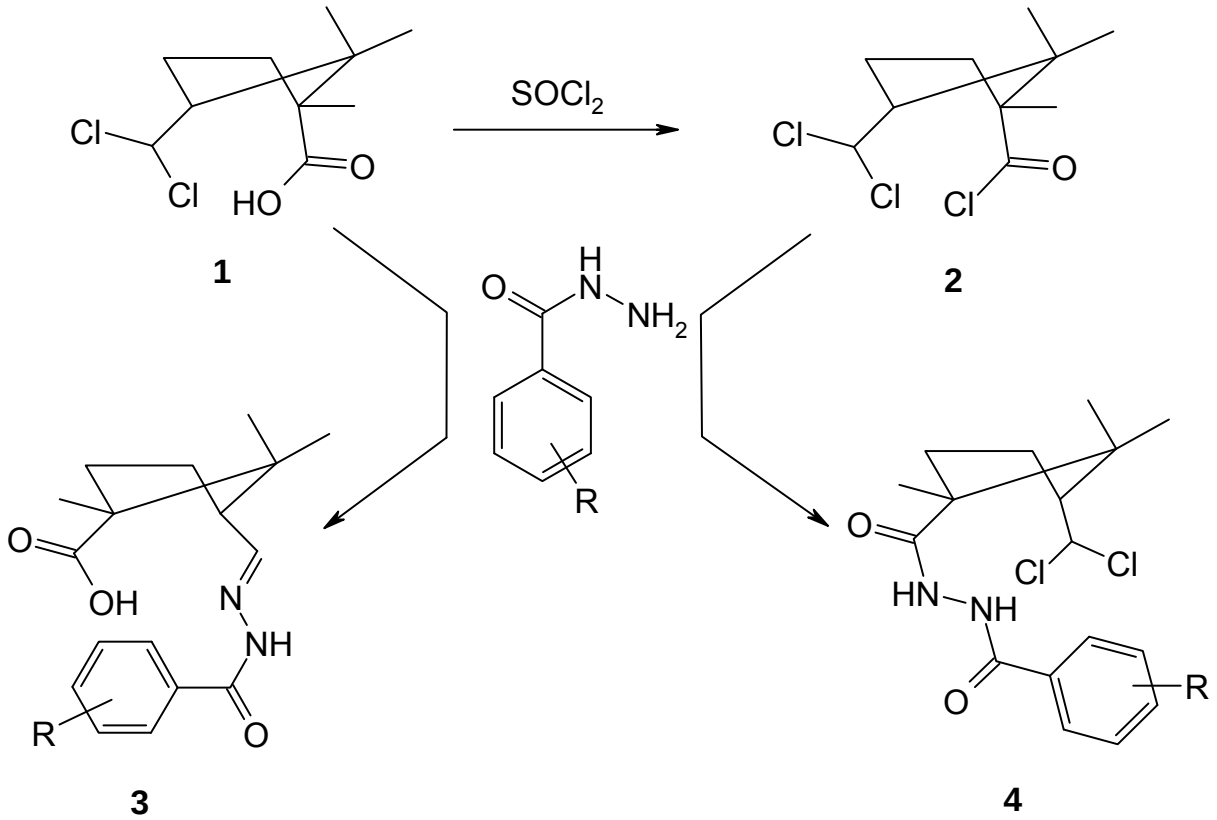
In previous studies we synthesized (±)cis-3-dichloromethyl-1,2,2-trimethyl-cyclopentanecarboxylic acid (compound 1, scheme). The aim of this work is to study the reactivity of carboxyl and groups of acid 1 and to synthesize new substances with a potential biological activity. The interaction of acid 1 and hydrazides of aromatic acids in ethanol in the presence of potassium carbonate lead to the corresponding (E)-3-(benzoylhydrazonomethyl)-cis-1,2,2-trimethylcyclopentanecarboxylic acids 3 in high yield. R-Benzoic acid N'-(3-dichloromethyl-1,2,2-trimethylcyclo-pentanecarbonyl)hydrazides 4 were synthesized via acylation of hydrazides by the 3-dichloromethyl-1,2,2-trimethylcyclopentanecarbonyl chloride, which was obtained from acid 1(scheme).

Scheme



The purity of synthesized compounds was proved by TLC, and their structure was confirmed by methods ^{1}NMR spectroscopy and elemental analysis.