Acid-Induced Heterocyclization of Cembrene, Linalool, and Geraniol-Type α-Amino Oximes

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Terpenes and their synthetic oxygen-, nitrogen- and sulfur-containing derivatives are of great importance for synthetic organic chemistry. Natural terpenes and most of terpenoids are usually transformed under acidic conditions to complex mixtures of isomeric products to produce significant amount of tar-like products. We have found a series of new unusual stereoselective heterocyclizations of terpenic α -aminooximes and developed effective syntheses of chiral substituted 4*H*-1,2-oxazines:



Details on preparation of starting amino oximes, their reactivity, structure elucidation of the rearrangement and cyclization products, spectral data of new chiral derivatives as well as possible mechanisms of the transformations are discussed.

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