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Synthesis of new derivatives of 3-nitrovinyl chromones – synthons for dihydroxanthones

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Abstract

The interaction of 3-formylchromone with nitromethane in acetic acid in the presence of pyridine results in the formation of new, previously unknown derivatives of 3-nitrovinylchromones. The reaction rate depends strongly on the nature of the substituent in the sixth position of the chromone. It has been established that the electron-acceptor substituents accelerate the reaction, electron-donor ones slow it down. 3-Nitrovinylchromones interact with enamines with previously unknown derivatives of dihydroxanthones.