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| Title | Michael 1:1 adducts by acid catalyzed reaction during synthesis of spiro and spiroketal compounds*.* | | |
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| Abstract |  |
| Four Michael 1:1 adducts 2-[1,5-bis-(2-methoxyphenyl)-3-oxo-pent-4-enyl]-cyclohexane-1,3- dione 3a, 2-[1,5-bis-(2-methylphenyl)-3-oxo-pent-4-enyl]-cyclohexane-1,3-dione 3b, 2-[1,5-bis- (2-chlorophenyl)-3-oxo-pent-4-enyl]-cyclohexane-1, 3-dione 3c and 2-[1,5-Bis-(2-chloro- phenyl)- 3-oxo-pent-4-enyl]-5,5-dimethyl-cyclohexane-1,3-dione 3d have been synthesised by the application of Michael reaction between 1, 3-cyclohexanedione 1a or dimedone (5, 5-dimethylcy clohexane-1, 3-dione) 1b and trans,trans diarylideneacetone [1,5-diaryl-1,4-pentadien-3-one] 2a-c using acid catalyst. These adducts may be regarded as the intermediate of spiro [5.5] undecane compounds which can be achieved effectively via intramolecular cyclization of the Michael 1:1 adduct. The structures of the Michael 1:1 adducts 3a-d were determined by their UV, IR, 1 H-NMR, 13C-NMR, DEPT-135 spectral data, HRMS and elemental analyses. | |