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Efficient Conditions for the Synthesis of C-Glycosylidene Derivatives: A Direct and Stereoselective Route to C-Glycosyl Compounds.

Wittig olefination of glyconolactones, e.g. (I), (V) and (VIII), with cyanomethylene triphenylphosphorane (II) proceeds smoothly under microwave irradiation to furnish C-glycosylidene derivatives (III), (VI) and (IX)/(X), resp., in good yields but without significant E/Z-selectivity. Catalytic reduction of the olefins under the stereodirecting influence of the acetal groups affords the corresponding cyanomethyl derivatives like (IV) and (VII) in excellent yields, which can be further elaborated to carboxamides, esters or aldehydes. — (LAKHRISSI, Y.; TAILLEFUMIER, C.; LAKHRISSI, M.; CHAPLEUR, Y.; *Tetrahedron: Asymmetry* 11 (2000) 2, 417-421; Groupe SUCRES, Unite Mixte CNRS, Univ. Henri Poincare, F-54506 Vandoeuvre-les-Nancy, Fr.; EN)

