

Vijayaganesh, N.; Jayaraman, N., 2007, "A 2-benzyloxyglycal route to prepare septanoside derivatives", *J. Org. Chem.*, 72, 5500 – 5504.

A new route to synthesize septanoside derivatives, from protected 2-hydroxyglycals, is reported. Ring expansion of a pyranoside to a septanoside was achieved through key reactions of a cyclopropanation, ring opening, oxidation and reduction. Glycoseptanoside derivatives, namely, methyl-7-hydroxymethyl- $\alpha$ -D-glucoseptanoside (methyl  $\alpha$ -D-glycero-D-taloseptanoside) and methyl hydroxymethyl- $\alpha$ -D-galactoseptanoside (methyl  $\alpha$ -D-glycero-L-galactoseptanoside), were synthesized in an overall yield of 35% and 46%, respectively, from protected 2-hydroxy glycal.