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Study of Individual Parameters on the Enzymatic Glycosidation of Betulinic Acid by Novozyme-435

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Abstract : The enzymatic synthesis of 3-O-β-D-glucopyranoside-betulinic acid using Novozyme-435 as a catalyst was studied. The effect of various parameters such as substrate molar ratio, reaction temperature, reaction time, re-used enzymes and amount of enzymes were investigated. The optimum rection conditions for the enzymatic glycosidation of betulinic acid in an organic solvent using Novozym-435 was found to be at 1:1.2 substrate molar ratio, 55oC, 24 h and 180 mg of enzymes with percentage conversion of 88.69 %.

Keywords : betulinic acid, glycosidation, novozyme-435, optimization
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