ABSTRACT

ANALYSIS THE PRODUCT OF THE YIELDS BIOCATALYSIS ENZYMES CGT-ASE BACTERIA AMILOLITIK ISOLATE LOCAL FROM ONGGOK CASSAVA

By

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Cyclodextrin glukanotransferase (CGT-ase)) is a distinguishing extracelluar matrix enzymes that can catalyze the multifungsional like maltodekstrin, amylose starch and others became cyclodextrin. Cyclodextrin (CD)) is composed of some oligosaccharides yields simpler sugars units based on the number of units of glucose, cyclodextin is divided into three forms, α-clyclodextryn 6 units of glucose, β-cyclodextryn 7 units of glucose and γ-clyclodextryn 8 units of glucose. β-CD is used more for a variety of applications as compared to other CD, because it has low solubility in water and is easily separated from the mixture by the use of organic solvents. A series of amilolitik bacteria isolation from industrial waste processing cassava has been done using medium Horikoshi's II. Based on the value of the diameter of the halozone isolate obtained on solid agar medium Horikoshi's II, isolate LTi-A24-4 was chosen as the best potential size isolate halozone 2.6 cm. The isolate was selected based on the growth and the CGT-ase activity isolate. LTi-A2-4 showed maximum growth in 36 hours (OD_{600} = 4,58) in Horikhosi's II liquid medium and the activity for 291,83 U/mL. Analysis of the product biokatalisis using method of TLC show that isolate LTi-A24-4 is β-cyclodextryn. This is indicated by the value of the sample Rf standards and β-cyclodextryn is same; on eluen-butanol-ethanol-water ratio 5: 3: 2 of 0.81 cm; and on a comparison of the eluen 5: 3: 1 by 0.72 cm. It is suggested to do more research on the product of the biokatalisis enzyme CGT-ase using ase HPLC to better expresses the type of clyclodextryn is generated.