

Thesis Title	THE SYNTHESIS OF OLIGOSACCHARIDES USING ENZYMES FROM BACTERIA AND GERMINATING COCONUT SEEDLING
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ABSTRACT

Cyclomaltodextrin glucanotransferase (CGTase) from *Bacillus ohbensis* was capable of hydrolysing starch as well as synthesizing glucosyl-inositol from starch and myo-inositol. Attempts were made to search for enzyme with similar abilities from other sources. Six isolates of bacteria was obtained from 35 soil and water samples. It was found that isolates KP-1, KP-2, KP-3 were *Bacillus* sp. While PK-2, PK-3 and PK-4 were bacteria of other types. All those 6 isolates produced enzymes capable of hydrolysing starch but were not able to synthesize oligosaccharides when myo-inositol and sorbose were used as substrates. An enzyme capable of hydrolysing starch was also extracted from germinating coconut seeds. However, the role of this enzyme in synthesizing oligosaccharides is still not clear.