

## Isolasi dan Karakterisasi Inulinase dari Aspergillus niger Gmn11.1 Galur Lokal

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| <b>Title</b>          | Isolasi dan Karakterisasi Inulinase dari Aspergillus niger Gmn11.1 Galur Lokal  |
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| <b>Accreditation</b>  |   |
| <b>Abstract</b>       | Inulin is a naturally potential polysaccharide used to produced fructose and fructooligosaccharide. Inulinase known also as $\alpha$ -D-fructosidase can hydrolise inulin to fructose or fructooligosaccharide. Inulinase production from Aspergillus niger Gmn11.1 isolated from dahlia tubers is conducted using medium containing 1% inulin and 0,2% yeast extract. The crude enzyme (filtrate culture) is purified by means of ammonium sulphate salt precipitation, followed by Sephadex G25 gel filtration column chromatography and DEAE cellulose anion exchanger column chromatography. The result indicated that the enzyme had optimum pH and temperature of 4,6 and 45°C, respectively with incubation time of 15 hours. The $K_m$ and $V_{max}$ values obtained from this experiment are 20 mg/ml and 0,769 mg/ml/hours, respectively. Whereas the relative molecular weight of inulinase was monitored by SDS PAGE is 63 kDa. |
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| <b>Author</b>         | Dr SARYONO, M.Kes   |