

Identifikasi dan Uji Potensi Amilolitik Isolat Jamur Pendegradasi Sampah Organik

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Abstract	<p>Organic waste is composed of organic compounds. The accumulation of organic waste is a serious problem. Fungal have an important role in degrading organic waste in the composting process. Biodegradation of organic waste is closely related to fungal ability to hydrolyze starch. The purpose of this study was to know fungi isolate which hydrolyze starch from organic waste and amylolytic potential of the isolate. This research was conducted by survey and experimental method. Kitchen waste samples consist of food waste and other organic waste taken from homes in Bancarkembar, Bobosan, Grendeng, Karangwangkal, Pabuaran, Purwanegara, and Sumampir village. A screening test with Starch Agar medium was used to know amylolytic potential of the isolates. Result showed there were eight isolates which have potential to hydrolyze starch. Six isolates which have higher amylolytic index were identified as <i>Fusarium</i> sp., <i>Aspergillus</i> sp., and <i>Penicillium</i> sp. Furthermore, to determine the amylolytic activity quantitatively, the DNS method was used to measure glucose levels. <i>Fusarium</i> sp. had the highest starch degradation activity with the average glucose content of the medium <i>Fusarium</i> sp. as much as 3,568.63 ppm.</p>
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Author	Dr RATNA STIA DEWI, S.Si, M.Sc.