## Karakteristik dan Potensi Enzimatis Bakteri Asal Tanah Sampah Dapur dan Kotoran Ternak sebagai Kandidat Agen Biodegradasi Sampah Organik

| Title             | Karakteristik dan Potensi Enzimatis Bakteri Asal Tanah Sampah Dapur dan Kotoran Ternak sebagai Kandidat Agen Biodegradasi Sampah Organik  |
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| Abstract          | Composting is an alternative for recycling organic waste. Microorganisms that can degrade the components of organic waste are an essential part of composting. Isolation and selection of bacteria with the ability to degrade the elements of organic waste are the first steps to obtain an organic waste degrading agent. This study aimed to determine the characteristics and the enzymatic potential (cellulolytic, amylolytic, and proteolytic) of bacteria isolated from soil, cow dung and kitchen waste as candidates for organic waste degradation agents. The research begins with sampling and isolation of bacteria. The isolates obtained were tested qualitatively for their amylolytic, cellulolytic and proteolytic activities. Furthermore, bacterial isolates were characterized morphologically and biochemically. A total of 30 bacterial isolates were isolated from soil samples, cow dung and kitchen waste. The screening result showed that 6 isolates had amylolytic activity, 7 isolates had cellulolytic activity and 3 isolates had proteolytic activity. These bacterial isolates showed various morphological and biochemical characteristics. In general, soil samples, kitchen waste and cow dung contain potential bacteria as organic waste degrading agents |
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| Author            | DWIANA MUFLIHAH YULIANTI, S.Si, M.Sc.   |