

The Lipid Content of The Culture Microalgae Using Media of Tapioca Liquid Waste

Title	The Lipid Content of The Culture Microalgae Using Media of Tapioca Liquid Waste
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Abstract	<p>Microalga <i>Navicula</i> sp., <i>Spirulina platensis</i>, and <i>Chlorella vulgaris</i> have the prospect of being a source of biofuel producers. Rapid cell growth, coupled with the ability to produce large lipids and less pollution, can be used as an alternative to biofuel development. Microalgae cultivation can utilize tapioca liquid waste. Addition of NaCl to regulate salinity, so optimum for microalgae growth. In addition it can reduce toxins by binding to dissolved cyanide acid present in the waste. This study aims to determine the effect of NaCl concentration on tapioca liquid waste on growth and lipid microalgae content. This study used an experimental method with a complete random factorial design. The first factor tested three species of microalgae. The second factor tested seven NaCl concentrations on tapioca liquid waste media. The results showed that the concentration of NaCl 35% in tapioca liquid waste culture media capable of producing biomass of <i>C. vulgaris</i> cells with the highest lipid content. The NaCl concentration capable of producing the highest microalgae biomass from the study can be developed to design more effective and efficient tapioca industrial waste treatment without damaging the environment but more productive, as a biofuel producer.</p>
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