

The effect of dilution level of liquid tapioca waste culture medium and concentration of phosphate on the growth of microalgae *Navicula* sp.

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<b>Title</b>	The effect of dilution level of liquid tapioca waste culture medium and concentration of phosphate on the growth of microalgae <i>Navicula</i> sp.
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<b>Abstract</b>	<p>Amalah N, Widyartini DS, Christiani, Hidayah HP. 2018. The effect of dilution level of liquid tapioca waste culture medium and concentration of phosphate on the growth of microalgae <i>Navicula</i> sp.. Nusantara Bioscience 10: 65-69. Liquid tapioca waste can be used as microalgae culture medium due to its nutrient contents that can support the life of microalgae. Liquid tapioca waste contains phosphate nutrient that can influence cell division and fat formation. Liquid tapioca waste is usually still highly concentrated, so it has to be diluted first to allow the light penetrates the microalgae growth medium. The aim of this research was to determine the effect of interaction between dilution level of liquid tapioca waste and concentration of phosphate on the density of <i>Navicula</i> sp. This research employed a factorial treatment design laid out in a Completely Randomized Design. The first factor was the dilution level of liquid tapioca liquid waste, consisted of 0%, 10%, 20%, and 30%, and the second factor was the concentration of phosphate comprised of 0 ppm, 10 ppm, 20 ppm, and 30 ppm. ANOVA results indicated a significant interaction between the dilution level of liquid tapioca waste and concentration of phosphate on the density of <i>Navicula</i> sp. DMRT post hoc test showed that dilution of liquid tapioca liquid at the level of 20% without phosphate addition was the best treatment that produced the highest <i>Navicula</i> sp. density.</p>
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