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Enhancement of growth and lipid production from microalgae using fluorescent paint under the solar radiation

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12

13 **Abstract**

14 Solar radiation has intensity that is too high to inhibit microalgae activity and is composed of
15 wide light spectrum including ultraviolet (UV) range which cannot be utilized for microalgae.
16 For these reasons, the modification of solar radiation is required for effective microalgae
17 cultivation, and to do that, fluorescent paint was used for not only blocking excessive solar
18 energy but also converting UV to visible light. With fluorescent aqueous layer, microalgae
19 was protected from photoinhibition and could grow well, but there was difference in growth
20 and lipid accumulation efficiencies depending on the color; Maximum dry weight of 1.7 g/L

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