

フサイワズタの生長と形態形成におよぼす光と水温の影響

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**The effect of light and temperature on growth and morphogenesis of *Caulerpa okamurae* in outdoor mesocosm**

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Fragments of *Caulerpa okamurae* were cultured in outdoor mesocosms in order to determine suitable growth conditions for commercial cultivation. Weight increases were observed above 16.2°C and 20.0 mol·m<sup>-2</sup>·d<sup>-1</sup> of mean total daily photosynthetic photon flux density (PPFD). Length of new rhizomes was also found to be related to water temperature. In contrast, the number and total length of new upright shoots depended on total daily PPFD, rather than water temperature. It was concluded that although light intensity could affect the morphological response of the upright shoots *C. okamurae*, temperature and total daily PPFD were two major factors affecting growth and morphogenesis of this marine alga.

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