EFFECTS OF THE MONOCHROMATIC LIGHT IN THE CULTURE TISSUE OF *Dendrobium lituiflorum IN VITRO*

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SUMMARY

In this work, the effects of 3 types of monochromatic red, yellow, and green light on the stages of *Dendrobium lituiflorum* culture were studied. Research results show that yellow light is the most suitable for rapid protocorm multiplication compared to red and green light; while red light is suitable for *D. lituiflorum in vitro* in creating shoots, multiple buds and create roots compared to other light. The multiplication process of *D. lituiflorum* protocorm cultured in yellow light plants obtained a multiplier of 5.50 times; protocorm produces green, evenly. In culture conditions under red light, buds generated from protocorm have bud height of 8.39 mm, the number of buds/shoots reached 3.76 leaves, the number of shoots/samples reached 6.74 buds after 4 weeks of study; shoot propagation obtained 2.21 cm in height after 4 weeks and 2.56 cm after 8 weeks, 3.26 leaves after 4 weeks and 4.44 leaves after 8 weeks, multiply shoots after 4 weeks reached 1.83 times after 8 weeks reached 5.45 times. The length of roots after 4 weeks reached 0.9 cm and after 8 weeks reached 2.40 cm, the number of roots/buds reached after 4 weeks was 1.93 roots, after 8 weeks the roots were 4.33 roots in the process of roots of *D. lituiflorum* culture conditions in red light.

Keywords: *Dendrobium lituiflorum,* monochromatic light, tissue culture.

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