

## ABSTRACT

### EFFECT OF ACTIVE CHARCOAL AND CONCENTRATION IRRIGATE COCONUT TO GROWTH OF PROTOKORM ORCHID OF *DENDROBIUM HIBRIDA* IN VITRO

By

**Pebria Sisca**

Growth of orchid protocorm of *Dendrobium* hybrid use medium that is manure of Growmore (32:10:10) as alternative medium. Giving of active charcoal at functioning culture medium as absorption of toxic compound capable to pursue growth of orchid protocorm of *Dendrobium* hybrid. Addition of materials of addenda organic one of them irrigate coconut is also passed to worthwhile culture medium for the growth of orchid protocorm of *Dendrobium* hybrid.

This research aim to know influence (1) Giving of active charcoal in medium of Growmore to growth of orchid protocorm of *Dendrobium* hybrid, (2) Giving of coconut water in medium of Growmore to growth of orchid protocorm of *Dendrobium* hybrid, (3) Giving of is make-up of concentration irrigate coconut growth of protocorm of *Dendrobium* hybrid, (4) Interaction between active charcoal and coconut water in medium of Growmore to growth of orchid protocorm of *Dendrobium* hybrid.

This research is executed by in Tissue Culture laboratory, Faculty of Agriculture, University of Lampung in December 2011 till March 2012. This research use complete random device with factorial treatment device (2x4). First factor is without active charcoal and with active charcoal (2 g/l) and second factor is various concentration irrigate coconut (0, 50, 100, and 200 ml/l). Each;Every treatment combination consist of 5, each;every restating consist of 5 bottle, and each;every bottle contain 10 protocorm. Data analysed with manner homogeneity between treatment tested with test of Barlett. Obtained data, analyse manner and continued by using Least of Significant Different (LSD) at real level 5%.

Result of research indicate that (1) Giving of active charcoal (2 g/l) in medium of Growmore depress the make-up of length grow on orchid protocorm of *Dendrobium* hybrid, however can improve wet wight of orchid crop protocorm of *Dendrobium* hybrid, (2) Giving of coconut water in medium of Growmore improve high growth of bydm soriyt, amount of leaf, long of leaf, long of root,

and wet weight of orchid protocorm of *Dendrobium* hybrid, (3) Giving of is make-up of concentration irrigate coconut from 50 ml/l till 200 ml/l improve growth of crop, posed at by high improvement of bydm soriyt, amount of leaf, long of leaf, and wet weight of orchid protocorm of *Dendrobium* hybrid, (4) Giving of active charcoal and concentration irrigate coconut 50 ml/l can improve wet weight of orchid protocorm of *Dendrobium* hybrid, however giving of active charcoal with concentration irrigate coconut 0, 100, and 200 ml/l do not improve wet weight of orchid protocorm of *Dendrobium* hybrid.

Keyword : active charcoal, coconut water, protocorm, and orchid of *Dendrobium* hybrid.