

ABSTRACT

THE INFLUENCE OF USING SOME DIFFERENT COLORS OF NEON LAMPS ON THE GROWTH OF KAILAN (*Brassica oleraceae*) IN AN INDOOR HIDROPONIC SYSTEM

By

Dea Gusti Dini Alhadi

The aim of this research was to evaluate the effect of some different colors of neon lamp on the growth of kailan (*Brassica oleraceae*) by using an *indoor* hydroponic with wick system. This research used 5 levels of a single factor treatment: one treatment conducted in a greenhouse under the natural sun light and 4 treatments conducted in growth chambers/rooms under artificial light of neon lamps. The colors of neon lamps used in the 4 level treatments were red, blue, yellow, and white respectively. In the growth chambers, plants were continuously lighted with no dark period. Each treatment consisted of 3 plants, totaling 15 plants. Results of the research showed that vegetative growth and production of the plants under the treatment of white neon was relatively better than the other under the indoor teratments. However; it has not been optimal yet if compared with the plant grown in the greenhouse (with natural sun lighting).

Keyword: colours of neon lamp, indoor hydroponic system, kailan.