## ABSTRACT

## THE INFLUENCE OF NEON LAMP ON THE GROWTH OF PAK CHOI (Brassica rapa L.) IN AN INDOOR HYDROPONIC SYSTEM

## By

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The purpose of this research was to observe the influence of neon lamp power (watt) on the growth of Pak Choi in an indoor hydroponic system. This research was done by implementing several pots of Pak Choi planting under some different treatments of lighting. The treatment consisted of neon lamp 20 watt (N1), neon 2 x 20 watt (N2), neon 40 watt (N3), neon 2 x 40 watt (N4) in a growth chamber and one treatment under the sun lighting (N0).

The result of the research showed that the treatment of 2 x 40 watt neon lamp (N4) turned out to have the best result at all variables measured. Then, it was followed by treatment of neon 40 watt (N3) and the lowest result was in neon 20 watt (N1). The highest biomass harvested was 35 g in N4, followed by 18 g in N3, then the 15 g in N2 and 4 g in N1. However, the highest ash content was in the treatment of 20 watt neon lamp (N1), and followed by N2 (neon 2 x 20 watt). Although, Pak Choi grown under the sun ray has the highest biomass harvested, but it had the lowest mineral content.

Keywords : Neon lamp, lamp power, Pak Choi, hydroponic wick system