

ABSTRACT

Testing the influence of light intensity on the growth of corn plants in the room has been conducted. The observed corn plants were planted in the pots of 25 cm in diameter with the distance of the lamp as a light source of 50 cm. The lamp used was a blue LED with a light intensity varied from 78 to 1127 lux, using arduino pwm. The study was conducted in 53 days (until the growth of vegetative maize) with irradiation for 12 hours/day (18-06.00). Based on the experimental results, light can affect the growth of corn plants. With intensity (1127 lux), the average height of the corn reached 44.2 cm, the average stem diameter of 15,7 mm, the average length and width of leaves reach 32,55 cm and 5,37cm. When the intensity is low (78 lux), the average height of the corn plant was 34 cm. The average stem diameter of 10.6 mm, the average length and width of leaves was 27,73 cm and 4,03 cm. From these results, it can be concluded that the intensity of light affected the measured parameters of corn plants growth

Keywords : Light intensity, corn plan, LED lamp.