

## **ABSTRACT**

*Sister Ponik is start-up enterprise, they gave a revolution at agricultural world and made it possible for indoors planting. That one of indoors planting is for planting microgreens. Microgreens are tiny vegetable types that grow from seeds of various plants and generally harvested at age 7-14. Even though some people have no clue about microgreens, they're gained pretty popularity in Indonesia recently. Unfortunately, there are obstacles and challenges for Indonesian farmers need to face the causes of microgreens cannot grow completely, either because of weather or lack breeding grounds. Sister Ponik ushered innovation in regrowing microgreens with a technology called artificial lighting. Artificial Lighting integrated with hydroponic planting method and led sprinkles that replaces the sunlight, also using Arduino Nano as the controlling. Photosynthesis can be process when a plant exposed by a light with wavelength around 400-740 nm.*

**Keywords:** *Microgreens, artificial lighting, Arduino Nano.*