

**Abstract**

**In planting vegetables to note the time and place to get a good harvest. To get fresh vegetables, urban residents can use a hydroponic cultivation system that does not require agricultural land as usual. Controlling microclimate system using sensors and microcontrollers. Plant nutrients can be adjusted according to the needs of the plant. With this microclimate control system is expected to help urban residents who do not have agricultural land to grow their own vegetables, and plants can flourish due to climatic conditions in accordance with the needs of plants.**

**Keyword: hydroponic, microclimate, plant nutrients**