## **ABSTRACT**

Swallows are birds that can build nests from their saliva. Apart from that, the price of a swallow's nest is relatively expensive because it has various health benefits. The scope of swallows is tropical climates such as Indonesia. Indonesia is one of the largest producers and exporters of swallow nests in the world. This is proven by approximately 78% of Indonesia's need for swiftlet nests being met. Swiftlet breeders are entrepreneurs who breed swiftlets by making the swallows' habitat similar to their natural habitat. Swiftlets have an ideal comfort level of temperature and humidity between 27-29° Celsius and humidity of 80-90%. This research uses qualitative research methods and experimental concepts, while the data collection method is observing birdhouse research objects in the city of Makassar, South Sulawesi with the application of IoT. The result is that by using a temperature and humidity control system in a controlled room that has been set to the ideal range, namely temperature at 27-29°C and humidity at 80-90%, oscillations occur during the day. This indicates that the tool has worked according to what has been programmed so that the effect of the swallow's nest in the controlled room shows that the nest is clean, full, not porous, and large enough.

Keyword: Swallow, Nest, Temperature, Humidity, IoT