

## **ABSTRACT**

Orchids are a plant that is loved by many people. In orchid cultivation, monitoring the state of the plant is important. Sowing orchid seeds is an important step in orchid cultivation. In order to sow the orchid seeds, watering is carried out on the temporary immersion system using the Internet of Things (IoT) using the Long Short-Term Memory (LSTM) method. The temporary immersion system is a labor-intensive and expensive process of mass propagation of plants by tissue culture. This study aims to analyze the effect of time and frequency of watering on the Temporary Immersion System on seeding orchids and to determine the optimal time and frequency of watering on the Temporary Immersion System for orchid seeds. This research has important implications for the development of IoT technology and its use in modern agriculture, especially in increasing crop productivity and quality. With this research, it is expected to be able to provide new insights for future readers or researchers.

Keywords: IoT, LSTM, TIS, Orchid Seeding