I. INTRODUCTION

Orchids are one of the most admired ornamental plants among ornamental plant lovers. Admirers of this plant not only come from Indonesia, but many devotees come from abroad, Therefore, in the process of exporting orchids, it is one of the products that are of interest in foreign countries. For this reason, it is necessary to produce orchids so that they can be exported to various countries.

Because in its development there are many things that must be considered such as pests, quantity of light, humidity, and temperature, a greenhouse is needed in the development of this ornamental plant

Greenhouse is defined as a structure that allows plants to grow and develop in an artificial environment and conditions related to temperature, humidity, and light intensity so that plants can grow properly and avoid pests and diseases. The implementation of this greenhouse sometimes requires special handling of plants which in practice require regular monitoring so that the plants can grow well and have good quality. Greenhouse as a building for plant cultivation, which has a translucent roof and wall structure [1].

The implementation of monitoring and predicting humidity, temperature, and light in greenhouses is good using the standard Support Vector Machine (SVM) method where this method has high accuracy and works well in high-dimensional spaces. The SVM classifier essentially uses a subset of the training points so the results use very little memory. And for the type of SVM used is linear SVM because the datasheet used can be classified into two classes using one straight line. Which is where the results of this calculation are used to evaluate the production of orchids in Lembang.

Firmansyah et al [2] A Comparison of SVM Classification and Decision Tree for Mangrove Mapping demonstrates that the estimated mangrove area achieved using SVM is 634.62 Ha whereas utilizing a decision tree results in a reduced mangrove area of 590.47 Ha.

Mahendra et al [3] It is demonstrated in a comparative case study of Support Vector Machine and Modified Balanced Random Forest in the Detection of Diabetes Patients that the resulting MBRF accuracy is up to 97.8%. The SVM, on the other hand, is only 91.48%.

Wijayanti et al. [4] A better classification rate can be achieved using Vector Machine (SVM) based on Particle Swarm Optimization (PSO), as it can enhance accuracy by 24.16 percent and UAC by 0.196. While the accuracy value for the Support Vector Machine (SVM) algorithm, which is based on Particle Swarm Optimization (PSO), is 70.83%.

Ilmawan and Mude et al. [5] the SVM classifier has an accuracy of 81.46% and the Nave Bayes classifier of 75.41%, according to a case study Comparison of Classification Methods and Support Vector Machine for Sentiment Analysis on Textual Reviews at The Google Play Store.

Willy et al. [6] with a case study The Fake News classification shows the SVM classification Dataset classification using SVM. The Training Accuracy value from the trial has a percentage value of 99.78%. The details of the Training Accuracy results of 99.76% are explained by the Training and Test values on high dimension RFC.

The main contribution of this paper is the use of Support Vector Machine (SVM) method for monitoring and predicting humidity and temperature in greenhouses. The data is provided by installing internet of things (IoT) device in the greenhouse. The acquired data can be used to assess the feasibility of new greenhouse.