## REKOMENDASI TANAMAN HORTIKULTURA BERDASARKAN KESUBURAN TANAH MENGGUNAKAN K-NN PADA STUDI KASUS KEBUN INOVASI POLITEKNIK NEGERI JEMBER

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Jember State Polytechnic Innovation Garden is a garden that can produce many horticultural crops and vegetables. In the problem, the innovation garden has difficulty in determining the right types of plants according to soil conditions, therefore the authors make tools and sensors to assist in determining the right types of plants according to soil conditions, so it is necessary to make a horticultural plant recommendation system with the K method. -NN. This system is made in the form of the PHP programming language that uses the Code Igniter framework with a MySQL database as its storage. The parameters used are pH, temperature, and humidity and these parameters are the conditions for plant growth. The author will make IoT-based tools and sensors with the NodeMCU ESP8266 board with a soil pH sensor, a DHT11 temperature sensor, and a soil moisture sensor as a tool to support data collection to be processed. Then the data from the three sensors will be transferred to a local website for recommendations for crop yields that are in accordance with soil conditions so that innovation garden managers can easily get crop yields that are in accordance with soil conditions.

Keywords: recommendation system, horticulture corps, method K-NN.