## Crop Prediction Using Supervised Machine Learning Techniques

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**Abstract:** Agriculture provides most of the world's food and fabrics. Cotton, wool, and leather are all agricultural products. Agriculture also provides wood for construction and paper products. These products, as well as the agricultural methods used, may vary from one part of the world to another. In general, agriculture is the backbone of India and also plays an important role in the Indian economy. Now-a-days, food production and prediction are getting scarcity due to unnatural climatic changes, which will adversely affect the economy of farmers by getting a poor yield and also help the farmers to remain less familiar with forecasting the future crops. This research work helps the beginner farmer in such a way to guide them for reasonable crops by deploying machine learning, one of the advanced technologies in crop prediction. Supervised machine learning algorithm puts in the way to achieve it. The seed data of the crops are collected here, with the appropriate parameters like nitrogen, phosphorus, temperature, humidity, pH and rainfall content, which helps the crops to achieve successful growth. To prevent this problem, Agricultural sectors have to predict the crop from a given dataset using machine learning techniques. Also we are calculating the performance metrics.

**Keywords:** Crop prediction, Agricultural data, Supervised Machine learning, Classification algorithms.