INFLUENCE OF CLIMATE ON TEA YIELDS IN MOUNT KENYA REGION

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Abstract

This study investigated the existence of a systematic relationship between tea yields and climatic parameters in the tea growing areas of Mount Kenya region. Both linear and multiple regression models were applied. The data used in this study were the daily mean minimum and maximum temperatures, daily mean relative humidity, radiation, total weekly rainfall, and total weekly tea yields. One week is taken to be seven days with the first day of July being the first day of the first week of the year. The results of applying these models using weekly data were found to be satisfactory and it was concluded that climatic parameters can indeed be used to predict tea yields in this region.

Key words: Aberdare Mountains, climatic parameters, Mt. Kenya, photosynthetically active radiation, regression models, Rift Valley, tea yield