EFFECT OF TIMING IN IRRIGATION BASED ON DIFFERENT LEVELS OF PAN WATER EVAPORATION ON THE PERFORMANCE OF MUNG BEANS

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A B S T R A C T

RODEROS, MARIA ERSANDO, Don Severino Agricultural College, Indang, Cavite, April, 1990. "Effect of Timing In Irrigation Based on Different levels of Pan Water Evaporation on the Performance of Mung Beans." Adviser: Engr. Cesar C. Carriaga.

A study was conducted to determine the effect of timing in irrigation based on different levels of pan water evaporation on the performance of mung beans.

Levels of water depleted from pan water evaporation served as index in the treatments used. Treatments were: no irrigation, irrigation after 15 millimeter pan water evaporation, irrigation after 30 millimeter pan water evaporation, irrigation after 45 millimeter pan water evaporation, and irrigation after 60 millimeter pan water evaporation.

Results of the study revealed that the growth of mung bean was affected by the different treatments used. Irrigation after 30 millimeter pan water evaporation gave the highest height of 32.0 centimeter at maturity. It was followed by irrigation after 15 millimeter pan water evaporation with a height of 26.0 centimeters. Irrigation after 45 millimeter pan water evaporation ranked third with a length of 25.4 centimeters. These were followed by no irrigation and irrigation after 60 millimeter pan water evaporation with a length of 23.2 and 23.0 centimeters respectively.

The yield of mung bean was affected by different frequency of irrigation and rate of water application. Irrigation after 30 millimeter pan water evaporation gave the highest yield with a mean of 1580 kilogram per hectare. It was followed by irrigation after 15 millimeter pan water evaporation with a mean yield of 1288.33 kilogram per hectare.

Irrigation after 45 millimeter pan water evaporation had a yield of 1198.33 kilogram per hectare, while irrigation after 60 millimeter pan water evaporation and no irrigation had a mean yield of 1160 and 1120.67 kilogram per hectare respectively.

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