ABSTRACT

Cucumber (Cucumis sativus L.), a vine vegetable crop, was investigated under four training management practices: freely trailing on the soil, trained on a trellis, trained on a platform and trained on a pyramidal structure. Only kraal manure was used to fertilize the crop in simulation of a common situation that a farmer had access to kraal manure but no money to purchase fertilizers. The objective of the investigation was to evaluate the effects of these training management practices on agronomic characteristics and potential income from cucumber in a situation where no inorganic fertilizers were applied. The results indicated that untrained cucumber initially had significantly (P<0.05) lower fruit yields/hectare than only the pyramid-trained crop. By the end of the investigation at 13 WAP, the untrained cucumber yielded significantly (P<0.05) higher than the trained plants but the cumulative yields were not significantly different between the trained and untrained plants. The cumulative yields were: untrained plants, 37.34 t/ha; trellis-trained plants, 44.77 t/ha; platform-trained plants, 38.73 t/ha and pyramid-trained plants, 32.75 t/ha. Fruit yield/ha was positively correlated (r=1.00) with potential income from cucumber. For more sustained fruit yields and higher income, it is recommended that cucumber be not trained, as training might not result in any significantly higher income.