Determining the Effects of Moringa oleifera Leaves on the Growth and Yield of Solanum melongena

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The purpose of this project is to assess the effectiveness of moringa oleifera leaves extract with different concentration on the growth and yield of eggplant and against pests. Agriculture is extremely common in American Samoa. Many local people contain their own garden, mostly for personal consumption. But there are some problems reported to have been occurring to some crops and those are diseases and pest infestations. To resolve this, local farmers have used pesticides to keep their plants healthy. Though this is convenient, it has many major cons. Bio-pesticide could be an excellent alternative. Therewith, I started my experiment by planting 20 eggplant seedlings to a 4 m by 2 m bed field at the spacing of 40 cm by 30 cm. The extract was made with 4 different concentrations in v/v ratio which are 1:10, 1:20, 1:30, and 1:40 by blending fresh moringa leaves. The five treatments were applied to 4 plants each every evening. Plant growth, the height, number of leaves were taken after 1, 2, 3, 4, 5, and 6 weeks of bio pesticide application. Defoliated leaves were evaluated and pests were counted after 1, 2, 3, 4, 5 and 6 weeks of bio pesticide application. The treatment 1:30 has the most improvement on the growth and yield of eggplants. Additionally, the different concentrations of the Moringa Oleifera leaves extract had a significant change on the growth and yield of the eggplant.

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