Effects of Shading and Bark Compost on Some Summer Vegetables in Penghu

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Abstract

High temperature, strong sunshine and low organic matter in the soil are the limmit factors to produce summer vegetables in Penghu. In order to improve the production of summer vegetables, five common vegetables were used for experiments, including pak-choi,water convolvulus, chinese cabbage,cauliflower and broccoli. These vegetables were planted in the field of Penghu substation,Kaohsiung DAIS from 1993 to 1994. The main purposes of these experiments were to identify the effects of shading and bark compost application. Four different levels of shading, namely, 40%, 50%, 60%, and 70% of sunshine, were arranged, and non-shading was used as check treatment. The results showed that the tretments with 40% or 50% of shading obtained a positive effects on plant growth and yield for pak-choi and water convolvulus . For chinese cabbage and cauliflower, however, the shading effects on yield was not signifcant difference. For studing the effects of bark compost application, four different treatments were designed, including 1.00, 0.75, 0.50 and 0.25m^3 of bark compost were applied respectively. The treatment with no bark compost application was served as the control. The experimental results indicated that all the treatments of bark compost application were effective for plant growth and yield of pak-choi; but for water convolvulus, only the treatment with 1.00m3 of bark compost application obtained higher yield than that of the control.

Keywords:Summer vegetables, Shading, Bark compost.

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