

Abstract

Research on enhance organic vegetables production of Royal project was aimed to examine pest management, nutrient management and postharvest management for organic vegetables productivity. All activities were summarized as follows, (1) The trial *Metarhizium sp.* to control big cricket in organic Carrot. The result showed that spraying *Metarhizium sp.* in to soil after plantation was able to reduce the produce loss due to big cricket by 35.26 percentage. (2) The trial bio-product to control leaf spot caused by *Cercospora sp.* in cos lettuce. The result showed that spraying copper oxychloride once a week was able to reduce leaf spot disease better than other treatment on Cos lettuce at 15 day and 22 day as 98.56 percentage and 97.58 percentage respectively. (3) The trial method for nutrient management in organic Kale. The result showed that spraying bio-extract from egg switching bio-extract from chicken manure was able to reduce yellowleaf spot symptom and increase productivity highest at 146.4 kg/ 24 m². (4) The study kind and using rate bio-extract to increase organic Chinese Mustard productivity. The result showed that spraying bio-extract from eggs with the ratio of 1 : 500 in organic Chinese Mustard, rapid growth, plant height more than other treatment and highest yield at 10.71 kg/3 m². (5) The study methods on postharvest handling to diminish the loss of Cos lettuce and Green Oak Leaf lettuce. The result showed that Cos lettuce stored at 7 °C had highest long shelf life at 5.8 day. While green oak leaf lettuce stored at 7 °C had highest long shelf life at 9.2 day.