World Academy of Science, Engineering and Technology International Journal of Agricultural and Biosystems Engineering Vol:9, No:08, 2015

On-Farm Research on Organic Fruits Production in the Eastern Thailand

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Abstract: Organic agriculture has become a major policy theme for agricultural development in Thailand since October 2005. Organic farming is enlisted as an important national agenda, to promote safe food and national export, and many government authorities have initiated projects and activities centered on organic farming promotion. Currently, Thailand has the market share of about 32 million US\$ a year by exporting organic products of rice, vegetables, tea, fruits and a few medicinal herbs. There is high potential in organic crop production as there is the tropical environment promoting crop growth and leader farmer in organic farming. However, organic sector is relatively small (0.2%) comparing with conventional agricultural area, since there are many factors affecting farmers' adoption and success in organic farming. The objective of this project was to get the organic production technology for at least 3 organic crops. The treatment and method were complied with Thai Organic Standard, and were mainly concerned on increase plant biodiversity and soil improvement by using organic fertilizer and bioextract from fish, egg, plant and fruits. The bio-logical control, plant-extracts, and cultural practices were used to control insect pests and diseases of 3 crops including mangosteen (Garcinia mangostana L.), longkong (Aglaia dookoo Griff.) and banana (Musa (AA group)). The experiments were carried out at research centers of Department of Agriculture and farmers' farms in Rayong and Chanthaburi provinces from 2009 to 2013. We found that both locations, plant biodiversity by intercropping mangosteen or longkong with banana and soil improvement with composts and bio-extract from fish could increased yield and farmers' income by 6,835 US\$/ha/year. Farmers got knowledge from these technologies to produce organic crops. The organic products were sold both in domestic and international countries. The organic production technologies were also environmental friendly and could be used as an alternative way for farmers in Thailand.

Keywords: banana, longkong, mangosteen, organic farming

Conference Title: ICOAFS 2015: International Conference on Organic Agriculture and Food Security

Conference Location : Venice, Italy **Conference Dates :** August 13-14, 2015