## The research on organic industry and leisure agriculture (LOHAS) corridor in East Taiwan (Ilan and Hualien)

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## Abstract

Cultivating veriaty plants could increase field organism diversity and build a suitable organic farm. To cultivate Japanese radish (Raphanus sativus) in the area surrounded by milkweed, the aphids (Lipaphis erysimi) damage degree were significant less than the control. There were also more ladybugs in the milkweed area therefore the *predator's behavior* lead to biological control on aphids. To evaluate bio-friendly agriculture operation and construct an agricultural biodiversity access system in organic farms, we conducted a research on biodiversities in organic and conventional farms in Fengnan Village in Fuli Township in Hualien County for one year. Preliminary results suggest that spiders may be the indicator for biodiversity in rice fields in estern Taiwan, for the numbers of captured spiders are significantly positive correlated with the numbers of other captured species, including plants, birds, insects, frogs and snakes. Some kinds of crop were cultivated for trial in the four organic agriculture area for promoting organic crop diversification. Which include Wentan pomelo, Chinese Angelica, rice rotation mode, and water bamboo-and-fish integrated culture method. Good result were gotten from those experiments. Xingjian village of Sanxing Township (Ilan county), Dong Hwa organic farming area in ShoufengTownship (Hualien county), Dafeng village of Guangfu township (Hualien county), and Lo-shan village of Fuli township (Hualien county). These four areas will be linked together to develop leisure industry in Ilan and Hualien county. We had investigated the organic agriculture, nature resoures and biological resoures, cultural caracteristic and leisure industry in these areas. We plan the Xingjian village of Sanxing Township, Dafeng village of Guangfu township, and Lo-shan village of Fuli township to be the organic village, and Zhixue village of ShoufengTownship to be the educate and organic farming area. This study of purchasing behavior, through investigating the distribution channels of commodities, we can have a more thorough understanding about the structure of organic food industry and marketing strategy for organic products and leisure agriculture. Applying cluster analysis, We roughly divide the consumers into three different groups: "Healthy Family group"," Organic Family group "," LOHAS Upstart group ".The results show that "Number of people dining at home", "Organic rice items" and "Way to buy organic rice" are three major factors that influence purchasing behavior and thus categorize consumers into different clusters. By using correspondence analysis, We collect features of these three clusters, and provide Farmers' Association enough data and helpful suggestions for their future marketing strategies. On the other hand, Applying cluster analysis, we roughly divide the travelers into three different groups: "Organic Production group", "LOHAS Travel group", "Leisure Experience group". The results show that "Information Acquirement", "The travel most want to experience activities" and "The required amount of leisure agriculture farm tourism" are three major factors that influence purchasing behavior and thus categorize consumers into different clusters.

Key words: hedgerow, agrobiodiversity, indicator species, spider, Chinese angelica, Wentan pomelo, Chinese Angelica, paddy rice, water bamboo, snail carp, organic agriculture, leisure industry, consumer behavior.