

Investigation of the Actual Conditions and Evaluation about Crop Rotation in Korean Organic Farming System

Young Ho Kim¹, Sang Guei Lee¹, Du hoi Choi¹, Yong Hwan Lee¹, Sang Min Lee¹,
Jwa Kyung Sung¹, Sang Mok Sohn²

¹ National Institute of Agricultural Science and Technology, Suwon, 441-707

² Research Institute of Organic Agriculture, Dankook Univ., Cheonan, 330-714

Objectives

This work was conducted to obtain the basic data for to improve the crop rotation in Korean organic farming. For this purpose, it investigated to the actual condition of current crop rotation in organic farming and executed analysis to propriety about that.

Materials and Methods

- Investigated target : Organic farmer in Korea(14 counties 65 farms 83 fields)
- Investigated method :
 - Questionnaire survey about crop rotation in Korean organic farmer
 - Estimation of soil fertility
- Investigated subject : crop rotation, soil management, soil fertility

Results and Discussion

- In survey about "Reason of application of crop rotation in organic farming", "For the improvement or conservation of soil fertility" was highest results(85.5%). And it was appeared "For the reduction of disease and pest injury"(10.8%), "For the conservation of landscape"(2.4), "The others"(1.3%).
- The survey about "Degree of satisfaction about crop rotation in organic farming" was appeared different results between paddy farm and upland farm. In paddy farm, "Nearly satisfied" was highest(57.5%), but "Dissatisfied"(53.5%) is highest in upland farm.
- The survey about "Obstruction of current crop rotation system in organic farming" was appeared "Insufficiency of labour"(39.8%) > "Additional expenses charge"(34.9%) > "Insufficiency of crop rotation system"(14.5%) > "The others"(10.8%).

Corresponding author --- 031-290-0552 E-mail · yhkim23@rda.go.kr

Table 1 Investigated counties for survey about the application of crop rotation in organic farming.

Investigated area		Investigated counties
Middle area	Gyeonggi-do	Yangju(3), Hanam(3), Yeosu(2), Yangpyeong(5)
	Gangwon-do	Pyeongchang(5), Heongseong(5), Hongcheon(3)
	Chungcheong-do	Cheongwon(8), Yesan(7)
South area	Gyeongsang-do	Jinju(7), Hamyang(13)
	Jeolla-do	Namwon(6), Gimje(5), Wanju(11)
Total		14 counties 65 farms 83 fields

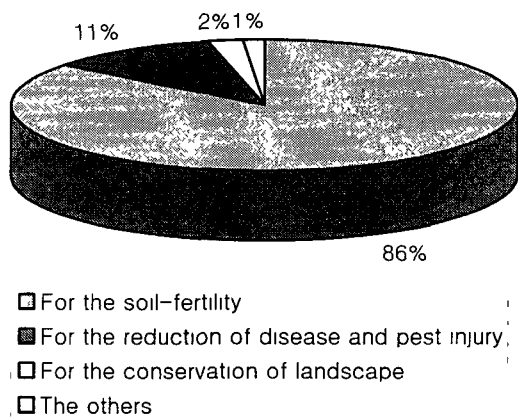


Fig. 1. The survey about "Reason of application of crop rotation in organic farming".

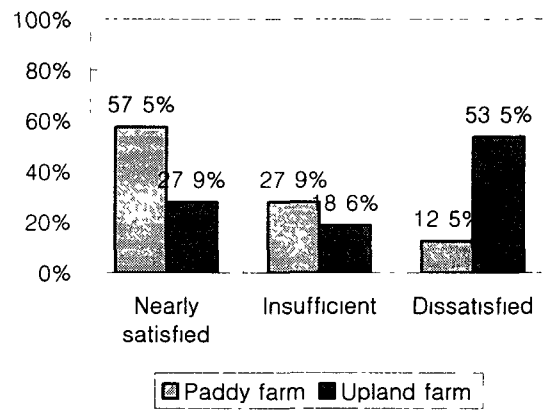


Fig. 2. The survey about "Degree of satisfaction about crop rotation in organic farming"

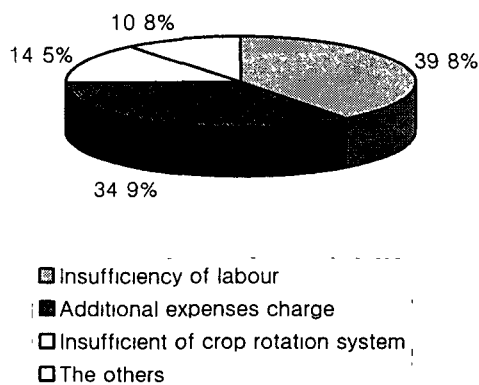


Fig. 3. The survey about "Obstruction of current crop rotation system in organic farming"