



## **Identification and investigation of effective factors of organic products status in consumer basket of households**

*Fahimeh Ganjkhani*<sup>1\*</sup>, *Mohammad Mohammadi*<sup>2</sup>, *Hossein Zahedi*<sup>3</sup>

*1- Master's degree in Agricultural Management, Islamic Azad University, Islamshahr Branch*

*2,3- Assistant Professor and Faculty Member of Islamic Azad University, Islamshahr Branch*

### **Abstract**

The purpose of this study was to investigate the factors affecting the status of organic products in the consumer basket of households in west of Tehran. This research is a descriptive-correlational study carried out using a survey method. The statistical population of this research includes those who are referring to fruits and vegetables and fruits in the west of Tehran. The number is 260 people. Using Karaji and Morgan tables, and according to the size of the population, the sample size was estimated to be 153 people. The samples were selected using simple random sampling. The main tool of this research is a questionnaire whose validity was obtained by the opinions of professors and experts in the field of agriculture. The reliability of the questionnaire was carried out through a preliminary test. The Cronbach's alpha coefficient was 0.94. Also, the results of parametric comparisons using Independent t-test and ANOVA showed that the average of the status of organic products by gender, household head, There is a significant difference between the occupation of people using organic products. Investigating the correlation between the factors identified in the factor analysis and the variability of the status of organic products in the consumer basket of households showed that there is a positive and significant relationship between the educational, marketing, informational and cultural factors with the dependent variable of the status of organic products in the consumer basket of households. The result of regression analysis is that the two variables of the marketing agent and the type of consumption of organic products are the most important independent variables affecting the dependent variable of the status of organic products in the consumer basket of households, which interact 8.1% of the variations of the dependent variable of the research.

**Keywords:** Status, Products, Organic, Basket, Households.

### **Introduction**

Today, all humans around the world are concerned about the increased degradation of agricultural land and the loss of vegetation. (Fukuoka, 1389). Sustainable agriculture originates from a philosophical and intellectual school before it is rooted in agriculture. According to Mac And sustainable agriculture partners are a philosophy and system of agriculture. Sustainable agriculture is rooted in values that represent a new awareness of the

ecological and social realities and the ability of humans to perform efficient agricultural operations. The advent of organic farming is to address the serious environmental, health and safety issues of conventional agricultural systems. The literature emphasizes the natural nature of organic farming, which is often referred to as the abnormal nature of agricultural practice. It refers to the abnormality of common agricultural practice with simple examples such as the use of inorganic industrial

inputs, the use of Genetically manipulated material and creatures, plant production in S. An example of organic farming is the protest against the immense interference of human beings in nature. Some researchers believe that protesting genetically engineered organisms is more than the cause of the protesters' concerns. In relation to their own health or the environment, the protest is to interfere in nature. The fulfillment of human needs should not be accompanied by the deterioration of natural resources, and, of course, the preservation of environmental resources and water and soil should also not reduce the optimum yield of yield in crops. (Mahmoudi et al. 2008)

### **Theoretical Foundations**

The advancement of technology, medical science, and the identification of the harmful and abnormal effects of chemical residues in agricultural production, which causes a variety of cancers and harmful effects on the nervous system in humans and animals, leads to the consciousness of communities and the welcome to products that are free of any residues. Is chemical (Samawat et al., 2008). Identification of consumer characteristics of organic products, motivations and attitudes of consumers to these products, as well as factors influencing the consumption of organic products, are essential for the further development of these products. Food Chain Finally, the consumer ends, that is, all the contributing factors In agriculture, they will see the result of their efforts to bring different products to the consumer community. It is believed that these products are so healthy that everyone can take them without any concern and doubt to obtain the nutrients they need. Not

to spoil the bitter taste of the poison (Lind et al., 2009). Although some studies suggest that there are no social-individual differences in the tendency of consumers to organic products, many studies show that organic shoppers usually have individual and social characteristics. Understanding these features helps us find the potential market for these products (Mahmoudi et al., 2008).

In 2009, a study was carried out on the influence of personal factors on the acceptance of organic products in Belgium. Values such as safety, pleasure in accepting organic products have contributed. Research in Jordan in 2013 shows that Jordanian consumers' awareness and information about organic foods is heavily influenced by factors such as education, occupation and occupation, marital status, income, desires, progress, quality, issues. Factors such as gender, age, and trademark are not affected by this.

The results obtained in this study have implications for the expansion and growth of organic food markets both inside and outside the country. Therefore, in order to assess the consumer's desire for organic products, it is very important to understand the motivations that make this a tendency. In a survey conducted in southern Italy in 2003, it was found that the most likely reason for consumers to consume organic products of health and health Iran has 97956 hectares of organic farming products in 2013, of which 46700 hectares were from natural areas and 51256 hectares of agricultural land. Currently, 164 countries produce organic products at 68 million hectares of land It takes about 35 million hectares It is a natural



field and the rest of the fields and gardens are managed and controlled by farmers. Australia, with 12 million hectares, is the world's first cultivator. Iran is ranked 5th in Asia in the cultivation of organic products in Asia, and ranked 50th in the world. And also in terms of organic farming, rank 2 belongs to the region. To Iran, and this is all the more so since the United Nations Agriculture Organization has also registered Iran as a land of agriculture, because of the world's 17 agricultural climates, it hosts 11 climates, which, on this basis, have the greatest advantage for agricultural development In the region, due to the high geographic and climatic abilities, His production to reach a higher position. Increasing awareness of food safety issues and health concerns are the main reasons for rising demand for organic products. Various findings suggest that the selection of organic food products by consumers is due to a lack of trust in non-organic products and a fear of the presence of compounds and Chemical additives are common in the products. In Rangier Wamidy's (2014) survey, it was determined that health knowledge, knowledge of organic products, motivation and age of consumers accounted for 32% of the variability in the attitude of organic products. Research by Mozafari (2014) on the factors affecting the purchase of chicken Organic in Tehran has been identified as factors such as awareness of antibiotics, exposure to organic products and education in this purchase. In another study by Ahmed (2010) in Malaysia, Malaysia, the results show that the intention to buy organic products is heavily influenced by the awareness and observation of the value of

buying organic products and believing in the health and safety of these products. . Respondents were classified into two groups, organic and non-buyer purchases. Among organic food buyers, many believed that organic food was more conventional, healthier, more delicious and more environmentally friendly than food. If our country wanted to take steps to develop this agricultural system, it would be more than Everything should pay attention to the consumer's attitude and increase their awareness of organic products and to be well-designed in this regard. Therefore, education and awareness of the importance of organic products are very important, as consumers receive more education and nutrition issues and more agricultural products as they are more likely to accept and buy organic products. However, knowing the characteristics of consumers Organic is very important for farmers who intend to produce and export these products to the domestic and international markets (Mahmoudi et al., 2008). As we know, they spray plenty of fruits and vegetables to fight their pests and diseases. Producer protests further state that the residual effects of these pesticides are low or short-lived. But environmental studies It has been shown that the remains of these toxins in a small, harmful and residual mixture of several types of poison, are more dangerous and can be problematic for human health. (Rezaani, 2008). Research of the Cancer Cancer Diagnostic Guide (2005) Said that children in the first two years of life were more likely to be exposed to cancer, and another study (2001) found that children who fed organic foods Are less at risk. In 2006, a study was

conducted that measured the amount of insecticide organophosphorus before and after the introduction of an organic diet in 23 preschool children. The study found that the amount of organophosphorus immediately decreased after replacing an organic diet. These studies helped to develop a An organic food system exists for children. Maternians are worried about giving their food to their children because their small body is very sensitive to toxins (Hasanzadeh and Gholinejad, 1393). Acrobi et al. (2008) conducted in Iran. The research topic is to study the attitude of agricultural experts about the effective components The use of organic agricultural products has shown that experts are the largest media outlet for informing consumers of radio and television, and the most important way to supply organic products through organic labels. The most important factors affecting the adoption of organic products among consumers of information in The effect of consumption of pesticides and chemical fertilizers in agriculture and the emergence of various diseases and taking measures to protect producers in line with the marketing and marketing of these products. Qadimi et al. (2013) in Iran was conducted in Fryden city. The research topic was to investigate the factors affecting attitude Farmers toward organic farming (Case study of Frieden County).

The result of stepwise regression showed that, from the first, participating in educational and educational classes related to organic farming, education and the application of organic farming techniques and technologies, about 42% of the variance in the attitude of farmers towards organic

farming Explaining factors affecting the purchase of organic products in Tehran (case study of organic chicken). The results of the research indicate that buying organic chicken, knowledge about antibiotics, familiarity with organic products and education affect sex, marriage, age and income, and 83 percent are willing to spend more on organic chicken. The most important reason for not eating chicken Organic is unavailability of these products. Rajabi et al. (2013) Research on researching the components of acceptance of organic products from consumers' point of view (a case study of Karaj city). The findings of the research showed that the level of knowledge and awareness of people about organic products is moderate. In addition, people's attitude towards organic products is moderate and favorable. Finally, using factor analysis, multi-factor as factors Effective on the acceptance of organic products. Ranjbar Shams and Omidi Najafabadi (2014) in Iran and in the city of Tehran. The subject of the study was the factors influencing the attitude of consumption of organic products in Tehran. The results of regression analysis showed that variables of health awareness, knowledge of organic products, motivation and age of consumers explained 32% of variations in the attitude of organic products. Azizi (2015) in his research on the effect of using vermicompost on production of products concluded that there is a meaningful relationship between the increase in the production of farmers and the success rate in using vermicompost. Rigby Acris (2000), in their research on the relationship between organic farming



systems and sustainable agriculture, found that organic farming itself leads to sustainability and agricultural development. Research by Scotsler, Joop de Bauer, Borsima (2012) in the Netherlands. They discuss issues such as the desire to return to a more natural way of life, distance from materialist lifestyles, and a return to a more meaningful, ethical life. Based on a series of careful and in-depth interviews, the study shows that such issues affect the current customers of organic foods, and this alone increases the importance of the connection with nature, consciousness and purity. It is said that these values are common to a broader part of the Dutch community and not only to current organic food customers. Strengthening cultural values in terms of choosing more durable foods can help expand the number of organic consumers and help in moving towards more durable ingredients. Research conducted by Hofkensa et al. (2010) in Belgium. The study titled "Food and Chemical Toxicology" has been selected by two distinct groups, and their study is based on the first group of people who used organic vegetables and the other group To those who have used ordinary vegetables, the nutrients and concentrations of the nutrients found in these two groups have been studied and their effects on both groups. The Turanian and Sankhivist (2005) research was conducted in Finland. Research Findings - The modified TPB correction model that matches the data shows that the role of individual principles in buying organic foods is different from the theory of planned behavior. Individual principles in purchasing organic food can be indirectly affected by the formation of

attitudes and behavior. In addition, the results show that the TPB model can predict the willingness to buy organic food better than the original model. Based on the results, it can be stated that the intention and intention of customers to purchase organic food can be predicted by their methods and routines, which can be predicted by their individual principles, and these intent and behavioral desires It can be well predicted of self-esteem behavior. Nahbia Ahmad (2010) in Malaysia's Valley of Kalanque. The results show that the intention to buy organic products is heavily influenced by the awareness and observation of the value of buying organic products and believing in the health and safety of these products. Respondents were classified into two groups, organic and non-buyer purchases. Among organic food buyers, many believed that organic food was more conventional, healthier, more delicious, and better for the environment. Research by Astirtsen et al. (2009) found that values such as the safety of organic products have been effective in its adoption. Eltrauna's (2013) research shows that Jordanian consumers' knowledge and information about organic foods is heavily influenced by factors such as education, occupation and occupation, marital status, income, desires and desires, progress and quality, quality of life, health issues And the source of the product. The results obtained in this study have implications for the expansion and growth of organic food markets both inside and outside the country. E et al. (2005) concluded that the impact of food health and environmental protection on purchasing organic products has been shown to have a direct impact. Accordingly, a study

was conducted to investigate the factors affecting the status of organic products in the consumer basket of households in Tehran. This had the following sub-targets:

- Investigating the effect of individual characteristics on the status of organic products in the consumer basket of families in Tehran.
- Identification of factors affecting the status of organic products in the consumer basket of households in Tehran.
- Investigating the relationship between the identified factors and the status of organic products in the consumer basket of households in Tehran.

### **Method and Material**

This research is based on the purpose-oriented research categorization as a applied theoretical research. In terms of research method, it is a descriptive-correlative type that has been surveyed. This research was carried out in 1394 and the statistical population of this research is based on average daily referrals of fruits to farmers and employees employed in fruit trees in west of Tehran. The statistical population is 260 people. Using Karaj and Morgan tables, and according to the statistical population, the number of samples was estimated to be 153 people, who were selected by simple random sampling. The main instrument for collecting information is a two-part questionnaire. The first part consists of personal characteristics and the second part includes effective factors. In order to determine the validity of the research tool, the experts panel panel method and to determine the reliability of the questionnaire, use Cronbach's alpha coefficient Has been. Regarding the results,

the reliability of the questionnaire was 0.942 and is acceptable. In order to achieve the research objectives, descriptive statistics such as percentage and frequency of independent and dependent variables were investigated. Using Spearman and Pearson test, the correlation between the factors identified in the factor analysis and the variability of the status of organic products in the consumer basket of households We will review. The difference between the mean of organic products status in terms of individual characteristics is also analyzed using Independent t-test and ANOVA. Then, using the regression test, we analyze the role of independent variables in the research on the variability of the dependent variable. Data and computations of this research were done using SPSS16 software.

### **Discuss**

Descriptive findings of the research:

Findings showed that 30.7% of the respondents with the frequency of 47 women in the group were 69.3% with a frequency of 106 men in the group. The range of age variations in the population was 19 years old and the most average age of the population was 19 years and the oldest was 75. 33.3% with the abundance of 51 had a bachelor's degree with the highest frequency or mode of study. The most frequent or fashionable employees are 58.2% with an abundance of 89 people, most of them employees. The percentage of respondents' expenditure indicated that 88.2% of the respondents with the most abundance of 135 people had expenditures of 300000-2000000 USD, and the range of variable expenditures in the population was 300,000 to 2,000,000 tomans, with the lowest expenditures of



300,000 and the highest of 8,000,000 tomans. The study of income variable among respondents showed that 57.5% of the people with a prevalence of 88 people had income from 2000000 to 3000000 USD, the lowest income of the population was 700000 USD and the maximum of 12000000 USD, and its index is also 2,000,000-700,000 tomans . The distribution of variable frequency of the type of organic product used in the statistical population showed that 16.3% of the people with a frequency of 25 were chicken, 25.5% with a frequency of 39 vegetable, 2.6% with a frequency of 4 persons, 12.4% With an abundance of 19 carrots, 3. 3% with a frequency of 5 legumes, 11.1% with an abundance of 17 fruits, 7.2% with an abundance of 11 nuts, 3. 3% with a frequency of 5 n Make-up products-Hygiene products. In this study, it has been shown that the most consuming people or fashion is the consumption of vegetables. The study also showed that the highest preference is for chickens or fashion. Also, 33.3% of the people with a high incidence of 51 people are expected to account for 10-10% of their own income from organic products, the

pattern of 32 in this population is related to those who They are willing to spend 1-10 percent of their income on organic products, meaning people are not eager to buy organic products. Findings of correlation analysis In order to identify the factors affecting consumption of organic products, factor analysis was used. The results obtained from factor analysis showed that the significance of the Bartlett test with the value of 263/3 rejected the zero assumption and showed that the correlation matrix has significant information and there are minimum conditions for factor analysis. Table 1. The results of the Bardelt test and the degree of freedom The significance level was 496.33 263.3. Based on the results of the factor analysis, six factors that could explain the part Of the variance of all variables were extracted. After the factor rotation of the variables extracted using the varimax method, it was found that the six factors in total 64.31% of the variation of the state of the change Organic products in the consumer basket of households The six factors and their contribution to variance are shown in the table below:

**Table 1. Factors extracted from agent factor analysis**

FACTORS	Special value	percentage of variance explained	Percentage of cumulative variance
First factor	723/11	634/36	634/36
Second factor	662/2	319/8	953/44
Third factor	889/1	902/5	855/50
Fourth factor	514/1	732/4	587/55
Fifth factor	444/1	512/4	100/60
Sixth factor	347/1	211/4	31/64

**Table 2. Introduction of extracted factors and variables of each factor**

Factor	Related variables	Factor load	
Educational	organization of workshops in organic products festivals	0/800	
	One day's name is Healthy and Organic Food	0/772	
	Organizing Organic Products Festivals	0/761	
	Organizing workshops on organic products for women	0/664	
	Organizing workshops for schools in relation to organic products	0/660	
	The variety of organic products	0/598	
	Global advertising of organic products	0/587	
	Organize organic products through posters, brochures and promotional gears	0/533	
	Food security	Taste organic products	0/705
		The health of organic products	0/635
Shelf life of organic products		0/561	
Promote Organic Products Via Media (Radio and Television)		0/555	
The cost of organic products is		0/546	
The presence of experts in organic food supply locations		0/504	
Marketing		The supply of organic products through fruit and vegetables	0/700
	The availability of organic products in organic food supply locations	0/704	
	The supply of organic products through school buffets	0/664	
	Organic products delivery through large stores	0/586	
Awareness	Organic promotion of organic products	0/754	
	Organic delivery in the form of packaging	0/669	
	Organic products delivery through special stores	0.631	
	Organize organic products through publications (journals and newspapers)	0/516	
Economic	Inflation rate	0/735	
	Individuals' income	0/690	
	Organic price	0/650	
	The quality of organic products	0/619	
	The appearance of organic products	0/600	
Cultural	Presence of specific labels on organic products	0/808	

Then, we use the matrix of factor load factors to identify variables related to each factor and also to interpret the factors. In the matrix, each variable that has more load on one factor is considered to be the factor, and variables with factor loadings greater than 0.5 have a significantly acceptable level with the relevant factor. Investigating the relationship between the correlation between the factors identified in the factor analysis and the variability of the status of organic products in the consumer basket of households showed that there is a positive

and significant relationship between the educational, marketing, informational and cultural factors and monthly income with the dependent variable of the status of organic products in the consumer basket of households. There was no significant relationship between independent variables of food safety factor, economic factor, age, number of household members, individuals' education and monthly cost with dependent variable of organic products status. Comparative analysis of the mean of organic products status in terms of sex, marital





status, head of household, specific disease, occupations, people's living area, type of organic products consumption and the need for organic products using independent t-test and ANOVA showed that There is a significant difference between the average of organic products by gender, household head,

their occupations, consumption of organic products. Also, there is no significant difference between the mean of organic products status in different groups according to marital status, specific disease, living area and need for organic products.

**Table 3. The correlation between organic product status and independent variables**

First variable		Second variable		Test	Correlation coefficient	Sig level
Variable	indexes	Variable	Indexes			
Educational factor	Semi – Interval	status of organic products	Interval	Pearson	0/0171	0/034
Food safety	Semi – Interval	status of organic products	Interval	Pearson	-0/003	0/968
Marketing factor	Semi – Interval	status of organic products	Interval	Pearson	0/182	0/024
Notification factor	Semi – Interval	status of organic products	Interval	Pearson	0/198	0/014
Economic factor	Semi – Interval	status of organic products	Interval	Pearson	0/054	0/510
Cultural factor	Semi – Interval	status of organic products	Interval	Pearson	-0/214	0/008
Age	Interval	status of organic products	Interval	Pearson	0/089	0/273
family members	Interval	status of organic products	Interval	Pearson	0/044	0/592
income	Interval	status of organic products	Interval	Pearson	0/164	0/043
Household expenses	Interval	status of organic products	Interval	Pearson	0/070	0/390
Level of Education	ordinal	status of organic products	Interval	Pearson	0/002	0/981

Source: Research findings

**Table 4. Comparative analysis of the mean of organic products status with independent variables in different groups**

j	Variable	Test	F	Sig
1	Sex	Independent t-test	18/781	0/00
2	marital status	Independent t-test	0/416	0/520
3	Head of household	Independent t-test	8/027	0/005
4	Having a specific disease	Independent t-test	0/356	0/552
5	jobs	ANOVA	3/286	0/003
6	People's living area	ANOVA	0/671	0/571
7	Type of consuming organic products	ANOVA	3/405	0/018
8	The need to consume organic products	ANOVA	2/045	0/053

Source: Research findings

Multiple Regression Analysis In order to analyze the role of independent variables of research, which has a significant relationship with the situation of household products in the consumer basket of households, multiple stepwise regression was used. The results of the research showed that there is a significant difference between the independent variables that have a significant relationship with the dependent variable. The extracted factors from the factor

analysis have a significant relationship with the individual characteristics. The results of regression analysis also indicate that the type of consumption of products Organic and marketing agent are the most important independent variables that affect the status of organic products in the consumer basket of households that interact 8.1% of the variations of the dependent variable of the research.

**Table 5. The results of stepwise regression analysis**

Level	Independent variable	B	SE(B)	Beta	t	Sig
-	-	3/872	1/048	-	3/694	0/000
First step	Kind of organic consumption	-0/217	0/077	-0/220	-2/809	0/006
Second step	Marketing	-0/159	0/065	0/191	2/433	0/016

Using the step-by-step method, the regression equation was obtained as follows:  
 $Y = 3.872 + (-0.217X1) + (-0.159X2)$

### Conclusion and Recommendations

The obtained data showed that the prevalence of consumption of organic products in case of need was 57.5% of the subjects with 88 cases of chicken, 4.6% with a frequency of 7 with vegetables, 7.2% with a frequency of 11, 2% with the frequency of 4 animals, 17.6% with the frequency of 27 beans, 2.6% with the frequency of 4 fruits, 17.6% with the frequency of 27% of dried fruits, 2.6% with the frequency of 4% cosmetic products and 1.3% with the frequency of 2 people of these products In terms of consumption of organic products, the data showed that in the statistical population, the type of consumption was 16.3% of the subjects with a frequency of 25 Chicken, 25.5% with a frequency of 39 vegetables, 6.2% with a frequency of 4%,

12.4% with a frequency of 19%, 3.3% with an abundance of 5 legumes, 11.1% with an abundance of 17 fruits, 7.2% with a prevalence of 11 nuts, 3.3% with an abundance of 5 cosmetic products and 18.3% with an abundance of 28% of these products. This study has shown that the highest consumption of people or the mode of consumption of vegetables is shown in this study. It has been the most preferred way to consume or to consume chicken.

Also, the results showed that there is a positive and significant relationship between income, educational, marketing, informational and cultural variables in the statistical population. And, the average of the status of organic products in the consumer basket of households by job occupation, head of household, gender There is a significant difference between the use of organic products and the multiple regression analysis. Independent variables such as the use of organic products and the marketing



factor with the variables of the status of organic products in household consumption basket are significant. Altraaune (2013), Ahmed (2010), Ranjbar et al (2014), old and both Aran (2013), M. (2014), Akbari et al (2008) found similar results in their study.

Based on research findings, suggested:

1- Because there is a positive and significant relationship between income level and organic products status in consumer basket of households, decreasing prices of organic products by reducing the prices of inputs, producer support by different organizations and institutions will cause people with different revenues Use these products.

2- Since there is a positive and significant relationship between the type of organic product consumption and the status of organic products in the consumer basket of households, it is possible to use more organic products with more production of these products.

3. Since there is a positive and significant relationship between the allocation of the head of household to the organic product and the status of organic products in the consumer basket of households, it can be noted that by raising the awareness of the head of household regarding organic products, the better position of these products in the basket of household consumption .

4. Since the education of individuals and their knowledge of the organic product with the status of organic products in the consumer basket of households has a positive and significant relationship, it is possible to put different educational classes related to organic products by different

organs of the family awareness level relative to Organic products are high.

## **References**

Iranfam, Ayub. (2007). Principles of production of agricultural organic products. East-Azarbaijan: the promotion and exploitation system of East Azarbaijan Jihad-e-Agriculture Organization.

Akbari, Morteza (2008). Attitude of Agricultural Experts on Effective Components on Consumption of Organic Agricultural Products. A Journal of Agriculture, 2.13-26.

Hassanzadeh, Abdullah and Gholinezhad, Ismail (1393). Sustainable agriculture. Armieh: Academic Jihad.

Rezan, Mohammad. (2008). Natural Agriculture, away from the use of chemical and harmful substances., Shiraz: Keshma Mehrsmawat, Saeed, Pazaki, Ali, Ladan Moghaddam, Alireza Vesmawat, Samaneh. (2008). Applied principles of organic materials in agriculture .German: Islamic Azad University, Azizi, Mohammad (1394). Master's Degree in Rural Development, Islamic Azad University, Islamshahr Branch, Tehran.

Old, Alireza. (2012) .Reviewing the Effective Factors of Agricultural Attitude toward Organic Farming. Agricultural Research Promotion and Education Research. 4. Lindh, Lyfar, Schlofer, Theodorefromyther. (2009/1388). Organic Fruit Growing. (Translator : Mohammad Reza Naeini and Ahmad Kajjani): Tehran:

Ayzhum Mohammadi, Hossein, Mahdavi Damghani, Abdolmajidoliaghati, Homan (2008). A trend towards organic farming. Mashhad: Mashhad University Jihad.