

# Insight into Consumers' Willingness to expend extra Time and Money to purchase Organic Vegetables

CHRYSANTHI CHARATSARI\*, IRINI TZIMITRA – KALOGIANNI\*\*

Jel classification: Q130, Q110

## 1. Introduction

The modernization of farming in Greece, in contrast to other countries of Europe, has progressed at an exceptionally slow pace. Even today traditional farming techniques are used in certain areas, while the damage caused to the environment due to conventional farming is not always visible. Consequently, the idea of organic farming is difficult to comprehend, not only by the producers and the consumers, but also by scientists.

During the recent years, however, an increased interest by producers in the production of organic produce in our country has been noticed. The reasons for this interest are numerous, such as the low prices of conventional products, or the easier availability of organic products, mainly in overseas markets, at satisfactory prices, in combination with the consumers' awareness on the protection of their health and of the environment (Magourilos, 1998:466).

The first attempts at adapting organic farming started at the beginning of the 1980's, with the repatriation of immigrants mainly from the countries of Northern Europe who produced organic products mainly for their own consumption (Taboukou, 1997).

Although organic farming in Greece has surpassed 20 years of application and in spite of the important thrust that the European Regulation 2092/91 gave to the field, its development is still in its early stages, covering 29,255 hectares, that is 0.85% of the total farmland.

## Abstract

The intense interest in the safety and quality of food was the reason for the execution of this survey, which was carried out in the town of Larissa located in central Greece. The primary elements collected were processed by the *Chi Square* ( $\chi^2$ ) *Test of Independence* and by the *correlation coefficient Spearman's rho* ( $\rho$ ). The statistical analysis showed that 80.9% of consumers are willing to pay extra money for the purchase of organic vegetables and 74.2% show their inclination to spend more time to purchase them. The relationship between the two mentioned variables changing the demographic characteristics of the consumer were studied, and also their attitude towards these products.

**Keywords:** organic vegetables, willingness to pay, willingness to expend extra time, consumer

## Résumé

*Le vif intérêt montré par la sécurité et la qualité des aliments est à la base de cette enquête qui a été réalisée dans la ville de Larissa, en Grèce centrale. Les éléments rassemblés ont été élaborés à travers le coefficient de corrélation de Spearman ( $\rho$ ) et le test d'indépendance ( $\chi^2$ ). L'analyse statistique a montré que 80,9% des consommateurs est disponible à payer davantage pour des produits maraîchers biologiques et 74,2% est disponible à consacrer plus de temps pour leur achat. La relation entre ces deux variables a été étudiée en fonction des caractéristiques démographiques des consommateurs ainsi que de leur attitude vis-à-vis des produits en question.*

**Mots clé:** produits biologiques, disponibilité à payer, disponibilité à consacrer plus de temps, consommateur

In regard to domestic production, the variety of produce that is included is especially small. The majority of organic producers focuses in a selective way on some perennial rather than annual crops such as the production of olive oil, which is the main Greek organic product (Van der Smissen, 2000:134). The cultivation of vegetables is restricted to 1.6% of the total of organically cultivated area. The result of this particularity is the surplus of organic production of olive oil and citrus disposed at satisfactory prices in overseas markets, while in contrast, domestic demand of vegetables are not covered

(Fotopoulos and Kristallis, 2002:50).

The Greek chain of organic products trade is characterized by the lack of organization in the areas of marketing, the restricted traded amount, and by multiple pieces. From the perspective of the channels in which the organic products are traded, the stress is on the specialized shops, where 65% is sold, 30% is sold directly by the producers and supermarkets represent 5% of sales (Yussefi and Willer, 2002:65).

Especially in regard to vegetables, 40% of domestic produce is sold directly by the producer to the consumer and the remaining 60% is traded to specialized shops (Michelsen *et al.*, 1999:190). The fact is that the retail chains are absent from the trading of vegetables, confirming that the specific market is not developed (Charatsari, 2004:59).

In regard to the prices of organic vegetables, it is noticed that they are especially high in contrast to other organic products, a fact that is due mainly to their high sensitivity.

\* School of Agriculture, Aristotle University of Thessaloniki, Greece

\*\* Department of Agricultural Economics, School of Agriculture, Aristotle University of Thessaloniki, Greece

## 2. Aim of the project

The purchase of organic food entails a high cost to the consumer, not only because of the extra price which he is called upon to pay, but from the aspect of time and effort he must invest (Vindigni *et al.*, 2002).

The willingness to pay is one of the most important elements for the marketing of organic food. The stipulation of willingness of payment refers to the price that the consumer is prepared to pay in order to buy organic instead of conventional products.

According to the available bibliography – Davies *et al.* (1995), Kyriakopoulos (1998:231), Gendall *et al.* (1999), Straughan and Roberts (1999), Klonaris (2000:205), Chinnici *et al.* (2002) – the willingness to pay is affected by factors such as:

Environmental concern;

The increase in family income;

The demographic characteristics of the consumer (age, structure of household, education, gender);

The type of product. In the research by Fotopoulos and Krystallis (2002:92), the Greek consumer shows willingness to spend an extra 63.6% for organic olive oil, 78.6% for organic raisins (sultanas), 76.3% for organic bread, 100% for organic oranges and 53.3% for organic wine, in relation to the prices of the relative conventional items of food;

The place of descent and the area of residence of the consumer, as they rearrange their dietary habits and therefore effect the kinds of products which reign in the local organic market.

The term “willingness to expend extra time to purchase organic products” refers to the time which the consumer is willing to devote in order to buy organics instead of the conventional product which relates to the effort which is needed to be spent in order to redeem the disadvantage of limited availability. The aim of this research is the investigation of the level of willingness to pay and also the investment of extra time for the purchase of organic in contrast to conventional vegetables<sup>1</sup> and the examination of the ways in which these are affected by the particular socio-economic characteristics of the consumers and their view of organic vegetables.

## 3. Research methodology

This research is made up of two parts. The first part, which took place in the months of October – December 2002, regards the qualitative research, which is supported by the interviews by Consumer Focus Groups. The second part, which took place in the period of May until July 2003 regards the quantitative

<sup>1</sup> The category of vegetables includes potatoes, tomatoes, lettuce, broccoli, cabbage, cauliflower, eggplants, peppers, zucchini, pea, cucumbers, onions, artichokes, spinach, fresh bean, okra, carrots

survey, which was based on personal interviews with consumers.

The formation of the questionnaire used in the quantitative survey was supported by the results of the qualitative survey.

The survey took place in the town of Larissa, capital of the Thessaly region, which offers a very satisfactory framework of sampling, since it combines elements of urban, semi-urban and agricultural population on one hand and on the other the growth of organic farming may be characterized representatively, as non-inclinalational especially under the prevalent conditions in the organic market in the Greek dominion.

The choice of members for sampling was done by the method of simple random sampling. As a sampling unit, one person from each household was considered. Since the questionnaire forwarded was to be answered in a preliminary sample and with the foundation of special statistical formula (Crimp, 1985:55), the size of the sample was determined by 283 people.

The statistical analysis of primary elements was done with the statistical package SPSS ver. 11.5 for Windows (Statistical Package for Social Sciences). The relationship between the variables was investigated with the Chi Square ( $\chi^2$ ) test of independence and with the correlation coefficient Spearman's rho ( $\rho$ ).

## 4. Results of the survey

Of the 283 consumers who took part in the survey, 45 (15.9%) have never bought organic vegetables, 146 (51.6%) are occasional buyers and 32,5% purchase them on a more regular basis.

The items which organic consumers prefer to buy are tomatoes, cucumbers, potatoes, lettuce and zucchini. These are the items, which are more familiar to the consumers, their supply is larger and are available at nearly all sales points of organic products.

### 4.1. Willingness to pay for the purchase of organic vegetables

The majority of consumers (49.1%) claim that they are in a position of spending up to 20% more for the purchase of

Table I. *Distribution of the sample based on the willingness to pay*

	At all	Wilingness to pay				
		<20%	20-50%	50-80%	80-100%	>100%
<b>Frequency</b>	54	139	66	15	7	2
<b>Percent %</b>	19.1	<b>49.1</b>	23.3	5.3	2.5	0.7

*n*= 283

Source: *Questionnaire*

organic vegetables. Also important is the percentage of consumers who are willing to pay up to 50% more for the purchase of organic vegetables (23.3%), while the percentage (19.1%) of those who are not willing to pay an extra amount is remarkable (Table I). The mid range of willingness to pay, based on the survey, is of 27.53%.

#### 4.2. The effect of demographic characteristics on the willingness to pay

Statistically a very important relation was noted between the willingness to pay and the variable “level of education”, “income”, “age”, “the existence of under-aged members in the family”, and “the existence of working women in the family”(Table II). More specifically, the higher the education level of the consumer, the higher the willingness to pay. Typically it is mentioned that of the graduates of first-degree education only 18% were willing to pay extra money whereas for the holders of postgraduate degrees or doctorates the relevant percentage is 100%.

Regarding the income, it was certified that the consumers who enjoy high monthly family incomes are those who appear more positive in the expenditure of extra amounts for the purchase of organic vegetables.

A catalyst in the willingness to pay is the existence of working women and under- aged children in the family. In households with minors, the willingness to pay increases by 23%, while the existence of the working woman determines a 22% increase.

Finally, increased age decreased the willingness to pay. More specifically the consumers, who belong to the age group of 21-30 years old, present a greater willingness to pay extra amounts of money.

The willingness to pay is increased in women, who are responsible for the purchasing of the food products in the family, without the relation between the two variables being able to be characterized as statistically important. The lack of statistical relation ascertains also with variables such as “occupation” and “place of descent”.

#### 4.3. Willingness to spend extra time in the purchase of organic vegetables

The relationship between the willingness to pay an extra amount for the purchase of organic vegetables and the

Graphic 1. Correlation between the variables “willingness to pay” and “willingness to expend extra time”

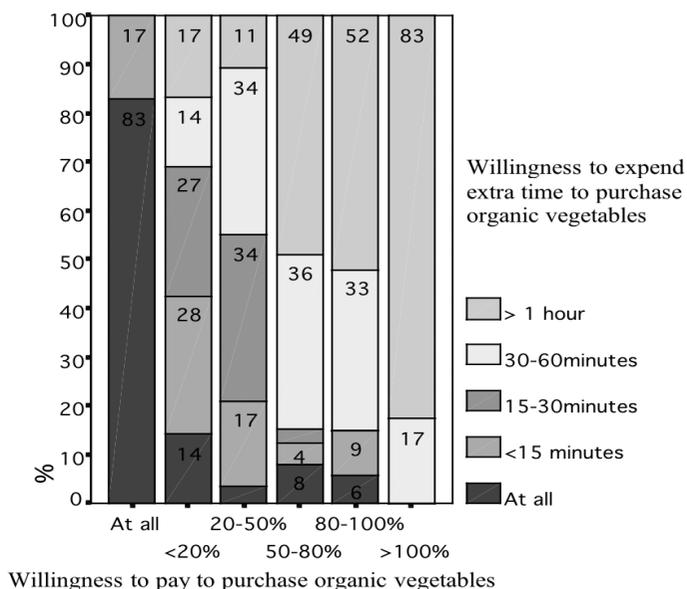


Table II. Relationship between the demographic characteristics and the willingness to pay

Willingness to pay	Demographic characteristics								
	Primary	Secondary	Education		AEI-TEI <sup>2</sup>	Msc-Phd			
Yes (%)	48.3	79.2	High School	IVT <sup>1</sup>	81.8	100	ρ=0.175		
No (%)	51.7	20.8	10.8	18.8	18.2	0	α=0.003		
			Age group						
Yes (%)	<21	21-30	31-40	41-50	51-60	>61	ρ=-0.225		
No (%)	85.7	95.2	82.5	82.3	61.1	71.1	α=0.000		
			Income (euro)						
Yes (%)	<500	500-1000	1000-1500	1500-2000	2000-2500	2500-3000	3000-3500	>3500	ρ=0.348
No (%)	37	77.8	72.4	92.5	90.4	96.2	88.9	100	p=0.000
			Presence of minors in the family						
Yes (%)		Yes			No				x <sup>2</sup> =8.980
No (%)		54.1			45.9				p=0.003
			Presence of a working woman in the family						
Yes (%)		Yes			No				x <sup>2</sup> =8.224
No (%)		33.3			66.7				p=0.004

n=283  
 1: Institute of Vocational Training  
 2: Higher Education Schools (Universities)  
 Source: Questionnaire

consumers’ willingness to expend more time for the same reason is statistically very important (ρ=0,562, α=0,000). 86.9% of those who are positively placed in the possibility of paying more money appear willing to spend more time to purchase the goods under examination (Graph 1).

Table III shows how consumers are rated according to their intentions or not to spend more time in buying organic vegetables. Most of them (31.8%), answer that they are in a position to spend 15 more minutes, many claimed willing to spend up to half an hour extra, while especially high is the percentage of consumers that are negative in the spending of extra time. For the whole of the sample, the mid rate of time that is willing to be spent for the purchase of organic instead of conventional vegetables is 20.35 minutes.

Table III. Distribution of the sample based on the willingness to expend extra time

	Willingness to expend extra time				
	At all	Up to 15%	15-30%	30%-1 hour	>1 hour
Frequency	73	90	74	38	8
Percent %	25.8	31.8	26.1	13.4	2.8

n=283  
Source: Questionnaire

Regarding the socio-economic characteristic, it was noted that statistically important was the relation to “education” since the increase in the level of education goes together with the wish to spend more time. Also very important is the relation to “income”, as the con-

ness to pay, the greatest willingness to spend more time in the purchase of organic vegetables, without statistical important relation between the two variables. Likewise, the lack of statistical relations was recorded referring to the formation of the household, although families with under aged members and working women appeared more willing to spend more time.

Also, it was ascertained that consumers who are willing to spend more time in order to buy organic vegetables are basically occasional buyers and have mainly started to consume these products during the last five years. (Table V).

#### 4.4. Effect on the attitude towards organic vegetables and the willingness to pay and to spend extra time

The attitude towards organic vegetables was differentiated on four axis: attitude towards the dietary properties of organic vegetables, attitude towards the relation of organic vegetables to the environment, attitude towards the organoleptic properties of organic vegetables and the attitude towards factors which relate to the market.

Statistically significant relations were noticed between the attitude towards the first three examined parameters and the willingness to pay and to spend more time. More analytically, the more positive consumers are towards the opinion that organic vegetables are healthier, more pure, more nutritional than the conventional, ideal for the diet of children (first axis), safe for the environment during their production, free from chemical residues (second axis) and with sensory properties such as taste and appearance, than the relative conventional (third axis), the more willing they are to spend more time and more money in order to buy these products (Table VI and VII).

On the contrary, the attitude towards factors such as price, availability and marketing of organic vegetables barely affect statistically the two above-mentioned variables.

Table IV. Relationship between the demographic characteristics and the willingness to expend extra time

Willingness to expend extra time		Demographic characteristics								
		Education								
		Primary	Secondary	High School	IVT <sup>1</sup>	AEI-TEI <sup>2</sup>	Msc-Phd			
Yes (%)		51.7	72.9	78.3	78.1	74	92.9		ρ=0.121 α=0.043	
No (%)		48.3	27.1	21.7	21.9	26	7.1			
		Age								
		<20	21-30	31-40	41-50	51-60	>61			
Yes (%)		71.4	85.5	77.2	71	61.1	71.1		ρ=-0.120 α=0.043	
No (%)		28.6	14.5	22.8	29	38.9	28.9			
		Income								
		<500	500-1000	1000-1500	1500-2000	2000-2500	2500-3000	3000-3500	>3500	
Yes (%)		44.4	75.6	63.8	84.9	82.7	84.6	77.8	76.9	ρ=0.198 α=0.001
No (%)		55.6	24.4	36.2	15.1	17.3	15.4	22.2	23.1	

n=283  
1: Institute of Vocational Training  
2: Higher Education Schools (Universities)  
Source: Questionnaire

sumers which are classed in high income status, appear more positive in the spending of more time (Table IV).

The age status of 21-30 presents, as does the willing-

ness to pay and to spend more time. More analytically, the more positive consumers are towards the opinion that organic vegetables are healthier, more pure, more nutritional than the conventional, ideal for the diet of children (first axis), safe for the environment during their production, free from chemical residues (second axis) and with sensory properties such as taste and appearance, than the relative conventional (third axis), the more willing they are to spend more time and more money in order to buy these products (Table VI and VII).

Table V. Relationship between the willingness to expend extra time and the frequency of purchase as well as the years of purchase

Willingness to expend extra time		Frequency of purchase								
		<Once/month	Once/month	Once/15days	Once/week	>Once/week				
At all		29.8%	12.8%	23.8%	11.4%	9.8%		ρ=0.202 α=0.002		
<15 minutes		38.6%	35.9%	31%	40.9%	26.8%				
15-30 minutes		21.1%	28.2%	31%	34.1%	39%				
30-60 minutes		10.5%	23.1%	11.9%	9.1%	19.5%				
>1 hour		0%	0%	2.4%	4.5%	4.9%				
Total		100%	100%	100%	100%	100%				
Willingness to expend extra time		Frequency of purchase								
		No purchase	<1/2 year	1/2-1 year	1-2 years	2-3 years	3-5 years	5-10 years	>10 years	
At all		71.1%	25.6%	20%	18.8%	8.1%	0%	18.8%	20%	ρ= 0.402 α=0.000
<15 minutes		22.2%	43.6%	33.8%	35.4%	27%	16.7%	37.5%	33.3%	
15-30 minutes		4.4%	20.5%	30.8%	31.3%	37.8%	38.9%	31.3%	20%	
30-60 minutes		2.2%	10.3%	15.4%	12.5%	16.2%	38.9%	12.5%	13.3%	
> 1 hour		0%	0%	0%	2.1%	10.8%	5.6%	0%	13.3%	
Total		100%	100%	100%	100%	100%	100%	100%	100%	

n=283  
Source: Questionnaire

Table VI. Influence of the attitudes towards organic vegetables on the willingness to pay

Axis One						
Item	Willingness to pay	C.A. <sup>1</sup>	A. <sup>2</sup>	N.A.N.D. <sup>3</sup>	D. <sup>4</sup>	Statistical parameters
Organic vegetables are healthier than the conventional	Yes (%)	94.2	91	32.5	0	$\chi^2=130.019, p=0$
	No (%)	5.8	9	67.5	100	
Organic vegetables are natural/pure	Yes (%)	89.8	84.3	50	28.6	$\chi^2=40.018, p=0$
	No (%)	10.2	15.7	50	71.4	
Organic vegetables are a richer source of nutrients than the conventional	Yes (%)	95.3	85.1	69.4	39.3	$\chi^2=51.932, p=0$
	No (%)	4.7	14.9	30.6	60.7	
Organic vegetables are ideal for children's nutrition	Yes (%)	93.9	81.6	53.1	18.2	$\chi^2=56.664, p=0$
	No (%)	6.1	18.4	46.9	81.8	
Organic vegetables are better for people with health problems	Yes (%)	86.7	86	70.2	0	$\chi^2=45.999, p=0$
	No (%)	13.3	14	29.8	100	
Axis Two						
Item	Willingness to pay	C.A.	A.	N.A.N.D.	D.	Statistical parameters
Organic vegetable's production is environment friendlier	Yes (%)	86.2	84.9	73.3	12.5	$\chi^2=29.579, p=0$
	No (%)	13.8	15.1	26.7	87.5	
Organic vegetables are free from chemical residues	Yes (%)	91.5	85.5	67.4	7.1	$\chi^2=64.073, p=0$
	No (%)	8.5	14.5	32.6	92.9	
Axis Three						
Item	Willingness to pay	C.A.	A.	N.A.N.D.	D.	Statistical parameters
Organic vegetables have a better taste than conventional vegetables	Yes (%)	95.1	93	67	41.7	$\chi^2=54.187, p=0$
	No (%)	4.9	7	33	58.3	
Organic vegetables do not have a very appealing look	Yes (%)	62.5	78.4	75.9	91.2	$\chi^2=17.272, p=0.002$
	No (%)	37.5	21.6	24.1	8.8	

n=283  
1: Fully agree 2: Agree 3: Neither agree nor disagree 4: Disagree and Completely Disagree  
Source: Questionnaire

Table VII. Influence of the attitudes towards organic vegetables on the willingness to expend extra time

Axis One						
Item	Willingness to expend extra time	C.A. <sup>1</sup>	A. <sup>2</sup>	N.A.N.D. <sup>3</sup>	D. <sup>4</sup>	Statistical parameters
Organic vegetables are healthier than the conventional	Yes (%)	89	76.9	30	9.1	$\chi^2=83.020, p=0$
	No (%)	11	23.1	70	90.9	
Organic vegetables are natural/pure	Yes (%)	81.5	76.9	47.1	42.9	$\chi^2=20.166, p=0$
	No (%)	18.5	23.1	52.9	57.1	
Organic vegetables are a richer source of nutrients than the conventional	Yes (%)	86.8	73.6	67.7	42.9	$\chi^2=25.298, p=0$
	No (%)	13.2	26.4	32.3	57.1	
Organic vegetables are ideal for children's nutrition	Yes (%)	82.6	75.2	56.3	27.3	$\chi^2=22.355, p=0$
	No (%)	17.4	24.8	43.8	72.7	
Organic vegetables are better for people with health problems	Yes (%)	80.8	78.5	59.6	11.1	$\chi^2=27.761, p=0$
	No (%)	19.2	21.5	40.4	88.9	
Axis Two						
Item	Willingness to expend extra time	C.A.	A.	N.A.N.D.	D.	Statistical parameters
Organic vegetable's production is environment friendlier	Yes (%)	78	80.2	65	12.5	$\chi^2=21.364, p=0$
	No (%)	22	19.8	35	87.5	
Organic vegetables are free from chemical residues	Yes (%)	84.9	75.2	65.2	14.3	$\chi^2=36.604, p=0$
	No (%)	15.1	24.8	34.8	85.7	
Axis Three						
Item	Willingness to expend extra time	C.A.	A.	N.A.N.D.	D.	Statistical parameters
Organic vegetables have a better taste than conventional vegetables	Yes (%)	91.5	86	56	41.7	$\chi^2=48.015, p=0$
	No (%)	8.5	14	44	58.3	
Organic vegetables do not have a very appealing look	Yes (%)	50	64.7	71.3	87.6	$\chi^2=24.027, p=0$
	No (%)	50	35.3	28.7	12.4	

n=283  
1: Fully agree 2: Agree 3: Neither agree nor disagree 4: Disagree and Completely Disagree  
Source: Questionnaire

## 5. Conclusions

Nearly half of the consumers of the sample claimed that they were willing to spend up to 20% more to buy organic vegetables, while the mid range of the additional rate, which is willing to pay, is 27.53% of the price of conventional. Demographic factors such as age, education and income significantly effect the willingness to pay, increasing in the younger consumers and in those who belong to the high income and educational classes. Furthermore, the presence of under age children in the family and also of working women also exerts significant positive effect.

Regarding the consumers' willingness to expend more time to buy these specific dietary items, most of them are in the position to spend up to 15 minutes more, while the middle rate of this specific variable ascends to approximately 20 minutes. The willingness to spend more time is connected to the willingness to pay, while it is effected significantly and positively by the income and educational level of the consumers. Also relative is the frequency and age of the purchase.

On the contrary, parameters such as gender, occupation and place of descent (urban, semi-urban or agricultural areas) don't have any effect on the variables under examination.

The positive attitude towards the dietary and sensory properties of organic vegetables and also towards environmental friendliness predisposes positively the willingness to spend more time and money in their purchase.

## References

- Charatsari C., 2004. *Measurement of the Attitude of Consumers to the Organic Vegetables in the city of Larissa*, Aristotle University of Thessaloniki, School of Agriculture, Master Thesis, (In greek)
- Chinnici G., D' Amico M. and Pecorino B. 2002. *A Multivariate Statistical Analysis on the Consumers of Organic Products*, British Food Journal, Vol. 104, No.3/4/5, 2002, pp.187-199

- Crimp M., 1985. *The Marketing Research Process*, Prentice Hall International, Second Edition, UK
- Davies A., Titterington A. and Cochrane C. 1995. *Who Buys Organic Food?- A Profile of the Purchasers of Organic Food in Northern Ireland*, *British Food Journal*, Vol. 97 No. 10, 1995, pp. 17-24
- Fotopoulos C. and Krystallis A., 2002. *The Greek Consumer of Organic Products. A Pan Hellenic Marketing Research*, Editions Stamoulis, Athens, (In greek)
- Gendall P., Betteridge K. and Bailey B., 1999. *The Japanese Market for Organic Fruit and Vegetables*, *Marketing Bulletin*, No. 10, 1999, pp. 24-37
- Klonaris S. 2000. *Consumer Behaviour for Fruits and Vegetables in Greece: Bayesian Estimation of an almost Ideal Demand System*, Problems and Prospects of Balkan Agriculture in a Restructuring Environment, 70th EAAE Seminar, Proceedings of the EAAE Seminar, 2000, Thessaloniki, pp. 201-208
- Kyriakopoulos K., 1998. *Preposition to Buy Organic Foods: A Theoretical Model Applied to Organic Olive Oil. Consequences on the Marketing Mix in Competitiveness and total development of the agricultural field; the new challenges for Greece*, Proceedings of 4<sup>th</sup> Hellenic Conference of Agricultural Economics, 28-30 November 1996, ET.AG.R.O., Thessaloniki 1998, pp: 228-238, (In greek)
- Magourilos M., 1998. *Financial Analysis of Olive Organic Production in Mani*, Proceedings of 5<sup>th</sup> Hellenic Conference of Agricultural Economics Reformation of Agricultural Land, 11-13 December 1998, Editions Stamoulis, Athens, pp: 466-484, (In greek)
- Michelsen J., Hamm U., Wynen E. and Roth E., 1999. *The European Market for Organic Products: Growth and Development, Organic Farming in Europe: Economics and Policy*, Vol. 7, University of Hohenheim/Department of farm Economics, Stuttgart, Germany
- Straughan R. and Roberts J. 1999. *Environmental Segmentation Alternatives: a Look at Green Consumer Behavior in the Millenium*, *Journal of Consumer Marketing*, Vol. 16, No. 6, 1999, pp. 558-575
- Tamboukou A., 1997. *The Image of Greek Organic Farming Today*, *Agricultural Technology*, Vol: "Organic Farming '97", 1997, pp: 13-20, (In greek)
- Van der Smissen N., 2000. *Organic Agriculture in Greece, in Organic Agriculture in Europe - Current Status and Future Prospects of Farming in Twenty-five European Countries*, Graf S. and H. Willer (Eds), SOL- Sonderausgabe Nr. 75, pp: 129-142
- Vindigni G., Janssen M. and Jager W. 2002. *Organic Food Consumption – A Multi-theoretical Framework of Consumer Decision Making*, *British Food Journal*, Volume 104, No.8, 2002, pp. 624-642
- Yussefi M. and Willer H., 2002. *Organic Agriculture Worldwide 2002 - Statistics and Future Prospects*, SOL- Sonderausgabe Nr. 74