

# **RESEARCHES ON THE ATTITUDES AND PREFERENCES OF THE CONSUMERS FROM IASI COUNTY TOWARDS THE ECOLOGIC VEGETABLE YIELD**

## **CERCETĂRI PRIVIND ATITUDINEA ȘI PREFERINȚELE CONSUMATORILOR DIN JUDEȚUL IAȘI FAȚĂ DE PRODUCȚIA LEGUMICOLĂ ECOLOGICĂ**

**TELIBAN G., MUNTEANU N.**

University of Agricultural Sciences and Veterinary Medicine Iasi, Romania

**Abstract.** *The study was made by the interview method using our own questionnaire made of 51 questions grouped by three directions: social-professional analysis, interviewed persons' attitude and preference. The study focuses on the highlighting of consumers' attitude and preferences as determining factors for the development of the ecologic vegetable yield. The obtained results show that respondents have a favorable attitude towards the ecologic vegetable yield and prefer the consumption of fresh vegetables obtained by pesticide-free and synthesis fertilizer-free technologies.*

**Key words:** attitude, preference, consumers, ecological product

**Rezumat.** *Studiul a fost realizat prin metoda interviului, folosind un cuestionar propriu, alcătuit din 51 de întrebări, grupate pe trei direcții: analiza socio-profesională, atitudinea și preferința persoanelor interviewate. Studiul are ca scop evidențierea atitudinii și preferințele consumatorilor ca factori determinanți ai dezvoltării producției legumicole ecologice. Rezultatele obținute relevă că respondenții au o atitudine favorabilă față de producția legumicolă ecologică și preferă consumul de legume proaspete, obținute în tehnologii fără ajutorul pesticidelor și îngreșămintelor de sinteză.*

**Cuvinte cheie:** atitudine, preferință, consumatori, producție ecologică

## **INTRODUCTION**

Iasi county has high possibilities to cultivate vegetables and in time there have appeared several traditional micro areas such as those around Tg. Frumos town or those from Lunca Prutului. In these localities, the pedoclimatic conditions, the professional knowledge and the existence of a good market (Iasi, Pașcani, Tg. Frumos, Huși and Hîrlău towns) are favorable factors for the practicing of the ecologic vegetable growing (4,5,6,7). To obtain an ecologic yield, the producers must be willing to make the vegetable ecologic yield, but there is also the consumer's demand for ecologic vegetable products. Related to this condition, the specialized literature (2,3), shows that it is extremely important to know the consumers' options towards the ecologic yield. In this context, the goal of this paper is to highlight the consumers' attitude and preferences towards the ecologic vegetable yield from Iași County.

Such studies are made at the level of some relatively large samples so that the answers might represent average values as close as possible to the theoretic

average for the entire population participating in the survey. In the making of such studies, the following phases are highly essential to obtain credible results: elaboration of questionnaire, organization of interview, establishing the sample, unfolding the interview, processing the statistic data and their interpretation (1,8,9).

## MATERIAL AND METHOD

In this study we used a questionnaire elaborated according to the norms stipulated in the specialized literature (1,9). The questionnaire comprises two sections: the first section contains 16 questions referring to the social-professional grouping of the interviewed people and the second one focuses on the consumers' attitudes and preferences.

For the field investigation we chose the towns of Iași and Tg. Frumos, as well as communes Belcești, Bosia, Focuri, Golăești and Răducăneni, localities having large surfaces and vegetable yields and a well known tradition (4,7). Respondents' answers were checked, validated and processed by specific methods using the SPSS programme (Statistical Package for the Social Sciences), variant 16 (8). Answers were graded on a five level scale from „I totally agree” up to „I totally disagree” (table 2).

## RESULTS AND DISCUSSIONS

The results obtained after the analysis of respondents' answers were grouped in two categories: (1) results related to the respondents' social-professional grouping (2) results related to the respondents' attitude and preferences.

(1) **Social-professional grouping** highlighted the respondents' structure in terms of: sex, residence (urban/rural), age, number of family members, level of education, family income, family structure, marital status a.o. Form all respondents, 46% are male persons and 54% are female persons. The women' percentage is slightly higher than men's due to the fact that women are probably more cooperative and interested in expressing their opinions.

A ratio of 2/3 of the interviewed people belongs to the urban population whereas 1/3 belongs to rural population; justification of these values is given by the fact that the urban population was more cooperative and willing to participate in the interview.

The classification by age shows a structure close to the normal values of population structure, the age groups from the middle of the interval, namely 26-40 and 41-65 years old, representing more than 70%.

As for the number of family members, most respondents belong to 1-3 member families (47.8%) and 3-6 member families (46.2%).

As for the education level of the interviewed people, this was very diverse. It is important to mention that 93.7% finished at least 10 grades or a vocational school what ensures a high percentage of correct answers.

The classification of respondents by income highlights that most of the respondents fall into the group of those with small and medium income: 59.8% having an income up to 800 lei and 74.7% having an income less than 1200 lei.

Knowing that income is an important factor in defining attitude and preferences and that ecologic products are more expensive than the usual ones, we expect our respondents to be less interested in the ecologic vegetables.

The question „do you have children?” generated answers from where results that almost 60% from the interviewed people have children. The answers of these respondents are highly important since this status involves special responsibilities towards children and their health.

Married people are also more responsible and involved in the social life and they represented almost 70% from the number of the individuals who participated in the interview and their answers are very significant for this study.

The pleasure to eat fresh vegetables emerges, as we expected, from the fact that 98.1% of respondents said they eat vegetables. Thus, we may say that answers come from people experienced in what vegetable consumption means, including the quality of products. Referring to the frequency of fresh vegetable consumption, 39.6% declared that they use the fresh vegetables every day, 24.1% 2-3 times a week and 30.4% 3-4 times a week. These answers show a high consumption of fresh vegetables. The proportion in which the ecologic vegetable consumption takes place was highlighted by marking an „x” on a 100 mm long axis, each millimeter representing the percentage in which the interviewed person declares himself/herself as a consumer of ecologic vegetables. The answers to this question are given in table 1.

*Table 1*

**Frequency of answer variants for the question**  
**„Are you an ecologic vegetable consumer and to what extent?”**

Analyzed interval	0	(0-10]	(10-20]	(20-30]	(30-40]	(40-50]	(50-60]	(60-70]	(70-80]	(80-90]	(90-100]
% respondents	5.4	7.0	4.7	6.3	7.6	10.4	7.3	9.2	11.7	18.0	12.3

From the answers to this question we may draw the conclusion that most interviewed people does not know well enough the concept of ecologic „vegetable growing”.

## (2) Results regarding the respondents' attitude and preferences

The questions addressed to the interviewed people, as well as their answers in terms of attitude and preferences for the ecological vegetable yield, are presented in table 2. The results of the field research show that vegetables are a very important segment in population's consumption and consumer's preferences are oriented more and more towards the quality of the vegetable products taking into account not only their size and commercial aspect but the guarantee that the product is clean without chemical and biologic polluting nutrients or products obtained by genetic engineering. Consumers want more and more a guarantee for the origin and quality of the respective products. The price element does not represent an argument in favor of giving up clean food and consumers (about 70%) accept the idea to buy ecologic products even if they are more expensive.

*Table 2*  
**Frequency of answers pointing out respondents'**  
**attitude and preferences**

No. crt.	Question on attitude and preferences	Respondents' answers				
		I totally agree (%)	I agree (%)	I am not sure (%)	I disagree (%)	I totally disagree (%)
0	1	2	3	4	5	6
1	Fresh vegetables are food products easy to procure	23.1	57.0	12.7	6.3	0.9
2	In my family, I buy vegetables for they are our favorite food products	27.5	58.5	10.8	2.5	0.6
3	I think that fresh vegetables are healthy for my family	62.3	36.1	1.6	-	-
4	Generally speaking, I am satisfied with the vegetable assortment existing on the market	17.1	55.4	16.8	10.1	0.6
5	When I buy vegetables I am interested in the place where they were grown (greenhouse, solariums, field)	19.6	46.8	18.0	13.9	1.6
6	I prefer the vegetables grown in the field to those grown in greenhouses	33.5	44.9	13.3	7.3	0.9
7	When I buy vegetables I am interested in their producer	18.0	34.5	22.8	20.6	4.1
8	Romanian vegetables are the best	43.7	43.0	10.8	2.5	-
9	The import vegetables do not taste like the Romanian ones	42.7	40.2	10.4	5.4	1.3
10	The import vegetables complete the market outside the season	22.2	60.4	13.9	2.5	0.9
11	Vegetables from the private producers are superior to those from the specialized farms	15.8	28.8	41.5	13.3	0.6
12	I buy vegetables only from the private producers	4.7	26.3	35.4	30.7	2.8
13	I do not buy import vegetables because I do not like them	7.0	24.7	35.4	31.3	1.6
14	I would enjoy a better presentation of the vegetable assortment	20.6	57.6	13.6	7.6	0.6
15	The price of vegetables depends on their quality	24.7	50.9	16.5	7.0	0.9
16	I appreciate the uniform aspect of vegetables when I buy them	20.9	54.1	9.8	13.9	1.3
17	I usually buy certain types, varieties and species of vegetables	10.8	59.8	17.1	11.4	0.9
18	Farmers should take into account the continuous change in consumers' demands and tastes	29.1	59.5	10.1	0.9	0.3
19	I am concerned by the pesticide (chemical product) level from vegetables	46.2	34.8	16.5	1.9	0.6

Table 2 (continuation)

0	1	2	3	4	5	6
20	I think that the pesticide (chemical product) level of import vegetables is high	38.6	31.0	27.8	2.5	-
21	I will never eat vegetables obtained by genetic engineering	20.6	22.8	42.4	11.7	2.5
22	I do not know the difference between the vegetable products obtained by using chemical products (fertilizers, substances to fight pests and diseases) and those obtained without these substances	5.1	19.6	30.4	28.8	16.1
23	I do not know the difference between the vegetable products obtained normally and those obtained by ecologic, organic or biologic means	4.7	22.8	31.6	28.8	12.0
24	For me there is no difference among the ecologic, organic or biologic products	7.0	16.8	31.6	33.2	11.4
25	Do you think that ecologic products are healthier?	41.1	42.4	13.3	3.2	-
26	I would buy ecologically obtained products	36.7	46.5	13.0	3.8	-
27	Would you buy ecologic products even if they are more expensive?	22.8	46.5	24.7	5.4	0.6
28	I think that it would be good to introduce certified ecologic products on the market	31.6	51.3	15.5	1.6	-
29	Do you think that ecologic products can be found in sufficient quantities on the market?	1.9	9.2	48.1	31.0	9.8
30	Do you think that the state should support the ecologic vegetable yield?	35.1	49.7	12.7	1.9	0.6
31	I do not buy ecologic products because they are too expensive	2.5	16.8	32.9	36.7	11.1
32	I do not buy ecologic products because, though believed to be healthier, they do not have an attractive aspect	1.3	8.5	28.2	48.4	13.6
33	If you were asked, would you support a firm (strong, severe) legislation on the ecologic growing of vegetables?	37.3	46.5	14.9	0.6	0.6

From our field research we notice that people know few things about the ecologic vegetable growing. However, more than 80% of consumers manifested their agreement for the ecologic growing of vegetables also saying that the state should support, by a firm legislation, the practicing of ecologic agriculture and the promotion of a large consumption of ecologic products as a component of „clean food for a healthy body”.

## CONCLUSIONS

1. Generally speaking, growing and consuming ecologic products is a matter of interest for consumers, regardless of their social-professional structure (sex, age, income, education etc).
2. Vegetables are a food product preferred by consumers that are aware of their importance.
3. In general, consumers have a favorable attitude towards the yield and consumption of ecologic products that must be promoted and supported by adequate agricultural policies.
4. Population prefers, to a large extent, the ecologic products (products without synthesis fertilizers and pesticides and genetically modified organisms) with a guaranteed origin and quality.

## REFERENCES

1. **Buia Anuța și colab., 2003** – *Statistică*, vol I. Presa Universitară Clujeană, Cluj-Napoca.
2. **Darnhofer Ika et al., 2005** – *Converting or not converting to organic farming in Austria. Farmer types and their rationale*. AHUM-A 367, Austria. Agriculture an Human Values 22.
3. **Munteanu N., Rominger O., 2001** – *Organic farming an increasing opportunity for romanien farmers*. Lucrări științifice U.A.M.V. Iași, seria Horticultură, vol 44.
4. **Munteanu N., 2008** – *Proiect PRODLECO - Raport final*. Contract cercetare nr. 31/2006.
5. **Munteanu N. și colab., 2008** – *Baze tehnologice ale legumiculturii ecologice*. Editura „Ion Ionescu de la Brad”, Iași.
6. **Munteanu N. și colab., 2008** – *Evaluarea potențialului pedoclimatic pentru legumicultura ecologică în județul Iași*. Lucrări științifice, seria Horticultură, anul LI, USAMV Iași.
7. **Munteanu N. și colab., 2008** – *Ghid de bune practici - Metode de conversie la producția legumicolă ecologică*. Editura „Ion Ionescu de la Brad”, Iași.
8. **Norusis J., Marija, 1993** – *SPSS for Windows: Base System User's Guide, Release 6.0*. Copyright by SPSS Inc.
9. **Oppenheim A.N., 1997** – *Questionnaire Design, Interviewing and Attitude Measurement*. Biddles Limited, Guildford and King's Lynn.