

BASIC CHARACTERISTICS OF THE ORGANIC AGRICULTURE MARKET

Jelena GOLIJAN¹, Aleksandar POPOVIĆ²

¹ PhD. Student, University of Belgrade, Faculty of Agriculture, Nemanjina 6, 11080 Belgrad, Serbia, email: helena.ilios@gmail.com,

² PhD. Student, Maize Research Institute "Zemun Polje", Slobodana Bajića 1, 11185 Belgrade, Serbia, email: dobropoljac@yahoo.com

Abstract

Considering the fact that the environment and natural resources face the consequences and challenges of the conventional agriculture, the importance of organic agriculture has been growing. The adverse effect of climate changes, contamination of soil and water as resources, are limiting factors that lead to the increase in cost price of organic products. Ever more complex process of the approach to the essential conditions necessary for the organisation of organic production through the provision or conversion of the land, access to water resources of satisfactory quality, availability of adequate organic fertilisers, results in high prices, quantitative limitation of organic product markets, the complexity of the certification processes and their protection. The value of the global organic food market in 2014 amounted to 80 billion US dollars, whereby USA, Germany, France and China were the leading countries. Australia is the country with the largest organic areas (17.2 million hectares). Approximately 2.3 million organic producers in the world manage 43.7 million hectares. The total organic areas increase at the average annual rate of change of 6.7%.

Keywords:

Organic production, organic product market, distribution channels

Introduction

Organic agriculture has been initiated as a response of man to environmental pollution, urbanisation and preservation of flora and fauna. Not only does the application of pesticides prevent crop losses by protection against pests and pathogens (Golijan and Elezović, 2015; Golijan, 2015), but also it has many adverse effects on the environment (Veličković and Golijan), and in particular on the market, because it leads to the increases in prices of agricultural products. In 2013, the total quantity of pesticide sales amounted to close to 360,000 tonnes. Spain (19.5%), France (18.7%), Italy (13.8%), Germany (12.3%) and Poland (6.2%) were the Member States in which the highest quantities of pesticides were sold and together they made up 70.5% of the EU-28's pesticide sales (Forti and Henrard, 2015). The very concept of organic production is made to protect the environment (Popović et al., 2016), i.e. existing resources, so it is technically applicable, socially acceptable and eventually economically sustainable. Hence, it represents an alternative to conventional production. The essential goals of this system are as follows: 1) increasing soil fertility, 2) minimising energy inputs, 3) reducing environmental risks and 4) maintenance of the achieved level of production. The International Federation of Organic Agriculture Movements (IFOAM) issued the first international guidelines and standards related to organic agriculture, which set a frame that provides measures applicable worldwide. Organic production is such a type of production that provides essential profit in addition to social and ecological benefits, hence the fundamental aim of business is to reach a maximum total result of an agricultural holding, provided that ecological optimum is achieved. In countries with successfully developed economy, where adverse effects of conventional agriculture are the most pronounced, sales of organic products have been

permanently growing and the turnover in the total global production is estimated to around 40 billion US dollars (Willer et al., 2010).

The objective of this study was to present economic factors and market trends of organic products at the global level using previous data. The idea was to observe the actual state of the market and the profitability of organic production, because the public is increasingly interested in this type of production, due to greater awareness of negative effects of conventional agriculture on environment and human health.

1. Method of work

Agricultural companies, holdings as well as farmers face many problems when they organise organic production, whereby economic profit that can be achieved by such type of agricultural production is the basic motif. According to previous studies, it may be concluded that awareness of people of the importance of the organic production system is a key factor for the increase of organic areas. Organic areas, food production and the state of organic product markets, as well as the distribution channels were the subject of this study. The desk research method was applied, while accessible statistical data were used to establish the state of the market, distribution and structure of organic production. These data were compared with literature data and in such a way, organic production and its characteristics in the market were analysed.

2. Results and Discussion

2.1. Organic production in the world

Due to available information on risks to human health and the need to preserve the environment, organic production has been having an increasing trend. The market and the demand for organic products have been permanently growing. Therefore, organic areas have been increasing. The consumption of organic food differs over both countries and regions due to different market and legal factors in certain countries. Institutional interventions in terms of establishing a legal foundation for the production and marketing of organic food, different forms of direct and indirect subsidies, independent control, certification and labelling, had a key role in the creation and development of the organic food market (Vehapi, 2014).

Sales of organic products in industrially developed countries amount to 1-2% of the total agricultural products in the markets. Organic food is sold in large supermarket chains as well as in small organic food stores. The international market is opened for organic products from all countries, especially developing countries and subtropical regions, whose fruits and vegetables have no competition on the European market, which represents an opportunity for agricultural development in undeveloped countries. The total organic areas increase at the average annual rate of change of 6.7%. The market research company Organic Monitor estimates that the global market for organic products in 2014 reached 80 billion US dollars, i.e. more than 60 billion euros (www.organicmonitor.com). The United States is the leading market with 27.1 billion euros, followed by Germany (7.9 billion euros), France (4.8 billion euros) and China (3.7 billion euros). The highest per capita spending was in Switzerland (221 euros) and Luxembourg (164 euros) (www.ifoam.bio/en/news). Based on previous data, 2.3 million organic producers were registered in 2014. As in past years, the countries with the greatest number of organic producers were India, Uganda and Mexico. According to the last report of the FIBL and IFOAM, the organic producers manage the area of 43.7 million hectares, which is the growth of almost 0.5 million hectares in comparison with the 2013 data. Willer et al. (2013)

reported that 16% out of 1.8 million producers worldwide in 2011 were in Europe. Over three quarters of organic producers are in Asia, Africa and Latin America (Tab. 1).

Table 1 World: Development of the numbers of producers by region 2013 to 2014

Region	2013 [no.]	2014 [no.]	Change in numbers	Change in %
Africa	572.498	593.050	+ 20.552	+ 3.6%
Asia	726.325	901.528	+ 175.203	+ 24.1%
Europe	334.170	339.824	+ 5.654	+ 1.7%
Latin America	320.148	387.184	+ 67.036	+ 20.9%
North America	16.393	16.660	+ 267	+ 1.6 %
Oceania	22.997	22.115	- 882	- 3.8%
Total	1.992.531	2.260.361	+ 267.830	+ 13.4%

Source: Lernoud and Willer, 2016.

Australia is the country with the largest organic agricultural area – 1.72 million hectares with 97% of that area used for grazing, followed by Argentina with 3.1 million hectares and the USA with 2.2 million hectares. A total of 40% of the global agricultural land is in Oceania (17.3 million hectares), followed by Europe (27%; 11.6 million hectares) and Latin America (15%; 6.8 million hectares) (press-release-world-2016-english.pdf). Mainly due to the increase of organic land in Australia, areas used for organic agriculture worldwide has increased by 6% or by almost 6 million hectares compared to 2013. (www.organic-world.net). The demand for organic products is concentrated in the markets of North America and Europe (making over 90% of the total sale). However, Japan is a very attractive and import-dependent market. By 2009, the American market has recorded a permanent growth, and then due to the economic crisis a decline of 5.1% happened and was followed by the market recovery during the succeeding year, which resulted in a growth rate of 9.4% in 2011. The comparison with the last decade data, organic land increased by four times (there were close to 0.53 million hectares in 1997). According to the predictions, by 2016 the annual rate of growth of the organic agricultural sector should reach a value of 11-12% (Vehapi, 2014).

Fish, meat and poultry represents the sector with the rapidest growth (13% in comparison to 2010), but they are least sold (Willer et al., 2013). According to this fact, the adoption of the system of organic production started with the sector of horticulture and dairy productions (sales of organic milk have been doubled since the 2006-2010 period). Certified areas with organic vegetable amount to 8% of the total areas used for growing vegetable crops, while areas with organic fruit production amount to only 3% (Vehapi, 2014).

The Asian market with a stable growth rate is very important, with Japan, as the largest Asian market, which presents alongside with EU and the USA the most important market for organic products. Japan is followed by Korea and India. In these countries, vegetable production ranks first, and together with rice production it presented 86% of the total organic production in 2011. An important feature of the Asian market is that the growth of national production of organic products lacks demands for such products, so import of these products have been increasing (Sheng et al., 2009). Agricultural land is mainly used for agricultural crops, with coffee, olive and cocoa as leading ones.

Retail sales of organic food and beverage reached a value of 80 billion dollars in 2014 (www.soilassociation.org). Although the economic crisis has led to stagnation and decline in some countries, organic food market has continued to grow and has increased by 6% in 2012. The Organic Market Report 2016 released by the Soil Association on February 23,

2015, reveals that the organic market continued steady growth of 4.9% in 2015 and sales of organic have continued to outperform the non-organic grocery market which decreased by 0.9% in the same period. Shoppers spent an extra £1.73 million a week on organic products in 2015, and the steady rise of the organic market experienced in the UK mirrors a global trend of growth and widening interest in the organic sector (www.soilassociation.org).

3. Organic market in Europe

Taking into account the global view, Europe is a forerunner in organic agriculture, since Germany, Austria and Switzerland are considered countries of the initial development of organic agriculture in Europe, because in these countries, Rudolf Steiner, Hans Müller and Hans Peter Rusch, initiators of organic and bio-dynamic farming used to work (Šiljković, 2002). The organic agricultural land, producers and markets of the greatest number of European countries show the trend of a steady growth and development. The positive development in Europe and the EU was due to high consumer demand, the development of private organic standards, legal protection and requirements for organic production, appropriate labelling as specified in the EU and national legislations, as well as policy and support measures. Out of the total global organic land, 27% are in Europe. In comparison with 2012, organic land has increased by 0.4 million hectares. The size of the European market in 2012 amounted to 24.3 billion euros, whereby 22.2 billion euros belonged to the EU countries (www.fibl.org). Organic agriculture in the EU has continued to show a significant growth and therefore organic land has been almost doubled in the last decade.

The organic food market in the EU countries increased by 24 billion euros (i.e. 7.4%) in 2014 (Tab. 2), while the corresponding value in Europe amounted to 26.2 billion euros (i.e. 7.6%). All EU member states have been having a positive growth since 20013/14, particularly Germany, whose market is the largest in Europe (increase by 4.8%). However, countries with highly developed markets, such as Norway (25%) and France (10%) have recorded a double-digit growth, while Sweden with the growth rate of 45% witnessed unprecedented growth in consumer demand (Meredith and Willer, 2016).

Table 2 Organic retail market trends in Europe by country group, 2014

Country group	Retail sales (million EUR)	Per capita consumption (EUR)	Growth 2013-2014
EU-28	23.963	47.4	7.4%
Europe	26.203	35.5	7.6%
Global	62.631	8.7	
EU-15	23.491	58	7.6%
EU-13	472.4	4	
CPC	4	0.1	
EFTA	2.099.7	154	10.7%
Other European countries	134.5	0.9	

Source: Meredith, Willer, 2016

In 2014, there were 260,000 organic producers in the EU and 340.000 in Europe (Tab. 3), with the greatest number in Italy (49.000) and Turkey (71.000) (Meredith and Willer, 2016). Although, the number of producers in 2014 did not significantly grow, it is important to stress that the past decade has seen the number of producers grow by even 81% (in Europe).

Table 3 Organic producers, processors, and importers in Europe by country group, 2014

Country group	Producers	Growth 2013-2014	Processors	Growth 2013-2014	Importers	Growth 2013-2014
EU-28	257.525	-0.2%	49.968	19.0%	1.650	17.3%
Europe	339.824	1.7%	50.774	18.6%	1.847	15.7%
Global	2.260.361	13.4%	61.977	20.9%	2.190	
EU-15	194.979	0.3%	47.636	19.4%	1.382	14.1%
EU-13	62.546	-1.7%	2.332	11.8%	268	36.7%
CPC	73.375	9.8%	190	-11.6%	70	-5.4%
EFTA	8.500	-3.7%	516	-1.1%	67	-9.5%
Other European countries	424	1.2%	100	-2.9%	60	46.3%

Source: Meredith, Willer, 2016

IFOAM EU *Organic Vision* for the period up to 2030 was initiated in November 2012, when IFOAM EU celebrated 10 years of commitment to sustainable food and agriculture in Brussels. This vision attempts to build on the foundations of organic priorities for the next two decades in order to facilitate coping with new challenges of organic agriculture and market development (Meredith and Willer, 2014). In the past 15 years, the majority of the European countries have launched an organic action plan or a similar support programme.

Switzerland and the EU are the top ranking countries for market shares and per capita consumption worldwide. Considering livestock production, beef, milk and sheep production has the greatest share. Germany as the greatest producer of organic milk is followed by Denmark, France and Austria (Meredith and Willer, 2014).

In the United Kingdom, where the retail sales had been decreasing in four consecutive years by 1.5%, and only started to grow in 2013. Production of organic eggs is one of the success stories within the total retail market, with market shares of even 20% in Switzerland and 10% in the majority of other countries (tab. 4). Organic vegetables have the highest market share after eggs representing between 8% and 14% of the total sales value of all vegetables sold in Switzerland, Austria and Germany.

Table 4 Shares of organic product groups for total market in selected countries, 2014

Product group	Austria	Belgium	Finland	France (2013)	Germany	Norway	Switzerland
Beverages		0.9%	0.6%	3.0 %	1.7%	0.1%	2.7 %
Bread and bakery products		1.7%	1.2 %	2.5 %	7.1 (bread)	1.0%	4.6%
Cheese	8.5%	1.7%	0.9%	1.2%	3.6%	0.5%	6.0 %
Eggs	17.2%	11.2%	12%	22.1%	16.7%	7.5%	22.7 %
Fruit	10.7%	3.5%		4.3%	6.7%	1.7%	10.1%
Meat and meat products	3.5%	1.3%	0.6%	1.6%	2.1%	0.3%	4.8%
Milk	15.7%	3.0%	3.2%	10.8%	8.1%	4.0%	18.9%
Milk and dairy products		2.1%		3.2%	8.6%	4.8%	11.0%
Vegetables	12.6%	5.4%	3.2%	4.0%	8.6%	3.6%	14.6%

Source: Lernoud and Willer, 2016.

4. Distribution channels of organic products

Until 1990, there were two distribution channels of organic products in the USA: health foods stores and direct-to-consumer markets. Organic food supermarkets occurred in 1990 and 10 years later, they became a very important type of distribution. New products introduced in 1999 were beverages (Dimitri and Greene, 2002), and then in 2000 over 800 new organic products were introduced. In recent years, leading distribution channels of organic products in the USA have been supermarkets, specialised health foods stores and direct sales, while the small part of products have been exported. Richter (2009) reported that the organic products market had a permanent annual growth rate of 20% until 2007, and then it declined to even 5% in 2009. In the subsequent year of 2010, the market recovered and the growth rate amounted to 7.7%.

In the USA, fresh products, beverages, dairy products, cereals, baby food, packaged foods and dry-frozen foods, soups and deserts are the top-selling organic categories (Dimitri and Greene, 2002; Hofmeister, 2005). Fresh fruit, vegetables and dairy products were the best-selling organic products in 2010.

In 2000, 48% of all organic products were sold in health and natural foods stores, accounting for 1% of all food retailers in the USA. However, 49% of all organic products were sold in conventional supermarkets, accounting for 99% of all food stores (Dimitri and Greene, 2002).

In contrast to the USA, in the EU countries, organic products are mainly sold through the conventional distribution channels (in the supermarket chains). However, beside this type of stores, sales are done in specialised stores (Tab.5) (Vaclovic, 2009).

Table 5 Retail channels for organic products: health food shops, specialised organic shops ()

CEE	Market share	No. of outlets	Range width	Range focus
Bulgaria	10 %	2	300	Processed packaged p./Dairy /Fresh
Croatia	20 %	20	200-500	Processed packaged p./Vegetables
Czech Republic	22.5 %	500 (10)	300 (1000)	Processed packaged p./Nuts, dried, fruits, cereals, legumes/Drinks
Hungary	34 %	80 (10)	wide	Bakery/Fresh/Cereals, seeds
Poland	73 %	(250)	(500-2000)	Cereals/Vegetables and fruits/Meat
Romania	5 %	100 (2)		Soy products/Herbs/Honey(Dairy/Bread)
Slovakia	40 %	56	30	Cereals/Confectionary/Milling p., tea
Slovenia	15 %	20	2500	Fresh vegetables and fruits/Basic foods/Processed plant products

Source: Vaclovic, 2009.

Lyons (2007) pointed out to the fact that sales of organic products in traditional distribution channels occurred when conventional agriculture was converted into organic one, which was followed by the organic food production. A steady increase of traditional distribution channels can be observed in the sales of organic products. Retail chains have the largest market share, hence they are considered an essential driver of future development of the European market (Richter, 2005; 2009). The lack of homogeneity is an important characteristic of the EU market, which is pronounced due to various developments of national markets that is a result of structural and cultural differences among countries and differences in national income (Wier and Calverley, 2002). Due to this fact, the

Scandinavian countries, as well as the countries of southern and eastern Europe have a significant development of the organic products market. Differences in the consumption of organic products may be explained not only by means of consumer preferences, but also by market barriers that prevent meeting the potential demand for these products, such as confusing labelling of products, insufficient supply and inefficient distribution channels due to which prices of products become too high (Brčić-Stipčević et al., 2011).

According to the analysis of the growth, there are three types of markets (Richter, 2005): 1) mature, 2) growing and 3) emerging markets. Countries such as UK, France, Switzerland, Sweden and Spain have reached the limit or temporary saturation in sales of organic products. In relation to countries such as Italy, the Netherlands, Denmark and Norway, it is observable that their markets overcome the first phase of expansion. However, these countries continue to achieve a significant annual growth. Considering that stated markets have a very high demand, the emphasis should be placed on expanding and deepening of the range of products. Markets of new EU member states and their eastern neighbours have emerging markets, which have shown the growth only in the last few years. This group includes the Greek, Polish, Spanish, Slovak, Croatian, Romanian and Czech markets. For instance, the Czech and Polish markets have most rapidly developed and their values increased by four to five times in the 2006-2010 period. Of all European countries, Croatia had the highest rate of growth of organic food market in 2011 (20%). An annual consumption of organic food per capita is a reliable parameter of the market development. According to this parameter, Switzerland is considered the European and global leader and is followed by Denmark and Luxembourg.

Markets in Austria, Denmark, Germany, Switzerland, UK, Finland, Norway and Sweden represent saturated markets of organic products, with the growth rates of 5% or even less, and decreasing sales volume (Brčić-Stipčević et al., 2011). In these countries, supermarkets have an important role in distribution channels, while a small number of retailers and distributors of organic products prevail in the market. A notable feature of this type of market is consumers' concern about environmental conservation and animal welfare, which are important postulates underlying the concept of organic agriculture (Padel and Midmore, 2005). The market share of traditional retailers in Germany, Austria, UK, Switzerland, Denmark, Finland and Norway amounts to 53 %, 65%, 75%, 76%, 80%, 84% and 85%, respectively.

The growing type of market is characteristic for Italy, the Netherlands, Portugal and France with the growth rate ranging from 5% to 15% (Richter, 2005). Markets in these countries grow permanently. Lesser consumers' concern about environmental conservation and animal welfare is characteristic for this type of market. Direct sales and stores specialised in sales of organic food are the basic methods of the distribution of organic products. Vaclavik (2009) reported that the market share of organic food stores amounted to 55%, 52%, 43% and 37% in Italy, Portugal, the Netherlands and France, respectively. Stores specialised in organic food sales are a dominant channel of organic products distribution, but according to the comparison with the supermarket chains, it may be concluded that their number stagnates (Brčić-Stipčević et al., 2011).

Markets in the majority states in eastern Europe, then in Greece, Poland, Spain and Slovakia belong to the third type of markets – emerging or developing markets (Vehapi, 2014). This type of market will grow rapidly, but the lack of organised structures is their negative feature, although distribution channels are in the initial stage of growth. The level of development varies over countries (e.g. in Slovakia there are 56 stores specialised in organic food sales offering 30 types of organic products, while there are 250 stores in Poland where 500-2000 types of organic products are sold).

Conclusions

Organic agriculture, based on the concept of sustainable development, provides proper utilisation of resources, environmental protection, conservation of biodiversity and more productive agricultural production. Methods of organic agriculture that have been applied for decades in many countries worldwide have pointed out to the excellent result of this system of production, both in terms of protection of biodiversity, soil and water against pesticides and in terms of production of food safe for human health. Markets and demands for organic products in the world have been constantly increasing. Previous data about organic food in the European and the world market show that the organic sector, particularly of the European countries is very well developed. In the past decade, the number of organic producers in Europe has increased by 81%, the area has increased by three million hectares, and the total European organic food market has increased by 7.6% in comparison to the market in 2013. Organic agriculture is most successful in the EU countries mainly due to the support of the Common Agricultural Policy, i.e. subsidies in the organic production sector, thus providing more intensive growth of this sector.

References

1. Brčić-Stipčević, V., Petljak, K. & Guszak, I. (2011). Kanali distribucije i obilježja tržišta ekoloških prehrambenih proizvoda. In *Proceedings of XI. international scientific conference "Business Logistics in Modern Management"*. University of Osijek, Faculty of Economics and Business, 111-125.
2. Dimitri, C., Greene, C. (2002). Recent growth patterns in the US organic food market. *USDA Agricultural Research Service, Resource Economics Division, Information bulletin, (777)*.
3. Forti, R., Henrard, M. (eds.) (2015). *Agriculture, forestry and fishery statistics, 2015 edition*. Luxembourg, EU.
4. Golijan, J., Elezović, I. (2015): Ispitivanje fitotoksičnosti i efikasnosti acetohlorida sa dihlormidom u kukuruzu. *Zaštita bilja*, 66 (1), 38-44.
5. Golijan, J. (2015). Evaluation of phytotoxicity and efficiency of dicamba in suppression of broadleaf weed in the corn. *Contemporary Agriculture*, 64 (3-4), 206-212.
6. Hofmeister, M. (2005). *International Organic Market and Retailer Study*. Natural Expo East Washington.
7. Lernoud and Willer (Eds.) (2016). *The world of organic agriculture. Statistics & Emerging Trends, 2016*. Research Institute of Organic Agriculture (FiBL), Frick, and IFOAM-Organic International, Bonn.
8. Lyons, K. (2007). Supermarkets as organic retailers: Impacts for the Australian organic sector. *Supermarkets and agri-food supply chains: transformations in the production and consumption of foods*, 154-172.
9. Meredith, S., Willer, H. (2014). *Organic in Europe-prospects and developments*. IFOAM EU Group, Brussels.
10. Meredith, S., Willer, H. (2016). *Organic in Europe. Prospects and developments 2016*. IFOAM EU Group, Brussels.
11. Padel, S., Midmore, P. (2005). „The development of the European market for organic products: insights from a Delphi study“, *British Food Journal*, 107 (8), 626-647.
12. Popović, A., Golijan, J., Babić, V., Kravić, N., Sečanski, M. & Delić, N. (2016). Organic farming as a factor for biodiversity conservation. In *proceedings of International scientific conference on Ecological crisis: Technogenesis and climate change*. Beograd, 21-23.april, 2016.
13. Richter, T. (2005): *Organic in the supermarkets–global trends*.

14. Richter, T. (2009): Trends in Organic Retailing 2008. *Organic Eprints* <http://orgprints.org/15482/02/richter-2009-trends.pdf> (site accessed 03.08. 2011.).
15. Schmid, O., Lampkin, N., Dabbert, S., Zanolli, R., Michelsen, J. & González, V., eds. 2008. (2008): European Action Plan of Organic Food and Farming – Final synthesis report of the ORGAP-Project. *Frick: Research Institute of Organic Agriculture (FiBL)*.
16. Schaack, D., Lernoud, J., Padel, S. & Willer, H. (2013): The Organic Market in Europe 2011-Nine Percent Increase Compared with 2010. *The World of Organic Agriculture-Statistics and Emerging Trends 2013*, 224-229.
17. Sheng, J., Shen, L., Qiao, Y., Yu, M., & Fan, B. (2009). Market trends and accreditation systems for organic food in China. *Trends in Food Science & Technology*, 20(9), 396-401.
18. Vaclavik, T. (2009). Specialised organic retail report Europe 2008.
19. Vehapi, S. Z. (2014). Marketing strategija proizvođača organske hrane. *Doktorska disertacija*. Ekonomski fakultet, Univerzitet u Nišu, Niš, Srbija.
20. Veličković, M., Golijan, J. (2015). Koncept integralne zaštite jabuke i kruške. *Journal of Agricultural sciences*, 60 (4), 381-393.
21. Šiljković (2002). Organska poljoprivreda Srednje Europe. *Geoadria*, 7/2, 75-93.
22. Willer, H., Yussefi, M. & Sorensen, N. (2010): *The world of organic agriculture: statistics and emerging trends 2008*. Earthscan.
23. Willer, H., Julia, L., Beate, H. & Amarjit, S. (2013): Presentations from the session "The World of Organic Agriculture-Statistics and Emerging Trends 2013" at the BioFach Congress 2013.
24. Willer, H., Lernoud, J., 2013. Europe: Current statistics. In: Willer, H., Lernoud, J., and Kilcher, L., eds. 2013. *World of Organic Agriculture: Statistics and Emerging Trends 2013*. Frick/Bonn: Research Institute of Organic Agriculture (FiBL)/International Federation of Organic Agriculture Movements (IFOAM), 215-223.
25. Willer, H., Schaack, D. (2013). Intermediate report on compilation of key organic market data= Deliverable 4.2 of the OrganicDataNetwork project.
26. Wier, M., Calverley C. (2002). „Market potential for organic foods in Europe“, *British Food Journal*, 104 (1), 45-62.

Internet sources:

27. <http://www.fibl.org/en/themes/organic-farming-statistics.html> (site accessed: 3.3.2016.)
28. <http://ec.europa.eu/eurostat/documents> (site accessed: 10.5.2016.)
29. www.ifoam.bio/en/news (site accessed: 28.2.2016.)
30. [press-release-world-2016-english.pdf](#) (site accessed: 8.4.2016.)
31. www.soilassociation.org (site accessed: 2.6.2016.)
32. www.fibl.org (site accessed: 4.3.2016.)
33. www.organic-world.net (site accessed: 10.4.2016.)
34. www.organicmonitor.com (site accessed: 3.6.2016.)