UDK 637.146.2:347.772]:631.155(497.16)

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PROTECTION OF TRADITIONAL DAIRY PRODUCTS IN MONTENEGRO

ABSTRACT

With the adoption of the Protected Designation of Origin, Protected Geographical Indication and Traditional Speciality Guaranteed laws (Official Gazette of Montenegro 2011), Montenegro has fully complied with the criteria for protection of agricultural products and foodstuffs according to European Union regulations. In this paper, the protection of agricultural products, and data on the number and type of products protected in European countries, as well as regulations for the protection of agricultural products in Montenegro, are presented. Given that most of the agricultural products that are protected by the aforementioned regulations are dairy products, especially cheeses, the importance and characteristics of traditional cheeses are shown. Also, Montenegrin traditional dairy products that should be protected in accordance with the laws are proposed and briefly described.

Keywords: traditional dairy products, protection, protected designation of origin, protected geographical indication, cheese, skorup

WHAT ARE TRADITIONAL PRODUCTS?

The predominant trends of globalisation of agro-industrial markets, growth in international trade, the proliferation of multinational companies with standardised products and the gradual homogenisation of supply have resulted in consumers increasingly refusing to buy uniform products. Consumers show a growing interest in traditional products that are closely linked to a specific place of origin, and show a greater propensity to purchase food or agro-industrial products that are deeply rooted in various cultures and traditions, and retain the quality of the past. Furthermore, it is important to note that consumers are willing to pay a premium to consume such products (Van de Kop et al. 2006). For producers and small- and medium-sized companies that operate in the agroindustrial sector, this new trend signifies a major opportunity, as it frees them from having to compete on price with generic and standardised products. Moreover, it rewards them for doing well what they, to a certain extent, have always been doing – using age-old methods to produce traditional products that are firmly rooted in a region and have their own special properties (UNIDO 2010).

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But what are traditional products? The word "tradition" comes from the Latin word "traditio", which means transmission of knowledge, beliefs, customs, habits and modes of cultural values from one generation to another, and one epoch to another, in oral or written form, and through education. It can also mean an established way of thinking through multiple generations, and fixed habits – work and otherwise – that have been in place for a long period (Vujaklija 1996).

Based on the mentioned definitions, traditional products are products that originate from a particular geographic area. They were incurred by transferring knowledge, beliefs, customs, habits and modes of cultural value. Also, they can be tangible or intangible, spiritual or technical knowledge and achievements, values and modes of behaviour. Traditional products are an essential element of the cultural heritage of each country, region or city. These are products which determine the micro or macro identification of a geographic area.

PROTECTION OF TRADITIONAL PRODUCTS IN EUROPE

The first officially protected traditional products of regional origin emerged as early as 1666. In that year, the parliament of Toulouse declared that only the inhabitants of the village of Roquefort had the exclusive right to produce cheese under the name "Roquefort" (Cambra Fierro and Villafuerte Martín 2009 as cited in UNIDO 2010). More recently, France became the first country in the world to establish a national system to protect and ensure the quality of traditional products of regional origin, especially wine. The first law concerning such products was passed in 1919. There are many food and non-food products in Europe that are so famous that their names are directly associated with the state, region or place of origin of the product. Some such well-known non-food products are: lace (Belgium), wooden clogs (Netherlands), and the flamenco dance (Spain), and foods such as: baguettes (France), feta cheese (Greece), pizza (Italy), whiskey (Scotland), chocolate (Switzerland), etc. Most of them are protected.

There are three programs in the European Union that promote and protect the quality of agricultural products and foodstuffs. The three programs, defined on the basis of Council Regulation (EC), No 510/2006, are:

- Protected Designation of Origin (PDO),
- Protected Geographical Indication (PGI),
- Traditional Speciality Guaranteed (TSG).

Protected Designation of Origin (PDO)

Protected Designation of Origin means that the name of a region, a specific place or, in exceptional cases, a country, is used to describe an agricultural product or a foodstuff that originates in a specific region, place or country. The qualities or characteristics of such products are deemed exclusively due to a particular geographical environment with its inherent natural and human factors.

Also, the production, processing and preparation of these products takes place in the defined geographical area.

According to this law, these agricultural and food products are produced, processed and prepared in a given geographical area with a distinctive "knowhow".



Figure 1. Protected Designation of Origin label.

Protected Geographical Indication (PGI)

Protected Geographical Indication means the name of a region, a specific place or, in exceptional cases, a country, is used to describe an agricultural product or a foodstuff originating in that specific region, place or country. These products possess specific qualities, reputations or other characteristics attributable to that geographical origin. Also, the production and/or processing and/or preparation of these products takes place in the defined geographical area.

This program includes agricultural and food products that are closely related to a specific geographic area, and where at least one of the stages of production, processing or preparation takes place in that geographical area.



Figure 2. Protected Geographical Indication label.

Traditional Speciality Guaranteed (TSG)

Traditional Speciality Guaranteed is a trademark for agricultural products or foodstuffs that have certain features or sets of features, setting them clearly apart from other similar products or foodstuffs belonging to the same category. The product or foodstuff must be manufactured using traditional ingredients or must have a characteristic traditional composition, production process, or processing reflecting a traditional type of manufacturing or processing. The product does not have to be manufactured in a specific geographically delimited area; it is sufficient that it be traditional and different from other similar products.



Figure 3. Traditional Speciality Guaranteed label.

These programs of the European Union encourage diverse agricultural production, protect product names from misuse and imitation and help consumers by giving them information regarding specific products. Protected Designation of Origin and Protected Geographical Indication are a specific type of intellectual property. These products' reputations for quality and authenticity are closely related to their geographical origin. Designation of Origin is very important in the European Union, given the rich history of local agricultural production, as well as the widely known products that are closely linked to their places of origin. These programs convey a message to potential buyers that the product is produced in a particular area and has certain desirable features that can only be found in that particular place (Tasić 2012). In the countries of the European Union in 2008, there were 764 agricultural products that were protected by the PDO, PGI or TSG programs. Most of the protected products were fruits, vegetables and grains (172), and what is very interesting and encouraging for cheese producers, is that 163 types of cheese are protected (see Figure 4).

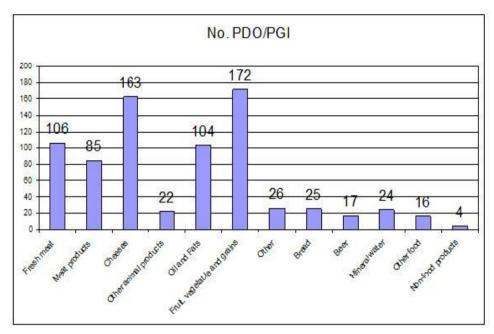


Figure 4. List of protected agricultural products in EU countries.

Nowadays, the European Commission Agriculture and Rural Development database lists 1000 protected products. More than half of them are protected as PDO (505), 465 products are PGI and 30 are TSG protected (see Figure 5).

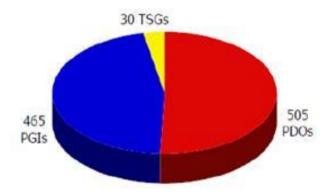


Figure 5. Ratio of PDO, PGI and TSG protected agricultural products.

In 2010, Italy had the highest number of protected agricultural products (206), followed by France (170), Spain (135) and Portugal (116) (see Figure 6).

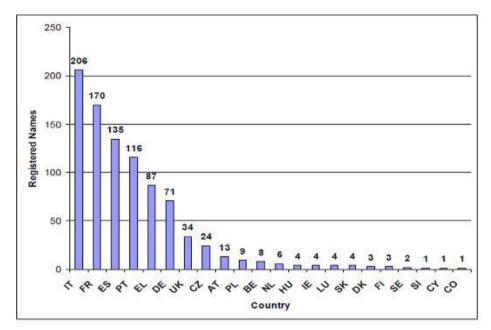


Figure 6. Number of protected agricultural products in EU countries.

PROTECTION OF TRADITIONAL PRODUCTS IN MONTENEGRO

New laws on Protected Designation of Origin, Protected Geographical Indication and Traditional Speciality Guaranteed were released and began to be implemented in Montenegro in 2011. Unlike the previous laws, the new legislation is completely in accordance with EU regulations:

- •Council Regulation (EC) no. 510/2006: the protection of geographical indications and designations of origin for agricultural products and foodstuffs
- \bullet Commission Regulation (EC) no. 1898/2006: detailed rules for the implementation of Council Regulation (EC) no. 510/2006
- •Council Regulation (EC) no. 509/2006: agricultural products and foodstuffs as traditional specialties guaranteed
- •Commission Regulation (EC) no. 1216/2007: detailed rules for the implementation of Council Regulation (EC) no. 509/2006

The law stipulates that products can be protected in three ways, then it defines how to apply for protection of the product, the required documents for the application, the procedure for filing and resolving requests, content of product specifications, the precise conditions that must be met to use the label, the importance of the label, etc.

Considering that Montenegrian law fully agrees with the EU regulations, it is possible to protect a traditional agricultural products in three ways:

•"ZAŠTIĆENA OZNAKA PORIJEKLA", (ZOP)

(Protected Designation of Origin, PDO)

•"ZAŠTIĆENA GEOGRAFSKA OZNAKA", (ZGO)

(Protected Geographical Indication, PGI)

•"GARANTOVANO TRADICIONALNI SPECIJALITET", (GTS)

(Traditional Speciality Guaranteed, TSG)

These types of protection comply with the forms of protection in the EU regulations, as described above, so there is no need to re-describe them.

Often, skeptical or insufficiently informed people doubt the importance and legitimacy of traditional products. Practice has shown that an effective system of product protection through national legislation provides:

- better trade between countries and integration of traditional products in international trade,
- protection of their own producers and rural development in terms of the introduction of different models of production,
- active involvement of all participants in the distribution chain (farmer-seller-consumer), and
- protection of consumers, who receive full information about the product with the guarantee of quality and authenticity.

Once a product has been registered according to EU regulations, that means it is protected in all EU countries, that it is a brand name that is protected from misuse (Lucatelli 2000).

TRADITIONAL DAIRY PRODUCTS

Today, thanks to the industrial revolution, there are hundreds of different types of dairy products in the world. For all of these products it is a common feature that they are created directly or through modification of traditional products (Lukač 1991). Barjolle and Sylvander (2000) stated that from a total of 570 agricultural products registered as PDO, PGI and TSG, the European Commission has protected 138 cheeses. From Figure 4 it can be seen that the number of protected cheeses in 2008 was 163. This is proof that cheese occupies one of the most important places according to production quantities, production distribution and presence on national plates.

Protection of traditional cheeses for some countries is, in a way, protection of their cultural identity, particularly for specific regions or areas. France, Italy, Greece and Spain protect most of their native cheeses. It is well known that Spain, through the protection of Manchego cheese, actually protects an autochtonous breed of sheep in order to preserve genetic diversity. Also, despite strong competition from the Danish, German and French brine cheeses, Greek feta, thanks to the label of origin (PDO), is very successful in the world market (Samaržija and Antunac 2002).

CHARACTERISTICS OF TRADITIONAL CHEESES

For all traditional cheeses, common characteristics include production in a limited geographical area, and the majority of cheeses being produced from raw milk.

The authenticity of a certain type of cheese is the result of actions of a large number of factors, such as the geographic features of the area in which they are produced, climate, altitude, way of animal feeding, soil and water quality, botanical composition of natural meadows and pastures, races and breeds of dairy cattle, as well as traditional habits and customs of the local population (Lukač 1989 cited in Prpić et al. 2003). Taste, smell and texture of these cheeses are significantly different from cheeses made from pasteurised milk, and their authenticity, which sets them apart from other cheeses of the same type, is based on the characteristics and diversity of the natural microflora of the milk from which the cheese is made, primarily lactic acid bacteria (Radulović et al. 2008, Mijačević and Bulajić 2007). Natural microflora influence the physico-chemical and microbiological quality of the milk and cause faster ripening and other special features related to the conditions of the areas in which they are produced (Monnet et al. 2000). In addition, autochtonous cheeses are part of traditions such as songs, folk dances and national costumes. Since cheese production is based on family tradition that is passed from generation to generation, cheeses are an indispensable part of the history and material treasure of each nation.

The market has differentiated the most important types of cheeses that are now produced in large industrial plants, and whose production still dominates. Industrial production of cheese has led to the loss of specificity in the production of certain types of cheeses, and thus to a loss of the "original" sensory characteristics. Lately, consumers are turning their backs on industrial products and are increasingly looking for products with a specific taste and smell. Food with Protected Designation of Origin can fulfil their requests. Fortunately, handcrafted cheese production is maintained in many areas, and thus the traditional technology of cheese production is preserved. The small amounts of handmade cheeses produced leads to these cheeses have a higher price in the market compared to the price of the mass industrial produced cheeses, but with the higher price comes higher quality.

Besides all these good qualities, traditional production of cheese has its negative side. The biggest problem in this industry is poor hygienic conditions of milk production and processing, which can cause poor microbiological quality and the presence of undesirable microorganisms, resulting in the cheese spoiling. The next problem in the production of traditional cheeses is that production processes vary from farm to farm. Those unstandardised technologies are the reason that traditional cheeses usually have no uniform quality, which is detrimental to their placement on the market (Sarić et al. 2007).

As noted above, traditional cheeses are mainly produced from raw milk, and their taste and texture vary significantly from cheeses made from pasteurized milk. Differences arise due to changes in the partial denaturation of α -lactalbumin and β -lactoglobulin and their interaction with casein denaturation, destruction of enzymes and thermolabile membranes of natural microbial populations that occur by thermal treatment of milk (Bachmann at al. 1996).

Also, cheese made from raw milk has a shorter ripening period, and a different texture and stronger flavour. The texture and taste of authentic cheeses are the result of an extremely complex system of biochemical reactions caused by the joint action of known and unknown populations of bacteria, enzymes, milk and curd, as well as secondary microbial populations during ripening of the cheese (Lukač Havranek et al. 2000). Gaiaschi et al. (2000) believe that proteolysis and lipolysis, as a consequence of activities of autochthonous microbial population on taste and texture of the cheese, are the most important objective parameters to identify origins of traditional cheeses produced from raw milk. In most cases, the autochthonous microbial population consists of heterogeneous types of lactic acid bacteria, and the dominance of a certain type is determined by the type of milk. Because of these facts, we can talk about the authenticity and specificity of a certain type of cheese according to how it differs from the same kind of cheese from other geographic regions.

Estaper et al. 1999 (cited in Moračanin et al. 2012) consider that the heat treatment of raw milk and adding commercial cultures causes a complete loss of the original taste, aroma, and texture of cheese, resulting in a complete loss of the cheeses authenticity.

CHARACTERISTICS OF THE MONTENEGRIAN DAIRY SECTOR

According to MONSTAT (2011), there are approximately 90,000 bovine animals of various categories, of which approximately 65,000 are dairy cattle. The number of sheep is 210,000 and goats 50,000. The estimated quantity of produced milk is 202 million litres, of which 190 million litres is cow milk, 9 million litres is sheep milk and the rest is goat milk. The dairy sector is characterised by the fact that milk production is based on private farms with a relatively small number of dairy cattle (4–5 on average). Also, there is a high proportion (28%) of milk production in Gross Domestic Product in primary agriculture (Mirecki and Marković 2004). The number of registered milk processing facilities is 20, but most of them have a small daily processing capacity – up to 1000 l/day. It is indicative that only 15–20% of the produced milk is processed in dairy facilities, and that most of the milk produced is used directly on farms, for farmers' consumption or the production of traditional dairy products for the market – first of all cheeses.

The importance of milk production in Montenegro is best seen in Figure 7, which shows that milk production, in terms of quantity and income, is at first place, compared to other agricultural products.

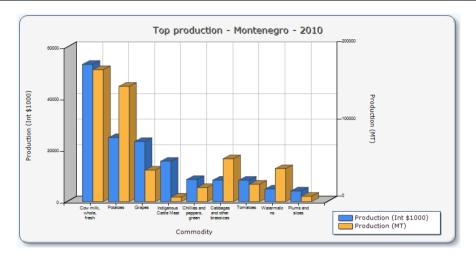


Figure 7. Production of agricultural products in Montenegro in 2010 (fao.org).

TRADITIONAL (AUTOCHTHONOUS) DAIRY PRODUCTS

Traditional dairy products in Montenegro can be divided into three main groups: cheeses, skorup (kaymak) and fermented milks. Montenegrin traditional cheeses consist of white brine cheeses, pasta filata cheeses, hard/semi-hard cheeses and low-fat cheeses (Figure 8). According to the distribution and quantity of production, the most dominant are white brine cheeses. These cheeses are produced in the northern and northeastern areas as well as in the far south of Montenegro.

The traditional technology is not standardised and varies from manufacturer to manufacturer. White brine cheeses often bear the name of the geographical area, town or village where they are mostly produced (Bojanić-Rašović et al. 2010). The most famous white brine cheese in Montenegro is Pljevlja cheese. Pasta filata cheese is produced in the central part of Montenegro. In literature, this cheese appears under the name of "soft", but it is better known as lisnati (leafy) cheese. In the southern, coastal region, hard and semi-soft cheeses are produced, and the best known is Njeguški cheese. The low-fat cheese prljo is produced in the northwestern, mountainous region of Montenegro, in the area where skorup is also produced. It is interesting that skorup is produced from the same quantity of milk as prljo cheese, so their technologies are very compatible. Skorup is a full-fat dairy product which cannot be classified as either cheese or butter, but has the features of cheese and butter put together. Fermented milk products are produced mainly in the mountainous areas of northern Montenegro, and the most notable are: Jardum, Gruševina and Kisjelo mlijeko (Dozet et al. 1996).



Figure 8. Traditional dairy products in Montenegro.

Based on the quality, produced quantities, the market demand and popularity among the consumers, Montenegrin traditional dairy products that can be proposed for the Protected Designation of Origin or Protected Geographical Indication are: Pljevaljski, Njeguški and lisnati cheese, as well as skorup.

Pljevaljski cheese

The raw material for the production of Pljevlja cheese is sheep's milk, but in recent times it is increasingly produced from cow's milk, or mixed cow and sheep's milk. The shape of the cheese slices can be triangular or quadratic, about 3 cm high. Ripening takes place in anaerobic conditions by dipping the cheese in brine or a specially prepared whey. The cheese contains about 50% fat in dry matter. It has a mild-sour milky and slightly salty taste. The cheese is white and does not have a crust (Mirecki and Adžić 2006).



Figure 9. Pljevaljski cheese.

Njeguški cheese

Njeguški cheese is one of the most famous Montenegrin traditional products. It belongs to a group of fat, hard cheeses. With its spicy taste and pleasant smell it is not inferior to the most reputable foreign cheeses. Originally, the cheese was made from sheep's milk, but cow and goat's milk, and a mixture of the above mentioned milks in different proportions are increasingly used. The cheese is produced in moulds with a diameter of 15–18 cm, and a height of about 5 cm. The ripening process is carried out on shelves under controlled temperature and humidity conditions, and takes at least three weeks. After this period, the cheese may be consumed or can be furthered matured submerged in olive oil (Mirecki 1999).



Figure 10. Njeguški cheese.

Lisnati cheese

Lisnati cheese is characterised by its distinctive soft, elastic and smooth structure, mild-sour odour and porcelain white colour. Also, it is recognisable from its very unusual form of slices that are extremely thin, like sheets of paper or leaves, and this is where it gets its name: "lisnati" = "leafy". The production technology of this cheese is specific and unique and does not match the technology of any other cheese in Montenegro. The unique technology is a result of a special way of preparing the raw milk for cheese production, and a specific way of coagulation and curd processing. Curd should be pressed and folded very often. Thanks to heavy pressure and the special way of curd folding, slices of lisnati cheese are very thin (Mirecki at al. 2011).



Figure 11. Lisnati cheese.

Skorup

Skorup is produced in the northern part of Montenegro, mostly in the mountains. It is mainly produced from sheep's milk, but it can also be produced from cow's milk or mixed sheep and cow's milk. It is difficult to determine to which group of dairy products skorup belongs. Sometimes it is classified as cheese and sometimes as butter. Skorup contains a large amount of fat, but because of the presence of a relatively high protein content cannot be regarded as butter. Also, according to composition, method of production and method of ripening, it cannot be considered as cheese because it contains a small amount of proteins, it is not a product of coagulation and the main role in ripening is fat, not proteins (Mirecki and Antov 2002).



Figure 12. Skorup.

CONCLUSIONS

Montenegro has a wide range of very good quality traditional (autochthonous) dairy products.

Montenegro has a legal framework which can protect and mark the traditional dairy products according to EU standards, because the law on Protected Designation of Origin, Protected Geographical Indication and Traditional Speciality Guaranteed (Official Gazette of Montenegro 2011), is fully compliant with the EU regulations 510/2006, 1898/2006, 509/2006 and 1216/2007.

Unfortunately, Montenegro still doesn't have protected and labelled traditional dairy products according to the new law.

It is necessary to initiate protection of the most important traditional dairy products in Montenegro as soon as possible.

The traditional dairy products that should be protected are: Pljevaljski cheese, Njeguški cheese, lisnati cheese and skorup (kaymak).

After protection and labelling, it is necessary to initiate activities on developing standards for the selected traditional dairy products.

REFERENCES

- Bachmann, H. P., McNulty, D. A., McSweeney, P. L. H., Rubgg, M. (1996): Experimental designs for studying the influence of the raw milk flora on cheese characteristics: a review. *The Jour. of the Society of Dairy Technology*, 49 53-56.
- Barjolle, D. and Sylvander, B., (2000): PDO and PGI products: market, supply chains and institutions. *Final Report (Fair 1-CT 95-0306) European Commission*, 1-53.
- Bojanić-Rašović, M., Mirecki, S., Nikolić, N., Vučinić, S., Ivanović, I. i Rašović, R.,(2010): Mikrobiološki i hemijski kvalitet autohtonih sireva u Crnoj Gori. *Prehrambena industrija, Mleko i mlečni proizvdi*, 1-2, 127-133, Novi Sad.
- COUNCIL REGULATION (EC), (2006): The protection of geographical indications and designations of origin for agricultural products and foodstuffs. *Official Journal of the European Union*, No. 510/2006.
- Dozet, N., Adžić, N., Stanišić, M. I Živić, N., (1996): Autohtoni mlječni proizvodi. *Poljoprivredni institut Podgorica, SILMIR*, Beograd.
- Gaiaschi, A., Beretta, B., Poiesi, C., Conti, A., Giuffrida, G., Galli, C.L., Restani, P. (2000): Proteolysis of s-casein as a marker of Grana Padano cheese ripening. *Journal of Dairy Science*, 83 2733-2739.
- http://europa.eu/rapid/press-release_MEMO-11-84_en.pdf?locale=en
- http://ec.europa.eu/agriculture/quality/schemes/index_en.htm
- Lucattelli, S. (2000): Appellations of origin and geographical indications in OECD member countries economic and legal implications. COM/AGR/APM/TD/WP 15/FINAL 1- 68.
- Lukač, J., (1991): Tounjski sir (Autohtoni proizvodi Hrvatske), *Mljekarstvo*, 41 (1) 7-18, Zagreb.
- Lukač Havranek, J., Hadžiosmanović, M., Samaržija, D. i Antunac, N., (2000): Prehrambena svojstva mediteranskih sireva, *Mljekarstvo*, 50 (2) 141-150
- Mijačević Z, Bulajić S. (2007): Prirodna mikroflora tradicionalnih sireva. *Prehrambena industrija – mleko i mlečni proizvodi*, 18 (1-2), 43-46.
- Mirecki, S., (1999): Njeguški sir. *Peta izložba podlovćenske zdrave hrane. Zbornik radova*, p. 33-34. Cetinje.
- Mirecki, S. i Antov, G., (2002): Tehnologija i kvalitet crnogorskog skorupa. *XVII* Savetovanje: Savremeni pravci razvoja u tehnologiji mleka. p.68-73. *Prehrambena industrija*. Novi Sad.
- Mirecki, S. i Marković, M. (2004): Novi način plaćanja mlijeka u CrnojGori. Simpozijum: Mleko I proizvodi mleka stanje I perspektive. Zbornik radova, p. 54-62
- Mirecki, S. i Adžić, N., (2006): Hemijski sastav i higijenska ispravnost Pljevaljskog sira. *Prehrambena industrija*. Vol. 17. br.1-2, p.64-68. Novi Sad.

- Mirecki, S. Ivanović, I. and Nikoleta Nikolić (2011): Characteristics of Montenegrian Autochtonous Lisnati *Cheese. Journal of Hygienic Engineering and Design.* Vol.1, no. 1, p.320-325. EHDG International.
- Monnet, J.C., Berodier, F., Badot, P.M. (2000.): Characterization and localization of a cheese georegion using edaphic criteria (Jura Mountains, France). *Jour. of Dairy Science*, 83, 1692-1704.
- Official Gazette of Montenegro (2011): Law on protected designation of origin, protected geographical indication and traditional speciality guaranteed. No. 18/11.
- Prpić, Z., Kalit, S., Lukač Havranek, J., Štimac, M. i Jerković, S., (2003): Krčki sir. *Mljekarstvo* 53 (3) 175-194
- Radulović, Z., Petrović, T., Paunović, D., Mirković, N., Obradović, D. (2008): Karakterizacija autohtonog soja Lactobacillus paracasei 08 na potencijalne probiotske sposobnosti. *Prehrambena industrija*, (1-2), 23-27.
- Samaržija, D. i Antunac, N., (2002): Oznake kvalitete : izvornost (PDO), zemljopisno podrijetlo (PGI)i garantirano tradicijski specijalitet (TSG) u socijalnoj I gospodarstvenoj zaštiti tradicionalne proizvodnje sira. *Mljekarstvo* 52 (4) 279-290.
- Sarić, Z., Puhan, Z. i Dizdarević, T., (2007): "Sirarska proizvodnja na raskršću tradicije i industrije". *Savremena poljoprivreda*, Vol. 56, 5, str.103-113. Novi Sad.
- Statistical Office of Montenegro "MONSTAT" (2011). Agriculture and Fishing, Producing statistic, Livestock Production, http://www.monstat.org
- Tasić, T., (2012):" Formiranje biogenih amina u tradicionalnoj fermentisanoj kobasici (Petrovská klobása) tokom standardizacije bezbednosti i kvaliteta". *Doktorska disertacija, Univerzitet u Novom Sadu, Tehnološki fakultet*, Novi Sad.
- UNIDO (2010): "Adding value to traditional products of regional origin" *United Nations Industrial Development Organization*, Vienna.
- Van de Kop, P., Sautier, D. and Gerz, A. (2006); Origin –Based Products: lessons for pro-poor market development; *KIT and CIRAD*; Amsterdam (Netherlands), Paris (France); www.kit.nl
- Vesković Moračanin, S., Mirecki, S., Trbović, D., Turubatović, L., Kurćubić, V. and Mašković, P., (2012): Traditional manufacturing of white cheeses in brine in Serbia and Montenegro Similarities and differences. *Acta Periodica Technologica*. *APTEFF*, 43, 107-113.
- Vujaklija, M., (1996): ''Leksikon stranih reči i izraza''. *Prosveta*, Beograd. www.fao.org

Slavko MIRECKI

ZAŠTITA TRADICIONALNIH MLJEČNIH PROIZVODA U CRNOJ GORI

SAŽETAK

Usvajanjem Zakona o oznakama porijekla, geografskim oznakama i oznakama garantovano tradicionalnih specijaliteta poljoprivrednih i prehrambenih proizvoda ("Sl. List CG", br. 18/11), Crna Gora je u potpunosti ispunila zahtjeve za zaštitu poljoprivrednih proizvoda koje propisuju regulative Evropske Unije. U radu je predstavljen način zaštite poljoprivrednih proizvoda, podaci o broju i vrstama zaštićenih proizvoda u zemljama Evropske Unije, kao i zakonska regulativa za zaštitu poljoprivrednih proizvoda u Crnoj Gori. S obzirom da mlječni proizvodi, naročito sirevi, predstavljaju najbrojnije poljoprivredne proizvode koji su zaštićeni, posebno je istaknut značaj i karakteristike tradicionalnih sireva. Takođe, predloženi su i ukratko opisani crnogorski tradicionalni mlječni proizvodi koje bi trebalo zaštititi po postojećem zakonu.

Ključne riječi: tradicionalni mlječni proizvodi, zaštita, oznala porijekla, geografska oznaka,sir, skorup