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TRAPPIST CHEESE HISTORY

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Abstract

The original Trappist cheese, the product of the monastery of "Marija Zvijezda" in Banja Luka, Bosnia and Herzegovina, is produced for more than 130 years. The specialty of this cheese is in its secret recipe which is transferred orally from a monk to a monk. Another particularity of this cheese is that only monks who passed vows and are inside the order community can produce Trappist cheese. As the production started in 1882, the cheese became a synonym for semi-hard cheeses in the area of South-Eastern Europe. After the Second World War, the monks produced it only for their own needs inside the monastery of "Marija Zvijezda", and in this period there was neither opportunity nor interest by the legal representatives of that time to accurately describe its organoleptic characteristics and traits. Since the production of Trappist cheese has been revived in 2008, we can try to correct this injustice. The characteristic of the Trappist cheese is the wheel weight 1.6-2.0 kg and it has a natural rind which is yellowish, thin and smooth. Its consistency is soft, elastic, mild and can be easily cut. The cut is smooth with or without very little holes, and the color is pale yellowish. Its aroma is clean, milk-specific, and it is moderately saline and easily soluble. According to Gerber, the fat content is about 32 %, the water content is about 41 % while the dry matter is 56 %. Instead of a conclusion, we can only wish that the Trappist monks continue the production of the Trappist cheese and that political circumstances will not influence it as it was the case up to now.

Key words: Milk, Monastery of "Marija Zvijezda", Trappist cheese.

Introduction

In 2014, the monastery of "Marija Zvijezda" will celebrate 132 years since the production of Trappist cheese has begun in Banja Luka. The cheese has been produced in all these years with more or less problems that followed the monks and their destiny in these areas. The production was interrupted only from 1996 to 2008 due to sudden death of Father Mohor who knew the secret recipe and which he did not manage to transfer to his brothers. The cheese production was revived again in 2008 when Father Tomislav went to France in the monastery of Mont-des-Cats and learned the technique of cheese making and brought back the recipe for cheese production. After the Second World War, the property of the monastery was confiscated, monks had to leave and the name "Trappist" was taken away but not the secret of cheese making. On the territory of the former Yugoslavia, each dairy owned by the state began the production of cheese called Trappist because this name was a synonym for a quality and for semi-hard cheese, but this production had never the approval of the monks. A particular problem then was the dairy of Banja Luka to which some cooperation was negotiated but which failed because the former government had its own experts who produced "better" and "original" cheese. Even now and as before, the Trappist monks had problems in regards to the protection of their intellectual property and many other producers used this name illegally for some of their products. Today in the monastery we can also find notices to consumers where Trappist monks warned about the look of the original cheese and

how it differs from forgeries. Trappist cheese is standardized and we hope that Bosnia and Herzegovina will finally protect this product under the designation of origin and thus prevent further illegal use of the Trappist name labeled on other semi-hard cheese.

The History of Trappist Order

Trappists belong to the monastic family that follows Christ by living according to the Rule of St. Benedict of Nurisa, the father of Western monasticism, the founder of the monastery Subiaco and Monte Cassino. The name "Trappists" was received by the reform movement that began in 17th century in French Cistercian monastery of Notre Dame de La Trappe in Normandy, under the guidance of Abbot Armand Jean le Bouthillier de Rance. This reform movement was inspired by the reform movement that began 500 years ago in the monastery of Cîteaux near Dijonin France. With this movement the aim was to influence changes in a loose lifestyle of the monks in many French monasteries. Therefore, the official name of the Trappists is Ordo Cisterciensis Strictioris Observantiae (O.C.S.O.) which means the stricter observance of the Cistercian Order. Trappists are actually reformed Cistercians who have started their activities as insignificant local reform movement, and today in the world they serve in more than 100 monasteries. It is less known that Trappists have a female branch which has 72 monasteries, mainly in Europe. The Trappists are a contemplative order in the Catholic Church that serves to God and to people in silence, prayer and physical work. Their motto is "Ora et labora" - Pray and work. These silent monks and nuns devote their entire lives to God and their life path is governed by the cross (Ostoji, 1965).

The monastery of "Marija Zvijezda" is the only Trappist monastery which produces cheese on the right side of the Rhine River that is in the former countries of the communist bloc.

Often, the religious community of Trappist monastery is misplaced with Cistercist monks who were also engaged in different productions, including the production of different cheese types. Some documents mention that Trappist cheese was made in the monasteries in Hungary, Czech Republic, Slovakia, etc. (Sanders, 1954) which is not true because in these countries there were no Trappist monasteries.

History of Trappist Cheese

The beginning of cheese production in "Marija Zvijezda" monastery is found in 1872, in a small dairy built by Father Franz and who called that cheese as a "Swiss". However, this cheese plant production did not last long due to animal diseases that caused the lack of milk.

The production of the original cheese began in 1882 when in the monastery in Banja Luka arrived Father Ignatius from the French monastery "Port-du-Salut". He trained his brother Luka in making cheese. At the beginning, the cheese was made only for the purposes of the monastery, and later it was made for the markets in Austria and Hungary as well as for the whole Europe. It was very well known and it was awarded numerous prizes at fairs in Europe. At first, the monks processed the milk from their own farm and later they started to buy it from the local farmers.

There was an auxiliary dairy at "Marija Zvijezda" monastery, and the main dairy was established in Josipovac (today called Bosanski Aleksandrovac) where in 1887 a branch of "Marija Zvijezda" was opened. However, the monks again encountered some problems, especially in the first year. First, because of the lack of expertise of cheese makers, they had initially problems with the quality of cheese. Therefore, in 1888 abbot Bonaventure the First sent brother Dositej to France to the local monasteries, especially in Port-du-Salut, to train in cheese making for one year. When he came back he taught his brothers about cheese production and they were obliged to keep the secret of production. The secret was transmitted orally from brothers to brothers or they would carry it with them into the grave. Kirin wrote about this: Even though in cheese making industry the Trappist cheese was dominantly

present for the entire century, in our literature there are very little data about the technological process of making this cheese. Due to the secrecy of making cheese, there is no description of the original Trappist cheese from Banja Luka, so it can only be speculated.

This secrecy draws the following conclusion: "The quality of the cheese and the art of its production are predicated largely on the method of its preparation. Specifically, a dozen specialists participated in the production of the cheese. Particular intervention was done by only one cheese maker. Each cheese maker knew his part of the job to perfection while the job of the others was a secret to him." The success of the branch Josipovac prompted the Abbot Bonaventure to establish the second branch. The colonists were well developing economically in the colony Windthrst (today called Nova Topola). The Trappists bought land from one colonist in 1893 and in that place they established the branch Marienburg - Marijin Dvor (Nova Topola). The cornerstone was set on March 18, 1893. In this branch, besides other buildings, a cheese making plant was opened. The local people brought the milk and the monks processed it into cheese and butter. Cheese production in both branches was developing successfully. Every day, 2.000-3.000 liters of milk were brought in. As the cheese plant was developing successfully, the purchase of milk rose up as much as 8.000 liters. The cheese production has reached 100 - 120 tons per year. The excess of milk was pasteurized and transported to Banja Luka where it was offered for sale. The milk was much appreciated for its quality but also because of the price. Specifically, it was cheaper than from other sellers. The cheese was packed in packages of 4.8 kg and sent by post or railway to the clients throughout the monarchy as well as beyond its borders. The Trappist monks were also the official suppliers for the royal palace in Belgrade. H. Renner travel writer wrote: "Now the monastery.... deals with manufacture of the "Trappist cheese" which has a good reputation abroad as well. Since the monastery does not have enough cows, the milk for cheese making plant is taken from the close German settlements. "Up to now, there were no reliable data on the organoleptic properties of the original Trappist cheese, and his secrecy of production does not allow us to obtain an insight into the production technology. The assumptions by different authors were the same as today's Saint-Paulin cheese that is a successor of Port-du-Salut and Port-Salut (Kirin, 2003). Mainly, the research was done to study the chemical composition, the quality and organoleptic characteristics of semi-hard cheese, which were produced in the former communist dairies. The cheese production was revived again in 2008 when Father Tomislav went to France in the monastery of Mont-des-Cats and learned the technique of cheese making and brought back the recipe for cheese production (Budimir, 2012).

Material and methods

Research is done on the Agricultural Cooperative "Liva" which is located in Aleksandrovac in Laktaši municipality, Bosnia and Herzegovina. The cooperative is engaged in the production of raw milk. Since 2008, in a newly built space for cheese production, the Trappist cheese is produced in collaboration with the monk Tomislav Topi . The cooperative provides production material and auxiliary work force and the recipe is owned by the monastery of "Marija Zvijezda". Currently is produced about 2.5 tons of Trappist cheese per month. The cheese plant is HACCP certified and has ISO 2008:2009 certificate and is under the constant supervision of a veterinary inspection. Microbiological and chemical analysis of cheese is done at the Veterinary Institute of the Republic of Srpska "Dr. Vaso Butozan" in Banja Luka.

Organoleptic Properties of Trappist Cheese

The Trappist cheese belongs to the group of semi-hard cheese types and is easily cut. It has somewhat stiffer consistency but is still soft enough; compared to the bad copies which are either too soft or too hard to cut. Unfortunately, because up to now it was not possible to forbid the use of the name "Trappist", on the market there are different cheese plants that make cheese types based on different recipes and then they label it as "Trappist".

The softness and ease of cutting comes from a special way of preparing and of course due to special conditions of its ripening. It is important to note that the original Trappist cheese ripens in special conditions, where it is handled with care and it is rotated and cleaned daily. The copies of Trappist cheese which can be found on the market are produced in a way that it is ,,dried" for fifteen days and then it is delivered to the stores. The ripening time of the original Trappist cheese is between 75 and 90 days as a minimum and this allows it to have a special consistency and taste.

The cheese is produced exclusively in the form of a wheel, 19 cm in diameter and 7-9 cm size (Table 1).

	External			
Group	appearance	Texture	Cutting	Smell and taste
semi-hard	wheel d=19 cm hight= 7-9 cm weight 1.6-1.8 kg smooth rind, dry yellowish, thin	soft, elastic, mild easily cut plastic	smooth without or with very little holes pale yellow color	clean milk–specific scent taste sweet, moderately saline easily soluble

Table 1. Organoleptic Properties of Trappist Cheese

The characteristic of the Trappist cheese is the wheel weight 1.6-2.0 kg and it has a natural rind which is yellowish, thin and smooth. Its consistency is soft, elastic, mild and can be easily cut. The cut is smooth with or without very little holes, and the color is pale yellowish. Its aroma is clean, milk-specific, and it is moderately saline and easily soluble.

According to Gerber, the fat content is about 32 %, the water content is about 41 % while the dry matter is 56 % (Table 2).

		Milk fat according to				
Water	Dry matter	Milk fat	Gerber	NaCL %		
41,26	56,01	53,56	33	2		

Some authors mention that the Trappist cheese is produced in the form of a block (Kirin, 2002) which is not true. All types of cheese which are made by Trappist monks are done in the form of a wheel. The authors note that this is cheese with bark which is usually protected by a coating, or as cheese without bark, if it ripens and ships as a cheese packaged in foil or vacuum packed plastic bag, thereby reducing the manufacturing abatement (Doruši et al., 1976; Kirin, 2002). This was typical for forgeries, or for semi-hard cheeses that were made in dairies of former system, or to those that today illegally use this name. The Trappist cheese has a natural rind, and a special coating is used which is acceptable in terms of hygiene and health and which gives a yellowish color of the bark.

In the earlier papers, the authors state that the cheese has small holes once it is cut. The scent and taste of the cheese are described almost as in the original Saint-Paulina, as well as in the illustrated versions (Mileti , 1969; Sabadoš and Rajši , 1980; Sabadoš, 1981). The original Trappist cheese once it is cut it does not have holes because of the production technology and the quality of milk which is used for its production.

Technological Process of Trappist Cheese

For obvious reasons, it is difficult to describe the technological process of Trappist cheese production. It is of utmost importance the quality of the raw materials out of which the cheese is produced, meaning the hygienic and microbiological safety of milk. Furthermore, the production conditions must be of a high standard. Upon receipt of the milk, a low pasteurization is done after which the milk is cooled and cultures and rennet have been added. Unfortunately for all, and fortunately for the cheese, the secret of the quantity and order of culture is known only to monks but not to all of them. Lay people do not know the quantities and types of cultures so they cannot describe this process. The written recipe is only in the Port-du-Salut monastery in France and is available only to the chosen monks.

After adding cultures the cheese is left resting to create a cheese curd after which the cutting starts. The cheese is moved to the cheese making table and it undergoes pre-pressing to separate the whey. Often, semi-hard cheese types undergo the rinse of the curd with water which is not the case with the Trappist cheese. After pre-pressing, the cheese is cut into an appropriate form; it is placed into a cheese mould and goes under pressing again. The cheese is pressed under certain pressure and after some time it is rotated and goes back under the pressure.

After completion of this process, the cheese is left to rest for some time and afterwards goes into brine which consists of water and salt concentration.

Once this phase is finished, the cheese is left on a shelf to drip and afterwards it is put into a pre-chamber. The first phase of cheese ripening has been done in this pre-chamber under adequate moisture and temperature conditions. After 40 to 50 days, the cheese is moved into another chamber with altered ripening conditions: lower temperature and slightly higher humidity. The ripening process ends with the optimal 75 to 90 days.

During the ripening process, the cheese is covered by the coating and it is rotated and cleaned in the chambers daily. The cheese is cleaned and coated regularly, as well as the wooden holders and shelves on which the cheese ripens. Hygiene has a great influence on the ripening and the quality of Trappist cheese.

Conclusion

Considering everything mentioned above, it remains to hope that the community of the monks of "Marija Zvijezda" monastery will continue to produce their cheese and that finally in Bosnia and Herzegovina the conditions will be set to protect the originality of the product according to the European standards.

This is also very important for other indigenous types of cheese that are made in BiH because they represent a significant potential for the development of tourist and gastronomic offer. The protection of cheese will enable the milk production to increase and a greater value will be achieved. In addition to this, it will lead to hiring additional population, either through direct or indirect arrangement in agricultural production, tourism and other related industries.

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