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#### Specification of the Protected Appellation of Origin Tushetian Guda

#### NUMBER OF REGISTRATION: 14

#### DATE OF REGISTRATION: 24/01/2012

HOLDER – MINISTRY OF ENVIRONMENTAL PROTECTION AND AGRICULTURE OF GEORGIA

PRODUCT NAME FOR WHICH THE REGISTRATION OF THE GEOGRAPHICAL INDICATION IS REQUESTED: Class 29 – Cheeses

The status of the Geographical Indication Tushetian Guda is going to be changed from Geographical Indication to Appellation of Origin.

#### I. Name of the Appellation of Origin

თუშური გუდა

English translation: Tushetian Guda

Cyrillic: Тушури Гуда ог ТУШУРИ ГУДА

#### II. Description of the product

**Tushetian Guda** is a cheese produced from sheep, cow or cow and sheep mixed  $(50/50\%, \pm 5\%)$  whole raw milk, which ripens in the "Guda" (bag made from skin of sheep, goat or calf, trimmed from inside).

Milk from goat can be added, up to 10% maximum of the milked cows and/or sheep.

#### **Organoleptic characteristics**

#### <u>Form</u>

The shape can vary and depends on the location of the cheese in the Guda during the ripening process. The cheeses at the ends of the Guda are hemispheric (see picture 1). The cheeses in the middle of Guda have the cylindrical shape (see picture 2). A slight deformation of the cylindrical shape is also permitted (see picture 3). The surface is not smooth and the visual presence of "Guda trace" is a must. Cracks up to 2 cm are permitted. Has no crust. The mass is 5-10 kg.



#### <u>Colour</u>

Sheep Tushetian Guda's outside colour is white to greyish/greenish. Inside colour is intense yellow in the centre. When cutting the cheese in half, a whitish ring up to 2 cm wide can be observed at the

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edge of the cheese.

Cow Tushetian Guda's outside colour is creamy. Inside colour is very light yellow.

Sheep and cow mixed milk Tushetian Guda's outside colours are similar to the sheep Tushetian Guda's, but less intense. Inside is slightly darker in yellow.

#### <u>Texture</u>

The cheese consistency is uniform, dense and slightly elastic. Cheese must not be crumbly or soft. Holes of various shapes and sizes are present inside in sliced cheese. The size of holes should not exceed 10mm. Yellowish drops of fat can exudate from the holes when the cheese is cut to length.

#### <u>Smell</u>

Sheep Tushetian Guda cheese has sheep milk aroma, appetizing piquant smell.

Cow Tushetian Guda has cow milk aroma, appetizing piquant smell.

Sheep and cow mixed Tushetian Guda has mixed aroma of sheep and cow milk, appetizing piquant smell.

Tushetian Guda Cheese should not have strange, uncharacteristic or unpleasant smell.

#### Taste

Salty, piquant and umami. Should not have bitter, rusty taste.

#### **Chemical properties**

The fat content in the dry matter should not less 45%

Salt content should not exceed 8%.

For a transitional period of three years from the registration date of this specification, cheeses with higher salt content are allowed.

# III. Description of the method of obtaining the product and, where appropriate, the authentic and unvarying local methods

### **Milk production**

#### Transhumance and summer pasturing

The milk used for the Tushetian Guda is produced by animals pasturing on the milking area of the Tushetian Guda at the end of springtime and during the summer months. As soon as weather permits, but not later than June, shepherds send their flocks and herds to feed in the lush upland pastures of Tusheti, bringing them back to lowlands in September or October, before the colder weather, a practice known as transhumance.

#### <u>Feeding</u>

During the grazing season in the milking area, animals are fed exclusively with pasture grass. Periodically, salt can be given.

During the transhumance period, in case of harsh winters, distribution of hay and mix of coarse barley and maize is allowed.

#### Milk characteristics

Sheep milk used for Tushetian Guda making comes only from Tushetian sheep breed. Sheep Tushetian Guda is made out of fresh raw whole milk.

Cow milk used for Tushetian Guda making comes from Georgian mountain cattle breed. Cow Tushetian Guda is made out of mix from fresh morning and last evening raw whole milk.

The mix of fresh sheep and cow milk is used for making of mixed Tushetian Guda. Mixing of last evening cow milk is also allowed.

When added, goat milk used for Tushetian Guda making comes exclusively from local goat breed and has to be a fresh raw whole milk.

#### Preparation of the Guda (skin bag)

Guda is a skin bag from sheep, goat or calf. Skin sourced in Georgia is obtained by skinning the animal from the back to head without cutting it longitudinally.

Skin is then dried by introducing a stick and hang in the shadow for a period going from 2 to 4 weeks. The skin is put to soak in water or whey for two days, before the hair is trimmed one to two centimetres long. The skin is then rinsed twice to three times, and returned in order to place the hair inside the skin, before placing the cheeses in it.

#### **Cheese production**

#### <u>Filtering</u>

The whole raw milk is filtered in a few layers (not less than five) laid out with cheesecloth and a combination of the following herbs: nettles (*Urtica*) and/or dead-nettles (*Lamium*), feathergrass (*Stipa*) and other hairy herbs of Tusheti flora.

#### <u>Curding</u>

After filtration, the milk is poured into a wooden (oak, aspen) or stainless steel vessel. The milk is mixed with the preliminarily prepared rennet from calf or lamb stomach, stirred it with a handmade tool in wood: a branch made from birch or aspen, with the end of different shape. The milk is then left for fermentation at a temperature between 35-37°C. To obtain the required temperature, it is allowed to add boiled warm but not hot water to the milk. For cow cheese, pouring milk that has been heated is allowed.

#### Dis-curding

When the curd is firm, it is ready for draining and cutting. Granules are formed by stirring manually with the wooden tool as described above for curding. Draining stops when the granules reach a size between a pea and hazelnut. Then they are left between 5 to 10 minutes, before extracting the whey.

#### Whey-off and moulding the cheese

The mass is cut with wooden knife. The mass is then put and moulded in the cheesecloth manually that once folded and tied over the cheese to form a bag. During this stage, the mass can be mixed / kneaded by hand in order to spread evenly the granules. The bag is then put on the wooden table for being pressed by hand with rotational motion of the bag and for draining the whey.

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For Tushetian Guda made from cow milk, after the draining and before moving it to the "Guda", the cheese is placed for a maximum of 24 hours in a wooden vessel (*Dergi*) for formation. For mix Tushetian Guda, the use of the wooden vessel (*Dergi*) is allowed if the texture of the cheese requires it.

#### <u>Salting</u>

Before placing the cheese in Guda, a thin layer of dry salt is poured on the bottom of Guda, then – to the top of each cheese put in the Guda. No other ingredient than salt is allowed.

#### Resting phase

The guda is then placed in a warm atmosphere for 1 to 3 days. To maintain a warm atmosphere, guda can be covered from outside. During this resting phase, gudas are rotated regularly.

#### <u>Ripening</u>

The Tushetian Guda is ripened in the Guda during a period of minimum 60 days in dry and cool place. The temperature must in no cases exceed 22°C. During the period of 24 months after the registration of this specification, the temperature may exceed the permitted level. During the ripening phase, gudas are rotated by 90° regularly according to the age of cheeses.

#### **Transportation**

For the transportation of the product to the lowland, it is allowed to extract the brine from the Guda. Before storing the cheese in the Guda in the lowland, a new brine is inserted in the Guda to complete the ripening. To prepare this new brine, an egg or a potato are placed in the water and salt is added until the egg or the potato start to float.

### IV. The definition of the geographical area

Delimitation of the area of production

### Map of the area of milking and cheese production

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### a. <u>Milking area</u>

Milking, cheese-making and the beginning of the ripening must be realized in the geographical area of Tushetian Guda production which coincides with the Tusheti historical region, limited by the border with Chechnya (Russian Federation) in north, Dagestan (Russian Federation) - east, and along the main watershed mountain range of Caucasus, within the frames of defined borders by the territories of Tusheti National Park, State Nature Reserve and Tusheti Protected Area - west. The south border coincides with the boundaries of the Tusheti National park.

#### b. Lowland area

For the completion of ripening, when needed, cutting and packaging, the area is extended to villages of Pshaveli, Kvemo Alvani, Zemo Alvani and Laliskhuri.

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The whole area belongs to the territory of the Kakheti region.

# V. Evidence that the product originates in the defined geographical area (traceability system)

## a. <u>Registration of a business-operator</u>

Each business-operator effectively involved in one or more steps of the manufacturing process of Tushetian Guda may log in to the PAO Tushetian Guda Producers' Organization (association, consortium, group, producers' union, etc.). The PAO Tushetian Guda Producers' Organization possesses a list of registered persons with the right to use the appellation of origin – Tushetian Guda, defined by the legislation of Georgia; the requisites of business operators - title, address, identification code, contact information should be registered in the list. The list is subject to regular updates.

## **b.** <u>Traceability criterias</u>

All processes of milking, cheese-making, ripening, cutting and packaging are performed inside, in the designated area, controlled and monitored conditions to ensure product uniqueness / specificity.

Traceability of the product must be ensured at the stages of milking, cheese-making, ripening, cutting, packaging and distribution of cheese.

To ensure traceability, every business operator connected to any stage of Tushetian Guda production (milk producer, cheese producer, cheese cutter, packager) must keep relevant information related to the stages of production, processing and distribution of the product, any ingredient used in it, including packaging material, and maintain relevant documents and records, which enable the assessment of compliance with the requirements of milk and cheese origin, specifications and conditions of production and which will be submitted to the state control body upon request. These records must contain at least the following data:

the number of milking sheep, milking goats and milking cows, at the beginning of the milking period and any change (increase or decrease) in the course of the season.

the approximate quantity of milk used, daily,

the number of cheeses made, daily,

the number of full gudas, daily,

the number of transported gudas, for each transportation,

the number of cheeses put on the market

Tushetian Guda is controlled in accordance with the plan of control defined and supervised by external control body and ultimately by Public Authorities, and main steps are summarized here:

The traceability system is coordinated by the PAO Tushetian Guda producers' organization, which defines the marking to be present with the product (the marking accompanying the product).

# VI. The link between the quality or characteristics of the product and the geographical environment

#### Natural environment

Climate is characterized by continental climate with snow cover for 5-6 months and by mild to fresh summers.

- 1) Humid climate with cold winters and short summers (1,600 m. above sea level);
- 2) Transitional mountain climate with cold winter and short summer (2,000 2,400 m. above sea level);
- 3) Moderately humid climate of highlands without real summer (2,400-3,400 m. above sea level);
- 4) Humid climate of highlands with constant snow and glaciers, where the average temperature for all months of the year is below zero (3,400 m. above sea level).

Tushetian Guda cheese is produced from May to August on sub-alpine (*Festuca ovina, Poa alpina, Zerna variegata, Dactylis glomerata, Lotus*) and alpine (*Festuca ovina, Poa alpina, Carex tristis and Campanula tridentata*) pastures. Traditionally the land at the altitudes of 1,600 - 1,900 m. was used for agriculture and cattle breeding, while the sheep was kept in pastures at the altitudes of 2,000 – 3,400 m. above sea level.

#### Human environment and factors

In order to secure food for the long winter period Tushetian farmers have developed traditional ways of preserving cheese in Guda. Over the past centuries shepherds have fine-tuned the process and transmitted the knowhow from generation to generation.

The ripening method using Guda and the rennet cause the transformation of the cheese involving among others lipolysis of fats conferring to cheese its specific taste and aromas.

This knowledge has also been influencing the characteristics of the sheep breed, adapted to the Tushetian mountain conditions and the need for milk.

Sheep breed

The sheep breed used in Tusheti:

Common name - Sheep

Latin name - Ovis Aries

#### Breed - *Tushetian sheep*

Tushetian sheep has been bred over centuries. The modern appearance of Tushetian (Tushetian) sheep was developed in XIII-XIV centuries. It is a meat, wool and milk productive animal. The breed is distributed in East Georgia and is characterized by the sturdy constitution and easy endurance of extreme migratory conditions on long distances (up to 500 km).

Tushetian sheep milk is distinguished with high fat content reflected in cheese fattiness.

#### Natural factors

The floristic cover of the pastures influences the flavour of the milk used eventually for the production of Tushetian Guda.

Relativity cool summers allow ripening of the cheese in optimal conditions.

#### **Reputation**

Tushetian Guda cheese produced in Tusheti has been consumed in Georgia and abroad for several centuries. Nowadays, Tushetian Guda, is commercialised and well recognised by consumers in the whole Georgia and several former Soviet countries. The fabrication process is well known as it has been described in several publications, and documented and make reference in different movies:

1922-1923: "The Messenger of the Tbilisi University" - Petre Melikishvili. p. 135 chapter - Georgian type cheese, describes the process of the Tushetian Guda cheese making.

Publication "Tusheti", 1993. Publication is based on the researches of the Georgian chronicler Giorgi Bochoridze (1884-1939). Besides the description of Tushetian Guda cheese making process includes drawings of Tushetian household type and equipment (drawings belong to Giorgi Bochoridze).

The film "Tushetian shepherd" by Soso Chkhaidze produced in 1976 describes in details the transhumance process and lives of Tushetian Shepherds;

Documentary film by Levan Tutberidze "Tushetian cheese" produced in 1980

#### VII. Packaging and Labelling rules

Tushetian Guda can be delivered to the consumer whole or cut in wedges or sliced, non-packed or packed.

Information on each whole or piece of cheese placed on the market with the name of appellation of origin Tushetian Guda shall be provided to the customers in accordance with the requirements of the "Consumer information on food" defined by the legislation of Georgia. In addition,

the name "Tushetian Guda" on of each whole or piece of cheese, in the same visual field, must be followed by the mention "Protected Appellation of Origin" and the state quality mark for PAO, use of which is regulated by Georgian legislation;

The Tushetian Guda PAO logos for the different types of Tushetian Guda PAO made from sheep milk, cow milk and mix-milks defined by the PAO Tushetian Guda producers' organization (Picture 1).

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**Picture 1.** Logos for the different types of Tushetian Guda PAO made from sheep milk, cow milk and mix-milks defined by the PAO Tushetian Guda producers' organization

## VIII. Control bodies

The control of the compliance with the specifications and production characteristics of the PAO "Tushetian Guda" is carried out in accordance with national Georgian legislation through:

- Self-control by the producers of PAO Tushetian Guda;

- Internal control exercised by PAO Tushetian Guda producers' organization, which is entitled to assess the compliance of production process with the requirements of PAO Tushetian Guda specifications at the place of production, to assess the compliance of organoleptic characteristics of the product with requirements of PAO Tushetian Guda specifications, to perform the cheese cutting and packing control, as well as control of traceability records, documents and other relevant information and to assist business operator in implementation of the State control.

- External control or State control carried out by the competent body - National Food Agency, Marshal Gelovani str. # 6, Tbilisi 0159, Georgia, or controlling body - a legal entity that has been delegated by the competent authority to perform a specific task related to state control and is accredited by the relevant body of Georgia or the Member States of the European Union and the Organization for Economic Co-operation and Development (OECD).