#### **NAPAREULI**

**NUMBER OF REGISTRATION: 790** 

DATE OF REGISTRATION: 10/12/2007

**APPELLATION OF ORIGIN: NAPAREULI** 

GOOD FOR WHICH REGISTRATION IS REQUIRED: Wine

NAME AND ADDRESS OF APPLICANT: LEPL - National Wine Agency; Marshal Gelovani

Av. 32, 0159, Georgia, Tbilisi

- 1. NAME: "NAPAREULI"
- 2. ADDITIONAL SIGNS:
- 3. TYPE, COLOR AND MAIN REQUIREMENTS:

"Napareuli" is dry wine, color can be white or red.

White dry wine "Napareuli" shall satisfy the following requirements:

- Color light straw;
- Aroma and Taste perfect, delicate, soft, harmonic, cheerful, having aroma characterizing location, with flower tones, and fruit tones are developed with aging;
- Actual volumetric spirit content no less than 11 %;
- Volumetric spirit content no less than 11 %;
- Concentration of finished extract mass no less than 16 g/l;

- Sugar content no more than 4 g/l;
- Titratable acidity in young wine should be –no less than 5.0 g/l, and in aged wine no less than 4.3 g/l;
- Other characteristics shall meet requirements provided by the legislation of Georgia. "

## **Red dry wine "Napareuli"** shall satisfy the following requirements:

- Color dark red;
- Aroma and Taste perfect, full, masculine, extracted, harmonic, having aroma characterizing location, fruit tones are developed with aging;
- Actual volumetric spirit content no less than 11 %;
- Concentration of finished extract mass no less than 22 g/l;
- Sugar content no more than 4 g/l;
- Titratable acidity in young wine should be no less than 4.5 g/l, and in aged wine no less than 4.0 g/l;
- Other characteristics shall meet requirements provided by the legislation of Georgia

### 4. SPECIFIC ZONE AVAILABLE AREAS

The micro-zone "Napareuli" is located in Telavi municipality, on left bank of the River Alazani. The vineyards are disposed on Alazani left tributaries, lower stream of Stori and Didkhev-Lopota running from the Southern tributaries of Caucasus Mountains, on the coordinates of 42°3' of Northern longitude and 45°31' of Eastern latitude, on 400-500 m above sea level.

The micro-zone zone "Napareuli" includes the following villages: Napareuli, Saniore, Jughaani, Artana, Pshaveli and Laliskuri.

#### **5. VINE VARIETIES**

Wine "Napareuli" red shall be prepared from Saperavi and/or Saperavi-Budeshuri-like grapes of micro-zone Napareuli, usage of other vine varieties are prohibited.

Wine "Napareuli" white shall be prepared from Rkatsiteli grapes of micro-zone Napareuli, and can be added 15% Kakhuri Mtsvane from the same zone.

# 6. VINEYARD CULTIVATION, SHAPE OF PRUNING AND CARE:

- The micro-zone Napareuli vineyards for wine "Napareuli"shall be situated on 450-750 m above sea level.
- Distance between the rows in the vineyards 1 3 m;
- Distance between the vines in the row -0.8 1.5 m;
- Height of stem 60- 90 cm;
- Shape of pruning one-sided or Georgian two-sided or free.

Vine cultivation, shape and puring, pests and diseases control, and soil treatment, fertilization, and other operations, shall be provided according to agro-technical activities selected by wine-makers.

### 7. GRAPE MATURITY, VINTAGE, TRANSPORTATION:

- "Napareuli" shall be produced only with ripe grapes. Sugar content shall be no less than 19%;
- Usage of polyethylene packages and/or bags is not allowed.

• The grapes shall be protected from dirtying at the transportation.

#### 8. VINTAGE AND WINE PRODUCTION:

Vintage on 1 ha vineyard shall be no more than:

- 10 tons for Rkatsiteli;
- 10 tons for Saperavi;
- 10 tons for Saperavi Budeshuri-like;
- 8 tons for Kakhuri Mtsvane.

Wine production shall be no more than 650 liters – on 1 tone grapes.

Wine production shall be no more than from 1 ha vineyard:

- 6500 liters for Rkatsiteli;
- 6500 liters for Saperavi and Saperavi Budeshuri-like;
- 5200 liters for Kakhuri Mtsvane.

## 9. GRAPE PROCESSING, WINEMAKING AND BOTTLING

Grapes processing and winemaking shall be provided exclusively inside of Napareuli, bottling is permitted outside Napareuli, but only on the territory of Georgia, under strong control.

In addition, grapes extraction from the micro-zone Napareuli for processing and wine withdrawal from Kakheti Viticulture Zone is permissible only under strong accounting and control conditions.

"Napareuli"red is made by complete alcoholic fermentation of must, and "Napareuli"white – by complete alcoholic fermentation of gravity juice.

"Napareuli"shall be represented on consumer market only packed in the consumer vessels.

In the production of the wine it is permissible to use only the operations, materials and substances provided by the legislation of Georgia.

## 10. LINK BETWEEN EXCLUSIVE QUALITY, REPUTATION AND GEOGRAPHICAL AREA:

**CLIMATE** – The micro-zone Napareuli is characterized with moderately humid climate, mild winter and hot summer. Local climate is mostly stipulated with relief conditions and circulation processes stipulated thereby.

Annual duration of sunlight on left bank is less than on right bank and equal to 2050 hours, because of more cloudness. In the vegetation period this indicator no more than 1500 hours. Sunlight amount ratio with its possible amount is 63%, in the summer and September; location warmth balance creating main component – sun direct radiation on perpendicular surface is 120-130 kkal/cm², and on horizontal – 70-75 kkal/cm². Annual radiation balance – 52-54 kkal/cm².

Annual air temperature is 12,4 °C. average temperature of the coldest month (January) is +0.5 °C, and of the warmest months (July-August) is +23.7-23.4 °C. The average of annual absolute minimum is 13 °C, absolute minimum -24 °C. The average of annual absolute maximum is 36 °C, absolute maximum -39 °C.

Air temperature sustainable transmition above 10 °C at 5.IV, and bellow – at 2.XI.

Average sum of active temperatures is 39-20°C.

Average sum of atmospheric precipitations is 845 mm, at the vegetation period – 630 mm. The biggest amount of sediments is in May (132 mm) and June (112 mm), at grape maturity (VIII-IX) average amount of precipitations is 145 mm. Hydrothermal coefficient at August-September is 1,0 -1,3. According of this, grape maturity period is provided with humidity, except some exclusion. In some years, August has deficit of humidity.

Big amount of precipitations take place at the spring (34%) and summer (32%), small – at the autumn (22%) and winter (12%).

Air annual average humidity is 74%, at the vegetation period -71%; that is close to established convenient norm (70%) for vine biological phases, it reaches its maximum in the end of autumn and beginning of winter (82%), and minimum - in second half of summer (66-67%).

First frosts are started averagely from 11 November, once in 10 years, can be even in 16 October.

Spring last frosts are stop averagely in last days of March, once in 10 years, can be continued even till mid-April.

Hailing days annual amount in average is 1,6. Hailing period continues from March to the end of October, most frequently it can be June (0,5 day) and May (0,3 day). In the most hailing years it can be even 5 days.

In the most years snow cover (77%) is unstable. It is created in the 3<sup>rd</sup> decade of December, and continued until first days of March. Snowy days amount is 26, averagely.

Western (23%), Eastern and South-Eastern (16-17%) winds are prevailing on Alazani Gorge directed from the North-West and South-East. Time by time they are changed with North winds (17%).

Wind average speed is 1,9 m/s. Annually wind speed is the greatest (2,1-2,4 m/s) in the spring and beginning of summer and the smallest (1,3 m/s) – in December. The strongest windy days ( $\geq 15 \text{ m/s}$ ) amount is 9, and continues maximum 39 days.

In accordance with said data the micro-zone belongs to wind impact III group regions.

**SOIL** – The micro-zone Napareuli is bordered with end of Caucasus Southern slopes from the North side and Alazani left first terrace – from the South. Relief of main part is slightly inclined flat lands and trails from the South and South-West. Vineyards and arable areas are presented on left second terrace of the River Alazani and its tributaries Lopota and Stori right and left terraces.

Geographically said territory is constructed with fourth and next age deposit rocks consisting of stony-loamy and stony-sandy layers brought by the River Alazani and its tributaries Lopota and Stori.

Mainly there are presented alluvial and deluvial varieties of soils:

- Alluvial carbonated, very thick, heavy loam;
- Alluvial not carbonated, very thick, light clay and heavy loam;
- Alluvial not carbonated, very thick, light and heavy loam;
- Alluvial not carbonated, very thick, slightly leptosol, sandy;
- Alluvial not carbonated, very thick, strong leptosol, sandy;
- Deluvial carbonated, very thick, heavy loam and clay;

- Deluvial not carbonated, moderately and very thick, leptosol, heavy loam;
- Deluvial not carbonated, very thick 100 cm, leptosol, light clay and heavy loam.

In accordance to morphological signs the alluvial soils have brownish-grey color in upper layers, and bellow are more grey; has solid-bean and solid-seed structure, deeply it is slightly expressed, especially in 4<sup>th</sup> and 5<sup>th</sup> varieties of soils.

In accordance to mechanical content first and second varieties are heavy loamy and light clay;  $3^{rd}$  – moderate and slightly loamy;  $4^{th}$  and  $5^{th}$  – sandy.

Structurally first and second are slightly dense and dense; 3<sup>rd</sup> – light quicksand; 4<sup>th</sup> and 5<sup>th</sup> – quicksand and leptosol.

Contrary, the first variety of soil is carbonated; from second to 5<sup>th</sup> – not carbonated.

Deluvial soils (6<sup>th</sup>, 7<sup>th</sup>, and 8th) are brownish with solid-bean structure, in arable layer it is quicksand and solid bellow.

In accordance to mechanical content the  $6^{th}$  and  $7^{th}$  varieties are clay and heavy loamy, the  $8^{th}$  – light clay and heavy loamy.

Contrary, the 6<sup>th</sup> is carbonated, and 7<sup>th</sup> and 8<sup>th</sup> – not carbonated.

Humus content is mostly 3,0-0,5%, in the active layer - 3,0-1,0%. Hydrolyzed nitrogen exists in moderate or small amount - 6,5-2,5 mg in 100 g soil. Soluble phosphorus content is low - 8,5-1,5 mg in 100 g soil, as well, and in some cases is presented as a trace.

Changeable calcium is in low content too -16,0-2,0 mg in 100 g soil, mostly in alluvial soils.

Exceptionally its content is high (in deluvial soils) – 32,0-59,0 mg in 100 g soil.

First and 6<sup>th</sup> varieties of soils contain small amount of carbonates – 12,8-0,8%, and the others – have not it.

Soil area reaction (pH) in carbonated soils is slightly or moderately alkaline – pH=7,3-8,2; the others are neutral or slightly alkaline – pH=6,4-7,2.

**HUMAN FACTOR** – In Kakheti and in Napareuli micro-zone, as in other regions of Georgia, the history of viticulture and winemaking started millenniums ago. Over this period, this field has developed, grown and taken experience.

In 1797, King Erekle granted to Garsevan Chavchavadze, well-known statesman, estates in Kakheti and also in the village Napareuli.. After his death, his son Aleksandre Chavchavadze took care of these estates. He turned out to be quite good to manage the vineyards. Aleksandre carried out several reforms that were helpful to improve the quality of the vineyards as well as wines.

In 1886, the Princes Estates Department wholly purchased Aleksandre Chavchavadze's estates in Tsinandali, Napareuli, Mukuzani, Zegaani and Mughanlo – in total 15089 dessiatinas ( (16447 ha) remaining at that time. The Napareuli estate was the largest among them – 11395 dessiatinas.

Vineyards in Napareuli occupied 129 dessiatinas (140 ha), wherein 71,4 buckets of wine were produced per ha. There were three stone cellars with 164 quevris (wine jars) and 6 presses.

There too, as in Tsinandali, the Princes Estates Department immediately started modernization of the field (new technologies, modern European equipment, professionals), which soon yielded a desirable result.

In accordance with European experience and technologies, exactly at this period (the 1880s) well-known wine brands No.66 "Napareuli" white and No.47 "Napareuli" red were created.

The high-class professional winemakers of the Princes Estates Department – Masano, Gogol-Janowski, F. Jofrio, Aleksandr Egorov, Mark Popich, Tripon Baakashvili, and others made a great contribution to the development of local winemaking.

Wine "Napareuli" is produced from 1890. It has took part in numerous competitions and exhibitions and until the 1990s "Napareuli" white received 1 gold, 6 silver and 1 bronze medals, and "Napareuli" red - 6 gold and 2 silver medals.

Geographical location of the micro-zone Napareuli, regional climate: mild winter and hot summer, moderate amount of precipitations, diversity of soils, special features of Rkatsiteli and/or Saperavi Budushuri like grape varieties characteristic for that zone and local centuries-old tradition of viticulture and winemaking produce the unique organoleptic features of wine "Napareuli", characteristic only of this wine.

#### 11. SPECIAL LABELING RULES

With Latin font – NAPAREULI

Protected Designation of Origin and/or PDO

Cyrillic font – НАПАРЕУЛИ М

Защищённое наименование места происхождения

## 12. ACCOUNTING AND NOTIFICATION

Accounting and notification of production and storage technological processes of "Napareuli" is carried out, in accordance with the rules established by the legislation of Georgia.

## 13. MAIN CONTROLLABLE POINTS

During control of the PDO wine "Napareuli" production process the producer shall satisfy the requirements established by LEPL National Wine Agency, and shall comply with the following parameters:

Main Controllable Points	Evaluation Methods
Vineyard location	Cadaster map, control on the place
Area	Vineyard accounting magazine, cadaster
Vine variety	Vineyard accounting journal, control on the place
Cultivation methods	Journal of registration of Agrotechnical Measures, treating journal, control on the place
Vintage and transportation	Vintage journal
Grape harvest per ha	Vintage journal
Grape harvest in total	Vintage journal
Grape processing and winemaking	Grape receiving journal, grape processing journal, product turnover calculation journal, laboratory analysis journals, notifications, control on the place

Wine bottling, packaging and storage place and conditions	Bottling journal, journal for motion of ready product in the storehouse, laboratory analysis journals
Physico-chemical characteristics of the wine at winemaking, before and after bottling	Laboratory analysis journals
Organoleptic characteristics of the wine	Tasting commission protocols
Traceability	Technological and laboratory records

# 14. CONTROL BODY OF PRODUCTION

State control for observance of production specification and lawful usage of the appellation of origin PDO shall be carried out by LEPL National Wine Agency, according to the rules established by the legislation of Georgia.