# "ბოლნისი/BOLNISI"

Registered in Georgia as an Appellation of Origin Registration Nº 976, Registration date: 04/03/2019<sup>1</sup>

PRODUCT TYPE FOR WHICH REGISTRATION OF GEOGRAPHICAL INIDCATION IS REQUESTED

Grape product, category

1. Wine

NAME AND ADDRESS OF APPLICANT: N(N)LE – "BOLNISI WINE"

44, David Aghmashenebeli Str., Bolnisi, Georgia

1. NAME: "ბოლნისი/BOLNISI"

#### 2. PRODUCT DESCRIPTION:

"ბოლნისი/BOLNISI" – is dry wine, which can be white, amber, red or rosé.

"ბოლნისი/BOLNISI" white shall meet the following requirements:

- Color light amber;
- Aroma and taste soft, refreshing, with balanced acidity, with the combined bouquet
  of notes of wild flowers typical for this geographical place and intensive aroma of
  lemon and banana.
- Alcohol by volume no less than 11%;
- Concentration of finished extract mass no less than 16 g/l;
- Sugar content no more than 4 g/l;
- Titrated acidity, calculated on tartaric acid no less than 4 g/l;

<sup>&</sup>lt;sup>1</sup> The list of Georgian AOs and GIs - https://www.sakpatenti.gov.ge/en/state\_registry/

- Volatile acidity no more than 1.0 g/l;
- Total mass concentration of sulfur dioxide no more than 200.0 mg/l;

"ბოლნისი/BOLNISI" red shall meet the following requirements:

- Color dark red;
- Aroma and taste full, extracted, velvety, with red fruit (cherry, plum, and blackberry) and floral aroma. Predominantly sweet, with soft tannins that offer an elegant and complex finish.
- Alcohol by volume no less than 11%;
- Concentration of finished extract mass no less than 22 g/l;
- Sugar content no more than 4 g/l;
- Titrated acidity, calculated on tartaric acid no less than 4 g/l;
- Volatile acidity no more than 1.2 g/l;
- Total mass concentration of sulfur dioxide no more than 150.0 mg/l;

"ბოლნისი/BOLNISI" rosé shall meet the following requirements:

- Color pink;
- Aroma and taste light, delicate, with fresh acidity, pleasant, elegant feeling of sweetness,
   with aroma of black berries of the forest and green pepper and peppercorns;
- Alcohol by volume no less than 11%;
- Concentration of finished extract mass no less than 16 g/l;
- Sugar content no more than 4 g/l;
- Titrated acidity, calculated on tartaric acid no less than 4 g/l;
- Volatile acidity no more than 1.1 g/l;
- Total mass concentration of sulfur dioxide no more than 200.0 mg/l;

"ბოლნისი/BOLNISI" amber shall meet the following requirement:

- Color from dark amber to color of black tea;
- Aroma and taste full-bodied, extracted, with medium acidity and pronounced tannins. It has aroma of ripe and boiled fruit, with notes of dried flowers, spices and dried fruits;
- Alcohol by volume no less than 12%;
- Concentration of finished extract mass no less than 22 g/l;
- Sugar content no more than 4 g/l;
- Titrated acidity, calculated on tartaric acid no less than 4 g/l;
- Volatile acidity no more than 1.2 g/l;
- Total mass concentration of sulfur dioxide no more than 150.0 mg/l.

### 3. GEOGRAPHICAL AREA AND ZONES OF PRODUCTION:

The micro-zone Bolnisi is situated in the South part of Kvemo Kartli, Municipality of Bolnisi, on 570 m above sea level, in the basins of rivers Mashavera and Khrami; it covers large area placed between the North latitude 40° 10′ – 41° 45′ and the East longitude 43° 28′ – 44° 45′; On the East it is bordered with Kvemo Kartli valley (Marneuli district), on the West – with Javakheti volcanic plateau (Dmanisi district), on the North – with Khrami Valley (Tetritskaro district), and on the South – with the Loki Ridge (mountainous area of Armenia).

Micro-zone Bolnisi covers the city of Bolnisi and the following villages: Ratevani, Khatisopeli, Rachisubani, Savaneti, Talaveri, Kvemo Arkevani, Samtredo, Chapala, Zvareti, village Bolnisi, Kveshi, Mushevani, Akaurta, Disveli, Kvemo Bolnisi, Samtsevrisi, Nakhiduri, Tsurtavi, Parizi, small town Tamarisi, Vanati, Kianeti, and Mamkhuti.

### 4. VINE VARIETIES:

"ბოლნისი/BOLNISI" white and amber may be produced only from the following grape varieties, grown in the Bolnisi micro-zone: Rkatsiteli, Chinuri and Goruli Mtsvane (green).

"ბოლნისი/BOLNISI" red may be produced only from the following grape varieties, grown in the Bolnisi micro-zone: Saperavi, Tavkveri, Shavkapito, and Asuretuli Shavi (black).

"ბოლნისი/BOLNISI" rosé shall be produced only from the processed colored-grape varieties, grown in the Bolnisi micro-zone, either from white grape must fermented on red grape marc, or from white and red wines mixes.

No other vine varieties, except the above-listed, are allowed for the production of wine "ბოლნისი/BOLNISI".

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

- Vineyards for "ბოლნისი/BOLNISI" winemaking shall be positioned on 500-800 m above sea level;
- Distance between the rows in the vineyards 1.8 -2.5 m;
- Distance between the vines in the row 1-1.5 m;
- Height of stem 0.5-0.8 cm;
- Shape of pruning one-sided or Georgian two-sided, one-sided or two-sided cordon, or free.

## 6. GRAPE RIPENESS, VINTAGE, TRANSPORTATION:

"ბოლნისი/BOLNISI" shall be produced only from ripe grapes. Sugar content for white, red and amber shall be no less than 20% and for rosé – no less than 19%, at the vintage;

- Grapes transportation is allowed only in wooden or plastic boxes in bodyworks made of stainless steel or painted with a special dye;
- Usage of polyethylene packages and/or bags for transportation is not allowed;
- The grapes shall be maximally protected from possible dirtying at the transportation.

#### 7. VINTAGE- AND WINE PRODUCTION:

Vintage harvest on 1 ha vineyard shall be no more than 10 tons;

Wine production shall be no more than:

- 650 liter from 1 ton grapes;
- 6500 liter from 1 ha vineyard.

### 8. GRAPE PROCESSING, WINEMAKING AND BOTTLING:

Grapes for producing "ბოლნისი/BOLNISI" shall be only originated from the Bolnisi microzone vineyards.

Grapes processing and winemaking shall take place exclusively within the borders of BOLNISI micro-zone, bottling is allowed outside the said micro-zone as well, in the territory of Georgia.

Only intact and ripe grapes shall be used for "ბოლნისი/BOLNISI" winemaking, and the degree of damage shall not be more than 5%.

"ბოლნისი/BOLNISI" is produced by full alcoholic fermentation of grape must or grape marc.

9. LINK BETWEEN EXCLUSIVE QUALITY, REPUTATION AND GEOGRAPHICAL AREA:

CLIMATE -The region is characterized by moderately cold winter and hot summer. Slopes (Kechuti, Sansara and Loki) situated on the West and the South from valley, prevent warm and humid air mass spread from West to South. Concerning the Trialeti slope, it borders the territory from the North and the Northwest.

Kvemo Kartli, particularly the territory of Bolnisi is surrounded by mountains on three sides, due to the influence of atmospheric processes, but because of the local conditions, the processes are changing and forming the specific climate characteristic for this territory.

Based on the meteorological statistical data of the region over the years, average annual temperature is 12°C. The average temperature in the beginning of February is above zero and it reaches up to 5.9°C in March, in the following months temperature rises and reaches its maximum in July. The warmest months are July and August; average monthly temperature is 23.6–23.3°C. The coldest month is January and it is characterized with below zero degrees (-0.3°C). The frosts are unstable. First frosts appear from 12th of November and end by 4th of April. Frosty period lasts for 120–144 days, and the number of frost-free days reaches 210–221 days per year.

The annual index of precipitations in the territory of Bolnisi is 700 mm. Winter is snowy, but the snow is usually unsteady.

The snow starts to fall in December and may end for the first half of March. Based on the data of many years, average height of snow cover is 6 cm.

Absolute minimum temperature in the area is quite low, which is caused by the flow of the arctic masses both from the East and the West. Absolute maximum temperature is quite high, especially in summer (36-39°C).

The maximum amount of precipitations falls in May and June (80-86 mm), and minimum - in December and January (20-25 mm). The amount of precipitation (152-166 mm) in the cold

period is small and reaches only 28-29% of the annual sum, which fails to provide significant supply of the soil humidity. In spring the amount of precipitation is higher (183-196 mm), which has a positive influence on the grape quality.

SOIL – Bolnisi micro-zone is characterized by meadow brown and meadow alluvial soils, which are found on both sides of the Mashavera river, mostly on the plain and weakly sloping relief.

HUMAN FACTOR – As is substantiated scientifically and known from historical materials, Georgia is one of the first countries where as early as in the Neolithic period, human "cultivated" and "domesticated" wild vine; Georgia, including Bolnisi region is linked with the wine culture by the continuous history of 8000 years, proved by archeological (clay Qvevris (wine jars), gold and silver bowls) and ethnographic materials, written sources, terminology and songs.

Viticulture had a significant role in the everyday life and economic well-being of ancient Georgia. It occupied a major place in foreign trade, as Georgian wine had always been the product to export. It was mentioned by academician Ivane Javakhishvili in V volume of his works on viticulture history and traditions in Georgia, including Bolnisi region.

The high professional level of ancient viticulture and winemaking is obvious from ornamental artistic works, monuments of culture, ethnographic and literary sources, folk stories and customs of Bolnisi region. Exactly during the archeological excavations in Bolnisi on "Arukhlo settlement site", the grape seeds were discovered dated to VI millennium B.C. and exactly in Bolnisi, its adjacent territories and Borjomi region, the ancient wine cellars of IV-III millennia B.C. were discovered. as well as ancient clay jars – Qvevris for wine storage, including thermos-like, double-walled Qvevris, presumably intended for thermal treatment of wine, which in itself is one of the unique phenomena worldwide.

Ivane Javakhishvili in his twelve-volume work often mentions winemaking in Bolnisi region and gives us extensive information about wine name, characteristics, origin and amount, particularly:

- It is obvious from the typicon fragment of a monastery of the 9th-10th centuries situated nearby Bolnisi that at the monastery the wine made from "Babilo" (grape alley) was kept separately in "Babilo Tchuri" (wine jar). It is clear from the same fragment that back to times of Queen Tamar the grapes white, green and dark-red were picked and pressed separately in Bolnisi. In the words of Giorgi Mtatsmindeli, wines produced in Bolnisi were divided in 3 categories: "light wine", "medium" and "the best wine" of excellent qualities, "good wine".
- In the 13<sup>th</sup>-14<sup>th</sup> centuries, due to the systematic Mongolian, Persian and Ottoman invasions and wars, the population of Bolnisi was exterminated or migrated. Accordance to Armenian historical sources, only Saperavi and green grapes were spread here during that period.
- From the beginning of the 17<sup>th</sup> century, in the Orbelianis family records the amount of vineries and harvests in 1619 and 1620. Based on these figures, it is seen that in 1619 they made 778 "sapalne" wine (1 sapalne 96 liters), and in 1620 808 "sapalne", from the vineries of the villages: Mukhrana, Balakhauri, Shua Bolnisi, Tsughrughasheni, Kvemo Bolnisi, Chapala, Potskhveriani, Disveli and Zvareti.

In Bolnisi micro-zone, vineyards are mostly laid out on alluvial and meadow brown soils, which in combination with the local climatic conditions is very favourable for viticulture and gives wine its rich taste and complexity.

The south, southeast and southwest exposure of white and red vine varieties vineyards, the large number of sunny days balanced by precipitation in combination with medium- and high-humus and fertile soils, results in the best ripening of grapes and stems.

The accumulated anthocyanins and other polyphenols, normal acidity and sugar content give the wine balanced and complex aromas: in white wines – lemon and banana, in red wines – cherry, plum and blackberry, in rosé wines – black berries of the forest and pepper, and in amber wines – ripe fruit, spices and dried fruit aromas.

Thus, the geographical location of micro-zone Bolnisi, characteristic climate of the region, soils favourable for wine grapes produced here and the centuries-old, local tradition of viticulture and winemaking determine the above-mentioned organoleptic features characteristic for wine "ბოლნისი/BOLNISI".

## 10. Control

Control of "ბოლნისი/BOLNISI" compliance with specifications shall be carried out by LEPL – National Wine Agency.