KINDZMARAULI

NUMBER OF REGISTRATION: 787

DATE OF REGISTRATION: 30/03/2006

APPELLATION OF ORIGIN: KINDZMARAULI

GOOD FOR WHICH REGISTRATION IS REQUIRED: Wine

NAME AND ADDRESS OF APPLICANT: LEPL - National Wine Agency; Marshal Gelovani Av. 6, 0159, Georgia, Tbilisi

1. NAME: "KINDZMARAULI"

2. ADDITIONAL SIGNS:

3. TYPE, COLOR AND MAIN REQUIREMENTS:

"Kindzmarauli" is red, naturally demi-doux (semi-sweet) wine, which shall satisfy the following requirements:

- Color – dark red;
- Aroma and taste – perfect, harmonised, velvet, refined, pleasantly sweet, with fruity tones, having taste and aroma of Saperavi grapes;
- Volumetric spirit content – no less than 10.5 %;
- Concentration of finished extract mass – no less than 22 g/l;
- Sugar content – 18-45 g/l;
- Titrated/Volatile acidity – no less than 5 g/l;
- Other characteristics shall meet requirements provided by the legislation of Georgia

4. SPECIFIC ZONE AVAILABLE AREAS

The micro-zone Kindzmarauli is located between Kvareli municipality administrative borders, on the South slopes of one branch of Caucasus Mountains, on the coordinates – 41°30' of Northern longitude and 45°50' of Eastern latitude.

5. VINE VARIETIES

Wine "Kindzmarauli" shall be prepared from the grapes of Saperavi and/or Saperavi-Budeshuri-like, vintage takes place in the micro-zone Kindzmarauli.

6. VINEYARD CULTIVATION, SHAPE OF PRUNING AND CARE:

- The micro-zone "Kindzmarauli" vineyards for wine Kindzmarauli is situated on 250-550 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:

- "Kindzmarauli" shall be produced only with ripe grapes.Sugar content shall be no less than 22%, at the vintage;
- Grapes transportation is permitted only with wooden or plastic boxes, with bodyworks made of stainless steel or painted with special colour;

- 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 10 tons.

Wine production shall be no more than:

- 650 liters – from 1 ton grapes;
- 6500 liters – from 1 ha vineyard.

9. GRAPE PROCESSING, WINEMAKING AND BOTTLING

Grapes for producing wine "Kindzmarauli" shall be only from the vineyards cultivated in the micro-zone "Kindzmarauli", usage of about 15% Saperavi grapes brought from outside of micro-zone, but within Kakheti region, is allowable.

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

At the same time, the grapes can be got from the micro-zone Kindzmarauli and the wine can be withdrawn from Kakheti viticulture zone only under strict accounting and control.

"Kindzmarauli" shall be prepared by uncomplete fermentation of must. In the production of wine "Kindzmarauli" it is permissible to use only the operations, materials and substances provided by the legislation of Georgia.

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

10. LINK BETWEEN EXCLUSIVE QUALITY, REPUTATION AND GEOGRAPHICAL AREA

The Western part of the micro-zone Kindzmarauli, from the right side of the River Duruji, is relatively inclined towards the South-West, with slightly waved surface and the rest of area is flat land directed from the East to the South.

CLIMATE – Weather formation in the micro-zone "Kindzmarauli" is caused by atmospheric processes developed in subtropical and moderate areas and moved from the East and West longitudes. Mostly there are prevailing the North-Western and South-Eastern winds, because of open gorge from the South-East and close from the South. Winds speed is not great because of close gorge. The climate in the micro-zone is moderately humid, with warm long-term summer and mild winter.

Vineyards are located mainly on 2-3° inclined Southern slopes. Position of sun varies within 60-70° and 40-50° at grape maturity. Sunshine duration is 2050 hours.

The total number of cloudy days is 20-18 with 8-10 points at grape maturity, and of clear days (0-2 points) it reaches 15-16, per year.

In addition, disposed on the Southern inclined foothills the atitudinal gorge main agro-climatic factors such as: sun radiation, heat rate, moderate summer temperature, enough humidity of the location create favorable conditions for high quality production with Saperavi grapes.

Daily temperature on the surfaces of black stony plates brought by the River Duruji is high and on 3-5°C that is more than temperature of alluvial, free from carbonates soils of bordering forest.

Black soil has less opportunity (15%) to reflect sun energy fallen on its surface. As a result of more energy absorption, soil temperature is increased.

Average annual air temperature of the micro-zone "Kindzmarauli" is 12.5°C, the average temperature of warm months (VII-VIII) is 23,6°C, and in the coldest month is + 1,0°C. Based on the annual data, Average annual air absolute minimum temperature varies within -10, -11°C, average absolute maximum is 350°C, and extreme temperatures are - 23 and + 38°C. In the spring, the average air temperature is above 10°C at 5.IV. Falling below the 10°C takes place in the autumn, at 4.XI. i. e. the warm period duration is 212 days.

Saperavi buds opening begins in mid-April (from 15.IV), flowering – in late May, grape maturity – in the second half of August (from 20.VIII), and grapes tech maturity – at the end of September.

In the micro-zone "Kindzmarauli" the first frosts start from 21.XI, and once in 10 years may begin in the last days of October. The last spring frosts are stopped averagely in 26.III, and may be continued till mid-April once in 10 years. Duration of non-freezing period in the zone is 239 days.

In the micro-zone, active temperature varies within 4100-3700°C on 350-550 m above sea level.

Annual sum of atmospheric precipitations is 1070 mm in the micro-zone Kindzmarauli, and 800 mm in the vegetation period.

Annual air relative humidity is 72%. It is less (66-64%) in summer months (June, July, August), and more at the end of autumn (80%) and early winter.

Snow cover is formed in the last decade of December (25.XII), and melting – in mid-March. Snowy days are not more than 21° in winter.

Snow cover is unsustainable in the micro zone, 87%.

Number of hailing days is averagely 2,1 per year. May is the most hailing month of the year (0,9 days); In April, June and July, separately, hail does not exceed 0.3 days.

In the micro-zone, the Western (23%) and South-Eastern (17%) winds are prevailing. In average, windless days are 31%, per year. Wind speed is enhanced by mountain-gorge winds formed here. The micro-zone of Alazani Gorge belongs to III Group of wind impact.

SOIL – On the basis of researches and materials conducted in 2005, there are distinguished two varieties of alluvial soils, with nine sub-varieties, and two varieties of deluvial soils, with nine sub-varieties, particularly:

1. Alluvial, free from carbonates, very thick, loam;
2. Alluvial, free from carbonates, very thick, slightly leptosol, loam;
3. Alluvial, free from carbonates, very thick, moderately leptosol, moderately loam and slightly clay;
4. Alluvial, free from carbonates, very thick, hard leptosol, loam;
5. Alluvial, slightly carbonated, very thick, loam;
6. Alluvial, slightly carbonated, very thick, slightly leptosol, loam;
7. Alluvial, slightly carbonated, very thick, moderately leptosol, loam;
8. Alluvial, free from carbonates, very thick, very moisture soil and bog, clay and loam;
9. Alluvial, slightly carbonated, very moisture soil and bog, clay and loam;
10. Deluvial, free from carbonates, very thick, loam;
11. Deluvial, free from carbonates, very thick, slightly leptosol, loam;
12. Deluvial, slightly carbonated, very thick, clay;
13. Deluvial, slightly carbonated, very thick, slightly leptosol, loam, clay;
14. Deluvial, slightly carbonated, very thick, very moisture soil, clay.

First ten varieties of said alluvial soils are disposed on second terrace of the River Alazani, and are characterized mainly with flat relief, while the 11^{th}, 12^{th}, 13^{th} and 14^{th} varieties of deluvial soils are presented on the Southern foothills of Caucasus directly bordering the slopes, on 400-500 m above sea level, these areas are creating slightly inclined trails towards the Southern and South-Western directions.

First ten varieties of alluvial soils are characterized with deep profiles, and are different from each other with range of leptosol and mechanical content, carbonate content, moisture and bog. First seven therefrom have deep profiles of 1-1,5 m thickness, and active humus layer is 50-70 cm., mechanical content mostly is loamy, can be slightly clay or slightly loamy and sandy in some genesis horizon. Furthermore, said soils are different with range of leptosol and stone content, prevailing on new terraces and banks of rivers. The 8^{th} and 9^{th} varieties of soils are very moisture or bogy on small areas, on lowlands, along flowing waters, and loamy and clay with their mechanical content.

Soil-producing rocks in first nine varieties of soils are consist basically with alluvial, loamy-stony and sandy-stony layers having destructed materials originated from the slopes of the Southern slopes of Caucasus, and which are black stone plates originated from sea, and have great capability to absorb heat and have great influence on temperature regime that is favorable to increase grape sugar content and product quality.

The 10^{th} –14^{th} varieties of soils are deluvial and developed on loamy and loamy-sandy layers of deluvial-proluvial origin, characterized with very deep profile of 80-150 cm thickness, active humus layer is 50-60 cm, and different from each other with range of mechanical content, leptosol, carbonate content and moisture. The 10^{th} – 11^{th} varieties of soils are free from carbonates and loamy, as well, 11^{th} is slightly leptosol, also. The 12^{th}, 13^{th} and 14^{th} – slightly carbonated, clay, and loamy, the 13^{th} is slightly leptosol and 14^{th} is very moisture. In accordance of data from analysis, said soils are mostly loamy, and slightly clay as exceptions. Humus content is average and 5,5-2,5% in 50-70 cm depth and decreases bellow to 2,5-0,5%. Hydrolyzed nitrogen content is small or average – 9,36-2,24 mg in 100 g soil. Mostly, it is poor with soluble phosphorus and represented as a trace. Changeable potassium content is low, as well – 17,0-2,0 mg in 100 g soil. The first, 2^{nd}, 3^{rd}, 4^{th}, 8^{th}, 10^{th} and 11^{th} varieties of soils don’t contain calcium carbonates, and in 5^{th}, 6^{th}, 7^{th}, 9^{th}, 12^{th}, 13^{th}, and 14^{th} -s, it is in small amount – varies within 0,2-5,0%.

Soil area reaction is neutral and slightly alkaline – pH is 5, 8-7,6.

HUMAN FACTOR – In Kvareli viticulture and winemaking fields developed in a different way as compared with Tsinandali, Napareuli and Mukuzani. Here the vineyards were not included in the Princes Estates, and therefore, they had not the positive influence playing a major role in the growth of the quantity and quality of these fields in the said estates.

Until 1942 there was not a perfect technology "Kindzmarauli" production, ensuring wine stabilization and keeping its sweetness for a long time. Therefore, the wine was made by the farmer method, during which the alcoholic fermentation stopped because of autumn-winter coldness and continued with spring warming. Consequently, "Kindzmarauli" production was not stable.

From 1942 implementation of the special resolutions of the Government began, which envisaged elaboration of new technologies, technical re-equipment of the enterproises and use of cooling method for semi-sweet wine production.

Wine "Kindzmarauli" is produced since 1942.

Among export wines, "Kindzmarauli" is one of the most demanded. In 2014, 9,3 million bottles of "Kindzmarauli" were sold at international markets, which is 15.8% of total exports and 49% – of the sold PDO Wines.

"Kindzmarauli" has participated in numerous competitions and exhibitions and until 1990 received eight medals.

Geographical location of micro-zone Kindzmarauli – the microclimate formed under the influence of foothills bordering on the high Caucasus Mountains from the South, leptosol soils developed on black stone plates brought by rivers, favorable heat regime created in the vineyard and the unique features of Saperavi and/or Saperavi Budeshuri-like vine varieties, ecological plasticity and local, centuries-old traditions of viticulture and winemaking determine the specific taste features of high-quality, naturally semi-sweet wine "Kindzmarauli".

11. SPECIAL LABELING RULES

With Latin font – KINDZMARAULI

Protected Designation of Origin and/or PDO

Cyrillic font – КИНДЗМАРАУЛИ

Защищённое наименование места происхождения

12. ACCOUNTING AND NOTIFICATION

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

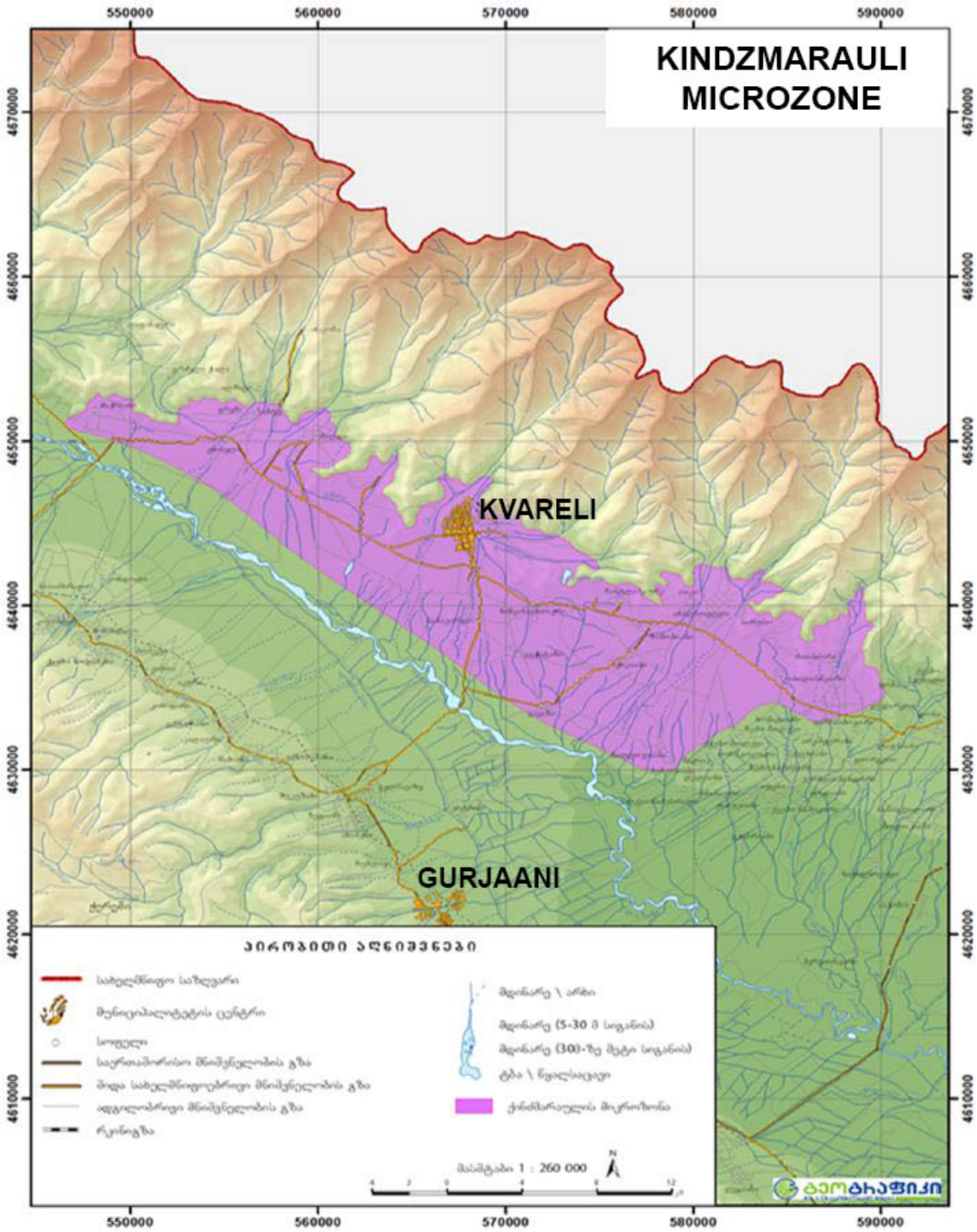
13. MAIN CONTROLLABLE POINTS

During control of the PDO wine "Kindzmarauli" 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.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ტბა \ წყალსაცავი
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