

“TIBAANI”

WINE OF APPELLATION OF ORIGIN

Geographical location. The specific zone of “Tibaani” is located in Inner Kakheti, in the eastern part of the right bank of the Alazani lowland, on the southern-eastern plain of Gombori Ridge, in Signagi Region, with the coordinates of North latitude $41^{\circ}35'$ and East longitude $46^{\circ}00'$. The absolute altitude of the areas to be cultivated as vineyards is 350 to 550 m above sea level. The area includes the villages of Tibaani, Kvemo Machkhaani and a part of Dzveli Anagi.

Climate. The climate is moderately humid subtropical here, with hot summer and moderately cold winter, with two minimums of precipitations during the year.

Average annual air temperature in the vine-growing area is quite high reaching $12,4^{\circ}$. Average temperature of the warmest month is $24,2^{\circ}$, and the average temperature of the coldest month is approximately $+1,0^{\circ}$.

A stable transition above the average daily air temperature of 10° takes place in the first pentade of April (5.IV), and the fall takes place at the beginning of November (3.XI). Duration of the period with the temperature more than 10° is 212 days. Sum of active temperatures ($\Sigma t > 10^{\circ}$) is 4100° on average. In 95% of years, total of active heat exceeds 3800° . Once in every 10 years, its amount approximates 4000° seven or eight times a year. The annual duration of sunshine is 2200-2300 hours, with 1500-1700 hours during the vegetation period.

The amount of precipitations is less than that in the micro-zones of Outer Kakheti to West. The annual total amount of precipitations here equals to 636 mm. Average monthly amount of precipitations is the greatest in May (105 mm) and is the least in the months of December-January (25-26 mm). The amount of precipitations during the vegetation period is 464 mm.

The number of the days with hail (IV-X) is 1,6 on average. In the rest of the year, hail is a rare event. It hails relatively more often in May (0,7 days).

The sum of precipitations falling in the months (IV, V, VI and X) of the warm period of the year significantly exceeds their evaporation rate and therefore, vineyards need no irrigation during these periods.

In July and August, hydrothermic coefficient is less than 1, i.e. the amount of precipitations is less than that of their evaporation and it is drought. Duration of the drought is 72 days on average. Drought starts in the first pentade of April and ends in the middle of September.

In Kakheti winds primarily blow along the Alazani gorge. Northern-western (29%), western (19%), eastern (17%) and northern-eastern (10%) winds prevail here.

Average annual wind speed in the specific zone does not exceed 1,0 m/sec. Therefore, the area belongs to the wind activity zone and a principal 4-row forest windbreak should be planted by considering the winds of western and eastern directions.

Spring night frosts end towards the end of March (31.III). First autumn night frosts start in the second decade of November (12.II). Frost-free period lasts for 225 days.

The average of annual absolute minimums of air temperature is -11, -12°C. Once in every 10 years, minimum winter temperature may fall below -16, -17°C. The absolute minimum in the zone is -24, -25°C, but such cases are very rare.

Soils. The areas to be used for vineyards are located at the foot of northern-eastern slopes of southern-eastern part of Tsiv-Gombori mountains. They are adjacent to the southern part of the Alazani Valley, which is the aprons and slopes on the right terrace of the river Alazani slightly inclined north-eastwards.

Extreme southern part contains Chernozem, and northern and western parts contain more the varieties of alluvial and dealluvial-proalluvial soils, which differ from one another with the thickness of profile, texture and skeleton-texture.

Thickness of the profile of the mentioned soils is mainly 0,8-1,5 m, and the thickness of active humus-containing layer is 40-60 cm.

According to texture, these soils are mainly attributed to heavy loamy and light clay types; in some sections, the soils (mainly proalluvial) are attributed to the average and light loamy types. The content of physical clay (with the fraction of $<0,01$ mm) mainly in Chernozem, alluvial and dealluvial soils varies within the limits of 40-75%, and of 20-45% in proalluvial soils. Soils contain calcium carbonates in average and little quantities, amounting to 2-20%, with greater content in some sections. The reaction pH of the soil area is weak or average alkaline and its indicator varies between 7,4 and 8,2.

The humus content in the profile of Chernozem is mostly 4,5-0,5%, and that in alluvial, dealluvial and proalluvial soils is mostly 2,5-0,3%, in exceptional cases even reaching 3,0%.

The content of hydrolysis nitrogen is mainly low varying between 6,0 and 2,5 mg in 100 gr. of soil, with 7-10 mg in exceptional cases. The content of soluble phosphorus is either average or low varying between 5,0-1,5 mg, represented as a trace only in some sections. The content of exchange potassium is also low or average. Sum of absorbed bases (Ca+Mg) is characterized by average or high indicators and its content in the active soil layer is 20,0-45,0 milliequivalents, reaching even higher indicators in exceptional cases. One per cent of the sum is absorbed calcium, and the content of magnesium is relatively low, but anyway presents in significant quantities.

Agro-technical regulations

The following agro-technical regulations should be observed to produce wine "Tibaani" by considering soil and climatic conditions:

Species of "Rkatsiteli":

Growing area: Up to 300-350 m above sea level.

Plot of planting: 2,0 x 1,5 m; 2,5x 1,5 m;

Height of stem: 80-100 cm

Form of pruning: Free and Georgian two-sided trellis.

Norm of loading per 1 m²: 8-10 buds.

Harvest: 9-10 tons per hectare.

Soil cultivation

Autumn and spring plough of soil, with minimal land cultivation. Moisture-preservation measures- preserving the soil surface in a loose state (cultivation, milling, mulching). In the irrigation area the last irrigation cycle of vegetation is to be ended one month before the vintage starts.

Fertilization

Application of organic-mineral fertilizers under cartographic regulations.

Phyto-sanitary regulation

Principal diseases: Mildew, powdery mildew, rot.

Pests: Ticks, western grape worm, mealybug.

Control measures: Applying contact and systematic preparations registered in Georgia.

Economic-technological characterization of “Rkatsiteli”

“Rkatsiteli” – Georgian wine species of white grape giving high-quality production, with an average growing ability, abundant harvest, with the average or late than average ripening period. The average weight of a bunch is up to 160-250 gr. The fully ripened grape becomes of a beautiful color with a pinkish-bronze tint. It is quite pulpy and juicy, with pleasant sweet species-specific aroma.

Sugar content of ripe grape reaches 220-240 gr/dm³, with the constant acidity of 5-6 gr/dm³. Average harvest to gain high-quality wines does not exceed 9-10 tons per hectare.

Wine “Tibaani” is controlled premium-quality dry white wine of geographical appellation. It is produced with the grape of species “Rkatsiteli” with fully stopped must.

Wine “Tibaani” is characterized with dark amber colour, with species-specific aroma, extractability, velvet taste and raisins tones.

Chemical characteristics of the wine “Tibaani” should correspond to the following indicators:

Volumetric spirit-content, % - 11,5-13,0

Mass concentration of sugars no more than 4 gr/dm³

Titrated acidity – 5,0-6,0 gr/dm³

Volatile acidity of no more than 1,2 gr/dm³

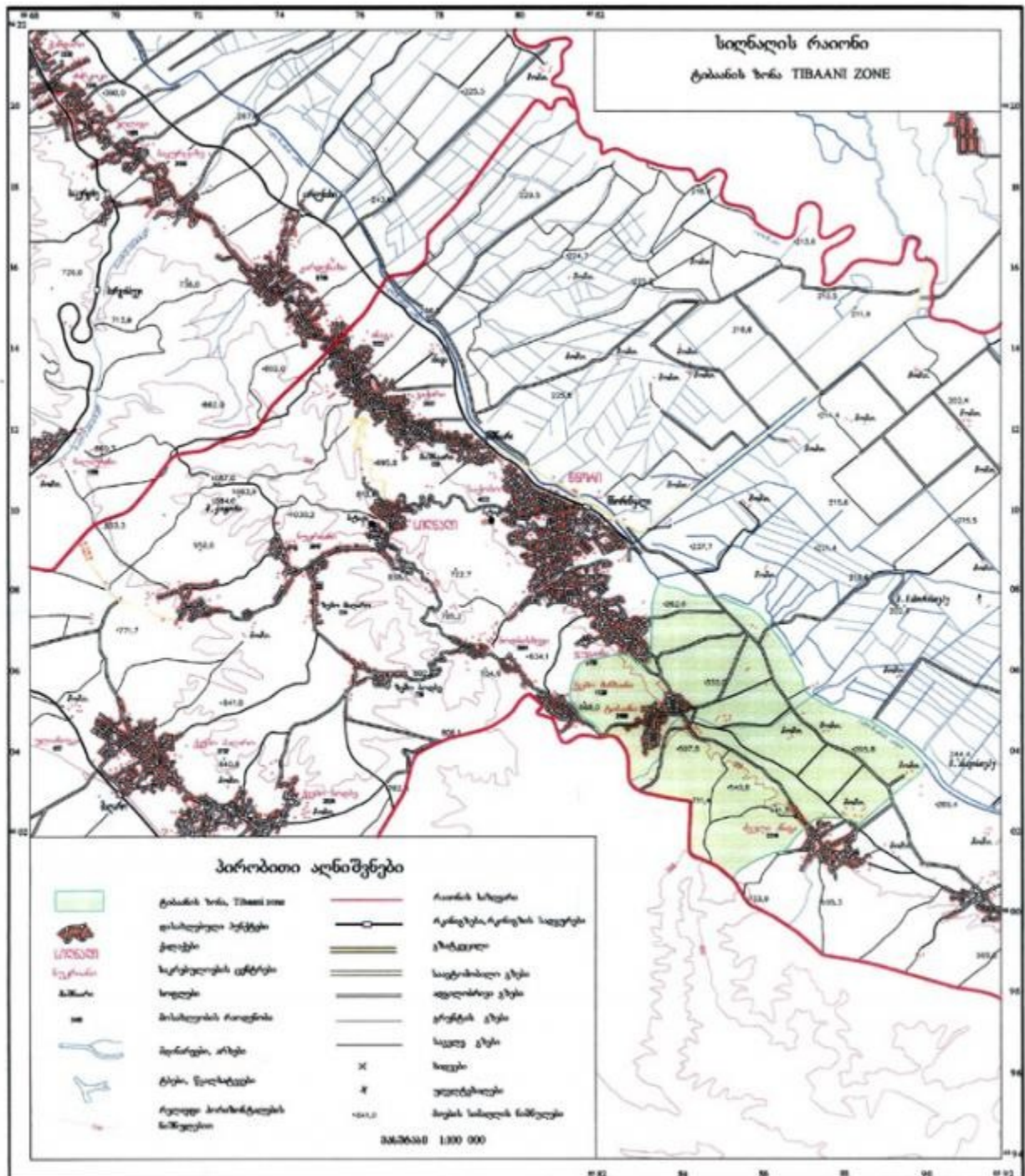
Mass concentration of finished extract of no less than 18 gr/dm³

The rest norms should correspond to the legislative acts of Georgia and the EU Directive No. 1493/1999 of May 17, 1999.

Area of specific zones

The area of the specific zone of “Tibaani” is approximately 28 km².

The climatic conditions, moderately humid subtropical climate, the location of vineyards at the foot of southern-eastern and northern-eastern part of Tsvi-Gombori mountains, the originality of indigenous species “Rkatsiteli” and the ancient rule to make wine in the wine clay-pitches make for special features of “Tibaani” wine.



Source :
National intellectual Property Center of Georgia

<http://www.sakpatenti.org.ge>