

# **TECHNICAL SPECIFICATIONS FOR REGISTRATION OF GEOGRAPHICAL INDICATION**

## **1. NAME OF THE GEOGRAPHICAL INDICATION**

Chinese name: 烟台葡萄酒

Transcription in Latin characters: Yantai Pu Tao Jiu

Translation for information purposes: Yantai Wine

## **2. CATEGORY OF THE PRODUCT FOR WHICH THE NAME IS PROTECTED**

Wine

## **3. APPLICANT**

Name: Yantai Municipal Government

Address: No.6, Furong Road, Laishan District, Yantai City, Shandong Province. PRC,  
264003

## **4. PROTECTION IN CHINA**

Date of Protection: August 28<sup>th</sup>, 2002

Proof of protection: General Administration of Quality Supervision, Inspection and  
Quarantine of the People's Republic of China (AQSIQ), Notice (2002) No.83

## **5. DESCRIPTION OF PRODUCT**

Product requirements: Yantai Wine is made from grapes grown in Yantai region, whose  
percentage is at least 85%.

### **(1) Varieties of Yantai Pu Tao Jiu (Tantai Wine)**

①Red wine: The main red grape varieties used for Yantai Red Wine production are  
as follows: Cabernet Sauvignon、Cabernet Gernischet、Cabernet Franc、Gamay、  
Merlot、Petit Verdot、Pinot Noir and Syrah, etc.

② White wine: The main white grape varieties used for Yantai White Wine production are as follows: Chardonnay、Italian Riesling、Petit Manseng、Chenin Blanc、Gewurtztraminer、Muscat Blanc、Pinot Blanc、Pinot Gris/Grigio、Sauvignon Blanc、Sauvignon Musque、Semillon and White Riesling, etc.

③ Rose wine: The main grape varieties used for Yantai Rose Wine production are as follows: Cabernet Sauvignon、Muscat Hamburg、Pinot Noir、Syrah、Merlot and Cabernet Franc, etc.

## (2) Sensory Characteristics and Physicochemical Indexes

### ① Sensory Characteristics

Wines should meet the requirements in Table 1.

Table1 Sensory Requirements of Fermented Wines

| Items      | Requirements  |   |  |
|------------|---|---|--|
|            | Red Wine  | White Wine  | Rosé wine  |
| Appearance | Purplish red, crimson, ruby red, or brownish-red; clear, glossy and having no obvious suspending solids | Nearly achromatous, yellowish green, light yellow, straw yellow or golden; clear, transparent, glossy and having no obvious suspending solids | Pink, light rose, or light red; clear, transparent, glossy and having no obvious suspending solids |
| Aroma      | Having the aroma of blackcurrant, black pepper, small berries, violet flowers, etc.                     | Having the aroma of lemons, apples, strawberries and small berries.   | Having the aroma of flowers and fruits, linden flowers, etc.                                       |
| Flavor     | Mellow, harmonious,   | Gentle, clear and refreshing  | Smooth and pure  |

## ②Physicochemical indexes

Wines should meet the requirements in Table 2.

Table 2 Physicochemical Requirements of Fermented Wines

| Items   |            | Requirements |
|---|------------|--------------|
| Alcoholic strength (20℃)/(%) (volume fraction) $\geq$   |            | 10           |
| Sugar-free extract/(g/L)..... $\geq$  | White Wine | 17.0         |
|   | Rose Wine  | 18.0         |
|   | Red Wine   | 19.0         |
| Volatile acid(in terms of acetic acid)/(g/L)..... $\leq$  |            | 0.9          |
| Notes: The difference between label value and measured value of alcoholic strength cannot exceed $\pm 1.0\%$ (volume fraction). |            |              |

## 6. CONCISE DEFINITION OF THE GEOGRAPHICAL AREA

The boundary of geographical region: It is within the jurisdiction of administrative area of Yantai.

Specific production steps:

(1) Red wine: Grapes are macerated and fermented after being picked, sorted, destemmed and crushed. The fermentation temperature should be controlled within  $25^{\circ}\text{C} \sim 30^{\circ}\text{C}$  and the fermentation period lasts for 7d~15d. When the sugar degree falls to the regulated extent, conduct separation and transfer another tank and then perform malic acid—malolactic fermentation. Separation, clarification, storage, stability treatment and sterile filtration go after malic acid—malolactic fermentation. Fresh wine should be stored for less than 24 months and aged wine should be stored

in oak barrels for more than 24 months.

(2) White wine: Grapes are clarified at low temperature, separated and fermented after being picked, sorted, and pressed. The fermentation temperature should be controlled within  $16^{\circ}\text{C}\sim 20^{\circ}\text{C}$ , and fermentation period lasts for 10d $\sim$ 20d. When the sugar degree falls to regulated extent, separation, tank transfer, clarification, storage, stability treatment and sterile filtration are conducted successively. Fresh wine should be stored for less than 18 months and aged wine should be stored in oak barrels for more than 18 months.

(3) Rosé wine: Grapes are macerated after being picked, sorted, destemmed and crushed. The maceration temperature should be controlled within  $24^{\circ}\text{C}\sim 26^{\circ}\text{C}$  and the period lasts for less than 48h. When the color meets specified requirements, remove the skins and dregs, and conduct fermentation by inoculating. The fermentation temperature should be controlled within  $16^{\circ}\text{C}\sim 20^{\circ}\text{C}$ , and fermentation period lasts for 7d $\sim$ 15d. When the sugar degree falls to specified extent, separation, transfer another tank, clarification, storage, stability treatment and sterile filtration are conducted, successively.

The process of grape growing and wine producing is carried out within the administrative region of Yantai.

## **7. LINK WITH THE GEOGRAPHICAL AREA**

Yantai is located in the eastern part of Shandong Peninsula and is located at east longitude  $119^{\circ}34'\text{—}121^{\circ}57'$ , north latitude  $36^{\circ}16'\text{—}38^{\circ}23'$ . It borders on the Yellow Sea and the Bohai Sea and administers seven cities, five districts and one county. It has a total area of 13,700 square kilometer, of which mostly are mountains and hills accounting for 76.3% of the city's total area. Grapes grow mainly on mountains and hills. Due to its warm temperate continental monsoon climate, there are four distinct seasons and the monsoon advances and retreats obviously. Compared with the same latitude inland, it has several characteristics such as mild climate, abundant sunshine, moderate rainfall and moist air. The quality of Yantai Wine is closely related to its environmental conditions.

(1) Temperature conditions: The annual average temperature of the whole city is  $11.1^{\circ}\text{C} - 12.6^{\circ}\text{C}$  and the annual mean frost-free period is 215 days. The annual active accumulated temperature above and equal to zero is  $4,424.8^{\circ}\text{C}$ ; and that above  $10^{\circ}\text{C}$  is  $3,924.7^{\circ}\text{C}$ . The annual active accumulated temperature above  $10^{\circ}\text{C}$  in grape growing season is  $3,228^{\circ}\text{C}$ , which is within the proper temperature range of grape growth. Influenced by marine climate, it is not bitterly cold in winter or blistering hot in summer so that there is no need to cover grape roots with soil to protect them against cold.

(2) Precipitation: The annual average precipitation of the whole city is 735 millimeters and the annual relative air humidity is 70.5%. The characteristics of precipitation is its uneven distribution during the year. The average precipitation is 108.6 millimeters in spring and 443.5 millimeters in summer. The average precipitation in autumn is little and it is 150 millimeters. The hydrothermic coefficient is 1.48 in grape growth period and it is lower than that in premium vintage areas and it is less than the standard 1.50.

(3) Sunshine conditions: The annual average sunshine of the whole city is 2,658 hours and the annual percentage of sunshine is 60%. During the growing period of the grape, the annual average sunshine duration in May is 278 hours, which is the longest. The annual total solar radiation is  $5,155 \text{ MJ/m}^2$  on average. Rich solar radiation during the grapes' production period is beneficial to the growth and development of grapes and the formation of high-quality fruits. In particular, there is abundant sunshine, cool climate and rare rainfall in fruit maturation period (September and October) and it is good for the grapes' slow and full ripening so as to accumulate more macromolecular compounds (such as pigments, phenolic compounds, aroma-producing substances, etc.). The macromolecular compounds are the basis of making high-quality wines because they make wines fragrant, bright, soft and mellow.

(4) The soil conditions: Most of the soil in Yantai is brunisolic soil, accounting for 80.69% of the total area. Composed of weathering residues of mica schist, brunisolic

soil has fine and soft texture and good arability. The topsoil is caesious gravelly loam which is rich in glittering crystalized pieces of black mica. The soil has strong permeability and high mineral content, making the grape roots develop extremely well. What is more, the soil is very sensitive to temperature, absorbing and releasing heat quickly. Therefore, the temperature difference between day and night is large and it is beneficial to the grapes' full accumulation of nutrients. Grapes here have high sugar content, dark color and moderate acidity.

**8. SPECIFIC RULES CONCERNING LABELLING AND USING (IF ANY)**

None

**9. CONTROL BODY / CONTROL AUTHORITY RESPONSIBLE FOR CHECKING THE RESPECT OF THE PRODUCT SPECIFICATIONS**

General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China (AQSIQ)