Development of the Chinese wine industry and the recent progress in Wine Research Center of CAU

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Wine History of China

- 2100 years ago, Chinese began to grow grape and make wine.
- 140BC-88BC, *Vitis vinifera* grape introduced into China.
- In Tang Dynasty (618-907), there was lots of artificial works and literature on wine in China.
- 1892: Yantai Changyu winery set up, a sign of beginning of Modern wine industry.
- 1980s-: A new stage.
Main region

- Shandong, 41.5%
- Hebei, 18.1%
- Tianjin 9.3%
Potential region

- Gansu
- Xinjiang
- Ningxia
- Beijing
Main Grape varieties

- Cabernet Sauvignon, Cabernet Gernischet, Merlot, Rose Honey
- Chardonnay, Riesling, Italian Riesling, Muscat Hamburg, Longyan, Shuijing
Varieties originated in china

- Longyan
- Bei Chun
- Bei Hong
- Bei Mei
- Bei Quan

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Sum of wineries in China

- 1995, 240;
- 2008, 600.
Average consumption of main wine country
Evolution of degree of wine self-sufficiency
The absolute difference and relative difference between export and import of wine in represent countries
The consumption value and consumption share of the local wine and export wine in Chinese market
From 2004, Wine tariff reduced from 65% to 14%. More foreign branded wine imported into China.
Evolution of wine export and wine export share of represent countries in Chinese market

chart
Importing
Fig. 3 Evolution of international competitiveness of wine industry in represent countries during 10 years
产业发展规律模拟示意图
Yield of China Wine
General Situation of Wine Consumption in China
Research work
Research field

Viticulture and Varieties:

- Relationship among the grape varieties, ecology and enology;
- Introduction, selection, planting and zoning of grape varieties under the condition of special climate in China.
Research field

Grape Physiology and Molecular Biology:
Ecological physiology;
Stress physiology;
Biochemistry: synthesis, transportation, accumulation and metabolism of sugar, polyphenol and fragrance of vintage grape.
Enology:

- Fundamental rule of enology;
- Optimizing of the method and technology parameter of fine wine production. Focus on studying the inner relationship between a piece assistant ingredient and the quality of wine.
- Changing and controlling principle of the key components in wine by changing the fermentation method, storing environment, aging method and stabilization measure.
Red wine

White wine
Research field

Wine Chemistry and the Wine Quality Control:
Chemical constitution and nutrition of wine on the molecular level;
Chemical and biochemical change during wine production. Such as sugar, organic acid, polyphenol and flavour substrate ..... Analysis and detection principle during wine production;
Theory and means of quality control;
Test and control of wine sanitation standard.
Fig. HPLC chromatogram of 3 flavan-3-ols, and proanthocyanidin cleavage products

1, CAT; 2, EC; 3, ECG; 4, EGC-P; 5, C-P; 6, EC-P; 7, ECG-P;
Research field

Sensory evaluation and Marketing
Others

- Engineering of wine;
- Genomics of Grape;
Welcome to China!
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