

## **Terroir in Slovak viticulture area**

### **Les terroirs viticoles slovakes**

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#### **Abstract**

Terroir method has been used for assessment of growing site in the world for years. In Slovakia actually regionalisation is used as the similar method which does not cover all the elements of wine quality evaluation however. Terroir is the complex embracing climatic conditions, character of region, growing technology, and that of wine production. Marking of wine according to region (terroir) guarantees the fact that wine has given characteristics which are irredeemable together with the high and permanent quality also the amount of customers and due to that it gains stable place on the market.

**Key words:** terroir, climate change, vineyard,

#### **Introduction**

Slovak viticulture area has five parts and Tokay. All vineyards are situating in South part of Slovakia. TOKAY is very special autonomous area with unique wine production of natural sweet wine from Cibebý - grape attacked generous mildew (on the map is the pink colour in east part of Slovakia). Total vineyard are in Slovakia has 21 148 hectares.

#### **Material and methods:**

##### ***Most planted Grape varieties:***

**White varieties:** Grüner Veltliner (3659,5 ha), Welsch Rizling (3112,6 ha), Müller Thurgau (1771,5 ha)

**Red varieties:** Blauer Fränkisch (1716,4 ha), Saint Laurent (1363,9 ha) Cabernet Sauvignon (616,4ha)

**Tokay varieties:** Furmint, Lipovina, Muskat yellow

##### ***Climatic and harvests measurements:***

- global radiation during vegetation period (kWh.m<sup>-2</sup>)
- photosynthetically active radiation during vegetation period (FAR) (kWh.m<sup>-2</sup>)
- sunshine (hours -h)
- precipitation (mm)
- potential harvest of Phytomass (kg.m<sup>-2</sup>)
- potential commercial harvest of grapes (kg.m<sup>-2</sup>)
- real harvest of Phytomass (kg.m<sup>-2</sup>)
- commercial harvest of grapes (kg.m<sup>-2</sup>)
- sugar content in grapes in °NM
- coefficient of FAR utilization

##### ***Soil conditions:***

- type of soil (black soil, brown soil)
- analyse of soil (content of N- nitrogen, P- phosphorus, K-potassium, Ca- calcium)
- structure of soil (skeleton, sand, deep mould, stony)

##### ***Wine analyses:***

- classic chemical analyses, HPLC, GCMS
- tasting wine in commission

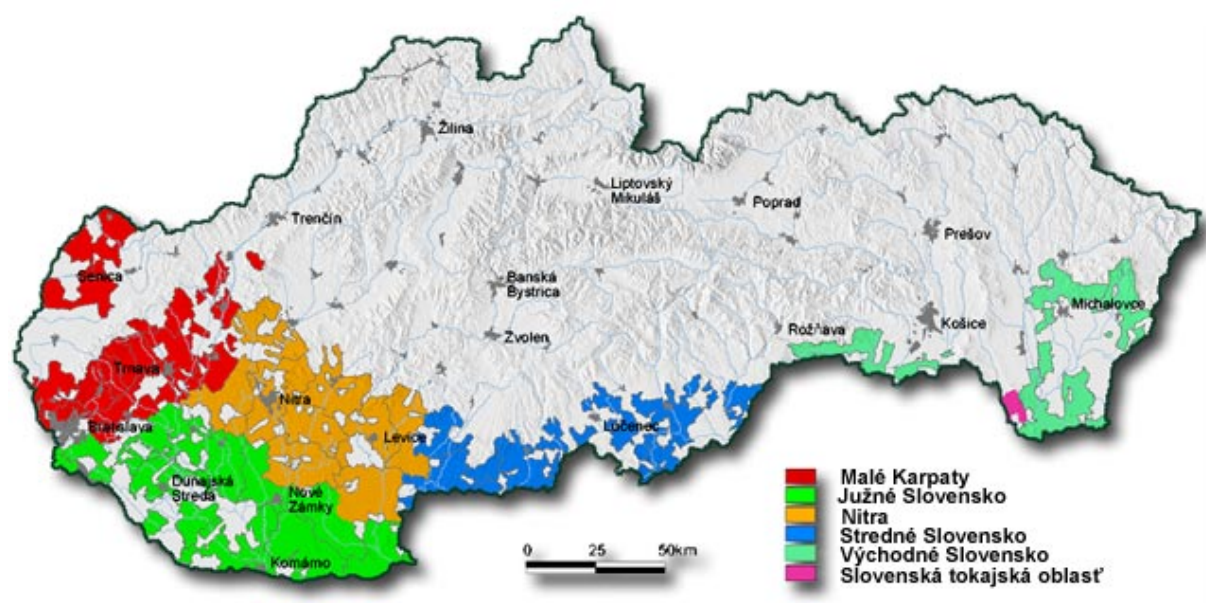
## Results

INVENTORY OF WINE-GROWING AREAS			
Member State: Slovak Republic		Date of communication: 8.1.2008	
Zone/Region/Wine	Situation on: wine year 2006/2007 Reference date: 31.7.2007		
	Area (ha)		
	Quality wines psr	Table wines (including table wines with geographical indication)	Total
1. Malokarpatská (RED)*	5 751,5	127,5	5 879,0
2. Južnoslovenská (GREEN)*	5 937,3	52,3	5 989,6
3. Stredoslovenská (BLUE)*	2 340,2	35,0	2 375,2
4. Nitrianska (YELLOW)*	3 791,5	40,1	3 831,6
5. Východoslovenská (PALE GREEN)*	1 016,8	630,2	1 647,0
6. Tokaj (PINK)*	675,7	750,4	1 426,1
Total(ha)	19 513,0	1 716,5	21 148,5

Sources: Central Controlling and Testing Institute in Agriculture - Vineyard register

\* Colour on map.

### Map of Slovak viticulture areas



## Conclusion

Slovak viticulture area is on the border of planting grape. When the climate changing become more visibly, it have impact on quality and quantity of grape harvest. During four years monitoring Slovak grape production can tell that quality of grape grow up in the main content of sugar and extract. Dimension of harvest have decreasing course, but not very big. Sugar and acidity of wine have better balance. New technologies and better climate condition supports to growing quality of Slovak wine.

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