60 YEARS OF PLANT BREEDING
RESULTS OF THE WORK ON CREATING
NEW GRAPE VINE VARIETIES AND CLONES
Depending on the **plant breeding objectives**, three phases in creating new grape varieties were determined:

**PHASE 1**

**Objective:** Improvement of the quality of cultivated autochthonous grape vine varieties (Smederevka, Kevidinka, Prokupac, Kadarka) by its cross-breeding with top quality Western European grape varieties. The following seven grape vine varieties were created and accepted: Neoplanta, Župljanka, Sirmium, Sila and Nova Dinka (white) and Probus and Rumenika (red).
KEVIDINKA
(RUŽICA)
PROKUPAC
Smederevka x Traminac.

Author - dr Dragoslav Milisavljević.

Ripens in II epoch.

Yield is better than Traminac.

It is very sensitive to low temperature, Botryts Oidium.

Good sugar level (20%).

Acidity level is low.

Vine has intensive aroma, like muscat.
ŽUPLJANKA

Prokupac x Pinot Noir
Ripens in III epoch.
The yield is high and regular
It is middle sensitive to low temperature.
Good sugar (20%) and acidity level (9 -12 g/l).
Dominated by malic acid.
Sauvignon X Smederevka.
Ripens in III epoch
Yield is high
Sugar level is middle.
Cultivar for quality wine, but sensitive on low temperature and Botrytis
Kevidinka x Chardonnay

Authors: S. Lazić, V. Kovač i P. Cindrić

Ripens in III epoch

Yield is high

High resistsants on Botryits

Wine is harmonic, with soft, pleasant aroma
Skadarka x Teran.
Authors: D. Milisavljević, S. Lazić i V. Kovač.
Ripens in III epoch
High sugar level (more than 25%)
Wine has rubin red colour and neutral aroma.
Good cultivar for natural desert wine
It is very sensitive to low temperature.
PROBUS
Skadarka x Cabernet Sauvignon.

It was named of the Roman emperor (Markus Aurelius Probus), who was reconstruction of vineyards in Fruška Gora in III century.

Authors: D. Milisavljević, S. Lazić i V. Kovač.
Ripens in III epoch.
Yield is high
Wine is a characteristic, pleasant smell, very intensely colored, harmonious
PHASE II

Objectives: Resistance to low winter temperatures
Grape and wine quality
Cross-breedings include hereditary base of Eastern Asian species called *Vitis amurensis* which is known for its high resistance to low temperatures, tolerance to fungal diseases and short vegetation.

Wild grape vine variety was not used. Cross-breeding included new Hungarian grape vine varieties *Kunleány* and *Kunbarát*, which were the result of regular hibridization of *Vitis amurensis x Vitis vinifera*.

These two grape vine varieties were cross-bred with famous, qualitative Western European grape vine varieties (Pinot noir, Pinot gris, Riesling Italian .....)

Hereditary base of this year generation of our grape vine varieties contains 87.5% of *Vitis vinifere* and 12.5% of *Vitis amurensisa*. The results of this phase were six recognized white grape vine varieties: *Zlata, Liza, Rani rizling, Lela, Mila and Petra*. 

ZLATA

Iršai Oliver x Kunleany.
LIZA

Kunleany x Pinot gray.
Rizling itali x Kunbarat.
Rizling italian x Kunbarat.
MILA

Kunleanj x Muskat Otonel.
PETRA

Kunbarat x Pinot Noir

Authors: P. Cindrić i V. Kovač.

High sugar level

Very intense smell,

Good cultivar for natural desert wine

high resistance to low temperatures
PHASE III

Objectives: Increase in fungal disease resistance
Better grape and wine quality

The hereditary base of North American species highly resistant to *Plasmopara viticola* and *Oidium tuckeri* is expanded by Seyve Villard hybrid and its varieties (Bianca). Few backcross breedings were conducted with the aim of constant quality improvement and resistance preservation.

During the first and second stage, seedlings of the last few generations were cultivated and selected in the field conditions with no chemical protection. Intensity of fungal diseases was estimated by “IBPGR grape descriptors” (1983) in the years of pathogen occurrence.

Elite genotypes were examined by special tests under laboratory conditions according to the methods developed at the Institute of Geilweilerhof in Germany (STEIN et al, 1985; DIEHL, 1988; EIBACH et al, 1994).

This phase gave two varieties of table grape – **Lasta** and **Karmen** and six varieties of white grape vines: **Kosmopolita**, **Petka**, **Rubinka** and **Bačka, Panonia** and **Morava**.
Muscat de St. Vallier x Ljana

Cluster is medium (280-300 g), medium dense
Berries are oval, uniform in size, green-yellow, very crispy consistency. Grapes have a very pleasant, refreshing taste.
Ripens in II epoch.
It can be grown with reduced protection
KARMEN

Moldova x Kardinal.

Cluster is a large, loose, cone

Berries are large, uniform in size, oval, dark blue uniform in color

Ripens in August

High yield (2 kg /m²).

This coultivar is a commercial
KOSMOPOLITA

Cserszegi fűszeres x Kristaly.

Early maturity
Yield is medium
Sugar level in must is high
Wine is nice muscat aroma
Can be grown without chemical protection against fungal diseases
Petra x Bianca

Ripens in II epoch
High yield.
High sugar level in must
Can be grown without chemical protection against fungal diseases
RUBINKA

Petra x Bianca.
Yield is medium
Wine is good, neutral aroma
Can be grown without chemical protection against fungal diseases
Petra x Bianca

Ripens in II epoch
Yield is high every year
Wine is harmonious, neutral.

High resistance on low temperature
Can be grown without chemical protection against fungal diseases.
PANONIA

Rain Riesling x domestic high quality genotype SK 86-2/293 (SK 77-7/4 x Bianca)
Grape berries are round, small, green-yellow, juicy and tasty.
ripen in I epoch
It can mostly be cultivated without pesticides.
It is resistant to low winter temperatures.
It collects a lot of sugar (over 20%) and has high acid level (9 g/l).
It is used for the production of mildly flavoured wine
Like Panonia
Ripens in III epoch
High resistance on low temperature
It can be grown with reduced protection
CANDIDATES FOR NEW VARIETIES

CABERNET FRANC E 11 X PANONIA

SK 01 1/12

15/09/2005
SV 12-375 X KIŠMIŠ MOLDAVSKIJ = SK 00 3/40
THANK YOU FOR YOUR ATTENTION

Mr Dragoslav Ivanišević