

High quality, disease resistant and hardy grape breeding in Latvia



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presentation by Andris Dišlers*

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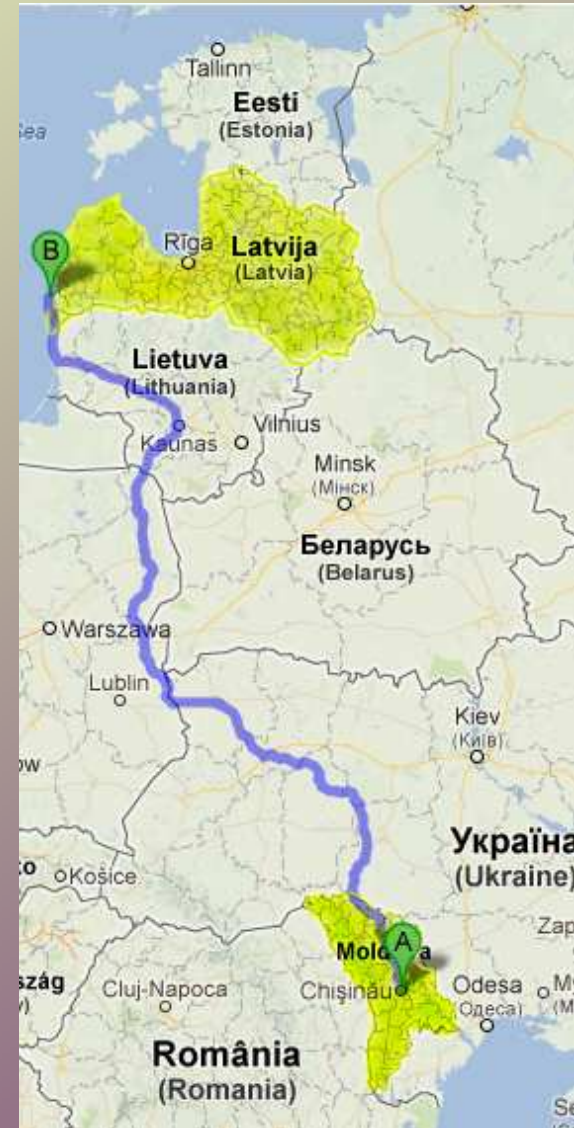
Two stage breeding: Moldova and Latvia

In Moldova, Onickani

- crosses
- biochemical tests – enzyme activity
- screening of disease resistance (*DM, PM, Botrytis, Antracnose*) of varieties and hybrids

In Latvia (1300 km from Moldova)

- seed distribution, evaluation of seedlings for disease resistance
- more than 2300 seedlings were screened



Selection criteria for Northern Viticulture

Only these were selected conforming with:

- early and super-early ripening – late August-early September
- high quality
- DM resistance – no more than 2 points, other diseases – 3 points
- early and good wood hardening
- cold resistance to – 23-25°C

12 seedlings were selected in total in this screening, 5 of them ripening in August

Halili belij (*V.vinifera*) x *V.amurensis*

- ‘Halili belij’ – high quality, early ripening
- *V.amurensis* M – *Khabarovsk* clone: cold resistance ~ -40°C, improved DM resistance, early, unusual aroma

1370 seedlings from the cross, selection under disease pressure: DM – 3p, O,B, A – 3-4p→good wood hardening→hardy to -30°C



Nimrang x SV20-473

- **‘Nimrang’** – high quality table grape, middle-late
- **SV20-473** (Muscat de St.Vallier) – gives early ripening offspring

1410 seedlings from the cross, selection under disease pressure, with cold resistance to -23-25°C, vegetation period 90-120 days

Selected: S5-6-3

Next crosses: adding quality

- S65 x Muscat jantarnij = 560 seedlings: **S198**
- S5-6-3 x Pearl of Csaba = 830 seedlings: **S445**

23-27°C, DM - **2p**, O,A,B - **3p**, veg.period 90 -110 days, **quality**

S198 x S445 = 230 seedlings,
selection under disease pressure,
wood hardening, cold hardiness

Liepājas dzintars

Liepājas agrā

female, muscat, high quality



Cīravas agrā and Dovga

Cīravas agrā:

S90 [(Irshai Oliver x V.amurensis) x Rannij VIRa] x S5-6-3

Dovga:

(S68 x Chilaki belij) x (S3-4-5 x Pearl of Csaba)

S3-4-5=Koroleva
vinogradnikov x SV 20-473

- DM - 2p, oidium 2-3p, -24°C
- good size, quality (muscat)
- 90-105 days for ripening



Silva (Vesmins)

(S68 x Muskat voskovoij) x (S1-2-1 x Pearl of Csaba)

S1-2-1=Shasla belaya x SV 20-453

- a bit more needed -100-110 days
- light muscat, Brix 18-19, TA 0.75%
- DM-2p, Oidium -2p.



New selections

Maiga=Dovga x Cīravas agrā, delicate taste

V 1-3-9=Liepājas dzintars x Cīravas agrā,
desease resistance.

V 2-4-1=Suruchenskij belij (Ichkimar x SV
365) x Ljana (Chaus belij x SV 20-366).
Reliable.

V 2-1-5=Voskovoij x Lastocka. Wood
hardening medium.

For wine:

V 4-3-3 blue

V 2-4-4=Kodrijanka x Vostorg. Resistance to -
29°C

S-1-5, S 1-6= Liepājas dzintars x Nagrada
(Arakseni belij x Russkij concord).
Exellent taste, but DM -4p. For breeding.



Recent crosses – to improve berry size

Liepājas dzintars x :

Ukrainka
Kodrijanka
Arkadija
Lora

Maiga x

Cīravas baltā
Silva

Voskovskij No 6 x Dovga

V 3-5-2 (type of amurensis) x Dovga



Welcome to the *Breeding Centre Vīnkoki!*