Experiences about sea buckthorn cultivation and harvesting in Latvia

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History

Roadside plantings, recultivation
Trials with *H.rhamnoides ssp. mongolica*

Since 1984

*H.rhamnoides ssp. mongolica x* ( *H.rhamnoides ssp. rhamnoides* + *H. rhamnoides ssp. fluviatilis*)

Area of plantations 350 ha, average yield 4 t/ha

Demand exceeds supply, price increases

New trend of logistics
Growing conditions in Latvia

Active growing season  180 – 200 days

Sum of temperatures above zero  - about 2000°C

Changing winter temperatures, especially along the seaside

Continental SBT varieties are not winterhardy
Environmental groups of SBT varieties

A. Selections of native SBT in Germany (Sirola, Leikora, Hergo, Askola, Habego, Dorana, Frugana, Orange Energy, Pollmix etc).

B. Selections of native SBT in Finland (Tytti, Terhi, Tarmo etc).

C. Crossings between continental Russian varieties with native SBT from southern coast of Baltic sea (Botanicheskaya Ljubitelskaya, Prozrachnaya, Podarok Sadu, Marija, Tatjana, Lord etc).

D. Crossings between continental Russian varieties with native SBT from northern coast of Baltic sea (successful trials since 2004, no commercial plantations yet).
Environmental Zone

- ALN - Alpine North
- BCR - Boreal
- NEM - Nemoral
- ATN - Atlantic North
- ALS - Alpine South
- CON - Continental
- ATC - Atlantic Central
- PAN - Pannonian
- LUS - Lusitanian
- ANA - Anatolian
- MDM - Mediterranean Mountains
- MDN - Mediterranean North
- MDS - Mediterranean South

Choice of varieties

C and D groups, because of:

• Large and juicy fruits. Outcome of juice is 85%, instead of 55% from A and B groups

• Less stellate hairs

• Drinks require less sweeteners
Young plants

Bare root plants more popular than potted ones

Overwinter in nursery, planted out in spring

Root suckers are used for replacing of dead plants
$\sigma : \varphi = 1 : 8$
Watering

Water deficiency leads to:

• Bad overwintering

• Less fruits, unpredictable yield

• More pest attacks

Best sites – floodplains out of flood reach, groundwater level about 100 cm
Total cut

Still active growth in September, carbohydrates are not yet stored in the lower part of trunk and roots

Early harvest - not more than 30% of leaves may be removed
Late harvest - -------------- 50% ----------------

SBT varieties in Latvia do not tolerate this way of harvesting
Vertical split
Advantages

• Yielding part of the bush for a long time is located at easy accessible height

• Bush is gradually rejuvenated, avoiding long interruptions between harvesting years

Conditions

• Sufficient growing factors (soil, water, nutrients, light, temperature)

• Late harvest

• All branches on the harvesting side must be removed
Horizontal split
THANK YOU !