Seabuckthorn on the way to global market

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SBT’s position in the world

From nature different plant
  • different species, sub-species and varieties
  • different areas of cultivation
  • different technologies of
    – harvesting
    – after harvest treatment
    – processing
  • different cultural environment

Men are different - the customer
  • different expectations on products in general (taste, colour, appearance, smell, packaging)
  • different cultural needs - organic food, social accountability, environmental effects, sustainability
  • resulting - manifold applications
SBT’s position in the world

International trade is growing
• upcoming production in Asia
  – China
  – India
  – Mongolia
  – ........
SBT in the world - view from databases in Europe
SBT in the world - view from ICRTS China
SBT’s position in the world

International trade is growing
• upcoming production in Asia
  – China
  – India
  – Mongolia
  – ........
• in Europe
  – European community
  – Russia
  – Turkey
  – Ukraine
• in America
  – US
  – Canada
SBT as raw material - standards and needs

Demand is still rising
- German market - estimated only 50% of raw material supplied from inland (planted area growing!)
- Raw materials from Baltic and southeast european states
- Raw materials from Russia and China

Raw material specification incompatible

**Europe**
- organic food
- min. residues
- safety
- processing properties

**Russia**
- sanitary and national standards
- maximum in lead substances
- oil yield maximum

**Asia**
- maximum in lead substances
- oil yield maximum
- national standards
Consumers needs

• differ regionally
• depend on culture
• a question of finances
• traditional influences (medical plant / nutritional plant / both)
• food safety plays a role
• regional sources favoured
• virtual values
Producers needs

- cheap raw material
- optimal processing qualities
- availability, just in time
- stable product with perfect quality
- safe product chain
- trusted suppliers
- certification (ISO, organic food, SA, fair trade)
Requirements on technology

Only a question of labour costs?
Harvesting technologies for SBT

Only a question of labour costs?

A question of quality!

• Minimum of damaged fruits
• reduced adulteration
• minimum of pollution
• short time from harvest to storage
• maintenance of valuable ingredients
After Harvesting Techniques*

Reduction of chemical changes
- biochemical degradation
- oxidation
- hydrolysis

Reduction of microbiological changes
- fermentation
- contamination by micro-organisms
- toxin formation

Prevention of chemical contamination
- PAH’s, PCB’s,
- pesticides
- radioisotopes

*From ISA 2009 - Belokurikha
What modern processing technologies should imply

Depending on product properties
• reduced damage of ingredients and nutrients
• high yield on target compounds or constituents
• economy of processing
• waste minimisation
• use of by-products

Depending on social needs
• organic farming (EU 2092/91, 834/2007 + 889/2008)
• social accountability SA8000
• sustainability, environmental friendly production
• extra benefits
the ‘quality flow’ from tree to counter

• Quality
  • is a complex interaction of many parameters
  • depends on regional and international factors
  • results from production process
  • arises from consumers demands and needs
the ‘quality flow’ from tree to counter

- SBT was for long time
  - plant with no need
  - plant easy to grow, harvest and process
  - the cash cow

- Resulting:
  - SBT and SBT products became
    - a good for trade
    - an object of speculation
    - a product of adulteration
the ‘quality flow’ from tree to counter

Resulting necessity

• responsible handling and processing of
  • seeds and seedlings
  • plants
  • berries - fruits
  • semi-finished products
  • final products

• Inspection and control
  • of international and national trade

• International quality standards for SBT

• it’s a challenge to grower and producer each day
The ‘quality flow’ from tree to counter

The dilemma of standardisation and legislation

‘Western’ system

• many legal regulations
• standards have no legal power
• many product details regulated by contracts

‘Eastern’ system

• only basic legal regulations
• standards have legal power
• product details mostly not regulated by contracts

*From ISA 2009 - Belokurikha
the ‘quality flow’ from tree to counter

The dilemma of standardisation and legislation

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summary

• SBT is growing international merchandise

• standards for international trade are necessary:
  • for raw material properties
  • for semi-finished products
  • for final goods
  • for documentation and legislation
  • for testing procedures
summary

• Standards shouldn’t be based on lowest level requirements (fulfilment of legal musts)

• Standards should be at a high stage (fulfilment of customers demands)

• Quality management is a necessary mean in international trade

• It’s the ticket to world market

• We need standards for international trade

• Supplier and producers have to take care on customers demands
Thanks for your kind attention