SPICED SYMPOSIUM 1 – 2 June 2016
in Berlin

Challenges in the production of safe spices and herbs

Gerhard Weber
ESA Secretary General
13 national Spice Associations from 12 EU Member States are full Member of ESA.

42 spice producers from 16 EU Member States are full member of ESA.

Approx. 350 spice companies in the EU are marketing spices. Most of them are member of a national spice association and hence indirect member of ESA.

Associations and companies from Non-EU countries (countries of origin) are associate members of ESA to embrace the supply chain assuring the transfer of knowledge about legislation, quality, hygiene into the origins.
The majority of spice companies has a turnover of < 50 Mio. €/a. Some spice companies have a turnover of 50 – 100 Mio. €/a. Only a few companies have a turnover of > 100 Mio. €/a.

Spice business is run by small and medium sized enterprises. Only a few „global players“ are in the market.
ESA is networking globally with spice industry associations, e.g.:

ASTA = American Spice Trade Association
CSA = Canadian Spice Association
AISEF = All Indian Spice Exporters Forum
ISB = Indian Spice Board
IPC = International Pepper Community
VPA = Vietnam Pepper Association
Spice Council of Sri Lanka
WSO = World Spice Organisation
IOSTA = International Organisation of Spice Trade Organisations
The spice industry produces

- spices, herbs, blends thereof
- seasonings, condiments and
- technical blends

for artisanry (e.g. baker, butcher), industry, catering, private households.

Most of the spices do not grow in Europe, they have to be imported.

Many herbs have to be imported.
Spices: Global Supply complexity

[Map showing global distribution of spices]
The spice industry

• identifies and selects suppliers
• buys raw material (e.g. dried herbs and spices)
• imports, tests
• cleans, standardises, packages and
• puts on the market

spice products = producing
Spice products meeting the requirements of the customers will often be:

- standardised, blended
- mixed with additives and other ingredients
- treated to reduce bacteria load / improve the hygienic status of the product
- packed into the requested packaging size – tailor made (e.g. 1 batch of tomato ketchup, 150 kg of meat product)
What is driving the quality requirements for spices in the European market?

Consumers demand high quality.

Consumer organisations, NGO’s, set own standards, e.g.

• only 50% of permitted pesticide MRLs should be detectable in a product;

• no “cocktails” of pesticide residues in products;

• sustainability in the supply chain should be demonstrated.
Retailers anticipate consumer demands and

- set high standards,
- control the quality of products,
- audit suppliers with consequences for the companies (spice industry).
Retailers require from spice industry:

- HACCP concept in place
- Application of standards, e.g. BRC standard, IFS standard
- Traceability
- Sustainability

This collaboration serves offering high quality herbs and spices and meeting the needs of the consumers.
Customers (e.g. food industry, artisanry) demand standardised products of reliable quality from suppliers. Food industry controls the quality of food ingredients.

Food hygiene is important; Hygiene levels in food industry are high and require good hygienic status of spices.

Composite convenient products require tailor made spice/herb/additive solutions supplied by the spice industry.
Legislation

Consumer protection is becoming more and more important.

Spices are no longer overlooked by legislation.

Even minor crops/low consumption are considered by legislators.
Quality issues of herbs and spices:

• Pesticide residues
• Authenticity (e.g. food fraud) of raw material
• Purity (e.g. allergens) of raw material
• Nicotine in mushrooms (e.g. boletus), herbs and spices
• Biphenyl in herbs and spices, especially nutmeg and mace
• Dioxins in paprika powder, dried basil, marjoram
• Traces of DEET in some spices
Recent issues of herbs and spices:

- Aflatoxins, ochratoxins,
- Chlorate, perchlorate,
- Anthraquinone, polycyclic aromatic hydrocarbons (PAH),
- Mercury,
- Pyrrolizidine alkaloids,
- Mineral oil compounds (MOSH/MOAH),
- Unintended presence of traces of allergens.
The spice industry has developed sophisticated systems to meet the requirements of food legislation, customer and consumer demands.

Which origin do we buy from, whom do we buy from? Are there known risks, alerts?

Tests of incoming material, separate storage; In house processing under control? Documentation! Allergen management system in place.

Packaging material in conformity with legislation; dry storage to guarantee best quality products.
Technical Commissions are established by the national associations (in the EU) to discuss current and emerging issues at national level.

National experts are working in the ESA Technical Commission (TC) dealing with current and emerging issues at EU level; working groups take care of specific issues and report to the TC.

Specific issues are treated in close cooperation with the appropriate partners, e.g. ASTA, VPA, ISB
With the support of experts ESA has established valuable documents for members supporting the production of safe, clean herbs and spices:

- European Spice Association Quality Minima Document (in English, Spanish, French, Hindi)
- General Guidelines for Good Agricultural Practices on Spices & Culinary Herbs, International Organisation of Spice Trade Associations (IOSTA),
- ESA Adulteration Awareness Document
- ESA List of Culinary Herbs and Spices
• ESA Definitions of Culinary Herbs and Spices (and seasonings)
• ESA Position Statement on Allergen Labelling
• ESA Product Information Standard
• Metallic and Magnetic Contaminations in Herbs and Spices – Risk Evaluation
In the spice sector problems can arise from pesticide application, drying processes, storage/transportation, climate/weather conditions, volcano activity, fire, political instability, …..

Networking and communication are key.

The spice business is global, so are the challenges, the cooperation and the spirit.
Thank you for your attention.

Questions?