

european spice services

food safe herbs & spices from source country

Who is Who?

- European Spice Services (ESS), Part of the Kutas Group,
 - We are a leading spices & herbs & AD vegetables distributor in Europe
- Eko Services (EKO), a sustainable spice processing plant in Europe
 - Indonesian Spice Sourcing Services (ISSS)
 - Indian Spice Sourcing Services (ISSS)
 - Brasil Spice Sourcing Services (BSSS)
- China Spice Services (CSS), a leading exporter of dehydrated garlic and bell pepper from China



European Spice Services Offices





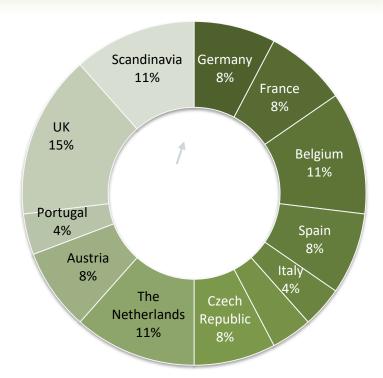
Product range

- Food Safe AD vegetables from CSS in China
 - garlic & onion & bell pepper
- Food Safe herbs from KUTAS in Turkey
 - Herbs: oregano, marjoram, basil, rosemary, thyme
 - Seed spices: cumin, coriander
- Food Safe Spices from EKO SERVICE in Belgium
 - Tropical spices: nutmeg, ginger, pepper
- Food Safe capsicums
 - chillies & paprika





Representation per Country









Eko Service

processed food safe spices & herbs







Processing competencies

- Pre cleaning:
 - Sieving, destoning, air separation, metal detection
- Steam Sterilisation
- Milling
- Cutting
- Blending
- Packing



Product Portfolio

- Specialty spices processed locally in Belgium due to complexity of the product and/or difficult supply chain at source country
- Freshly milled to obtain the best organoleptic characaristics
 - Freshly milled nutmeg
 - Freshly milled black Pepper
 - Freshly milled white pepper
 - Freshly milled ginger



Indonesia Spice Sourcing Services

Farm to fork Nutmeg

 Nutmeg is grown on the Nord Sulawesi islands

Tablitand

State Cores

BRUNE

Siau and Sangihe Island



3000mtonnes nutmeg growing







Indonesia Sourcing Services collection center at Sangihe Island

Collection center in Naha

Local & Japanese management







Farm to Fork tracebility

Local farmer brings nutmeg to Indonesia Sourcing Service Center

Daily registration of nutmeg







Nutmeg drying center

Air circulation

Temperature and moisture contol







UV light hand selection: our guarantee on aflatoxine control

20 experienced workers make hand selection under UV light



Aflatoxine contaminated nutmeg pieces get removed

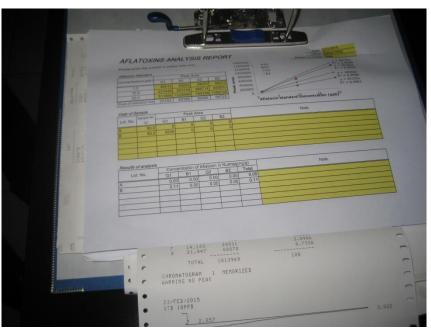




Indonesia Sourcing Service inhouse lab

Inhouse Aflatoxine & OTA testing COA prior to shipment







Container loading & shipment to Europe





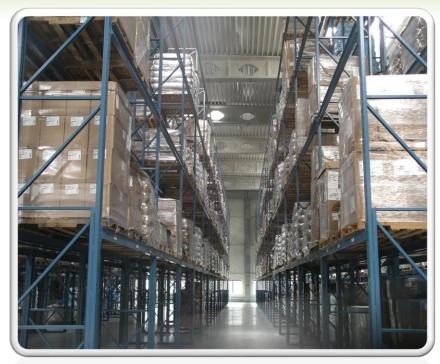


ESS dedicated spices warehouse for 3500 pallets











- Modern warehouse meeting the high requirements of our customers, with the following services:
 - Clearing & Forwarding
 - Material handling: palletisation and labeling
 - Storage and warehouse management
 - Transport management throughout Europe
 - A courier service
 24-48 hours service throughout
 Europe



EKO PROCESSING = one of the few spice processing units left in Europe!



- Factory
 - BRC 7 A certified
 - Nutmeg raw material enters warehouse
 - 6 Processing steps
 - Steam sterilization
 - Milling
 - Sieving
 - Blending
 - Metal detection
 - Packing



A focus on **freshly** milled spices

Pesticides, afla, OTA controlled RM!

A focus on **pure product**!



Safe Steril steam sterilizer





Hammer mill

3 milling lines







Milling room

Alpine mill



Urschel cutting machine



Urschel cutter



- Special cut & cracked spices
 - Tea
 - Ginger
 - Turmeric
 - Black, white & green pepper
 - Nutmeg & mace
 - Bell pepper
 - Onion
 - Cassia & cinnamon



Inhouse laboratory







Third party laboratory testing



Testing procedures

- Inhouse
 - Particle size
 - Density
 - Organoleptical evaluation
 - VO
 - Moisture

- Third party accredited laboratories (Eurofins)
 - Afla & OTA
 - Micro
 - TPC
 - Y/M
 - Coliformes
 - E coli
 - Salmonella
 - Pesticides



BRC & organic certified

Certificate



BRC Global Standard for Food Safety

TÜV NORD INTEGRA bvba (CB number: 011), certification and inspection body for agriculture and food processing, accredited by BELAC and recognized by the British Retail Consortium declares that the company mentioned below is audited by TÜV NORD INTEGRA and is complying with the requirements of the BRC Global Standard for Food Safety (issue 7, January 2015) for the mentioned site and scope.

Ekoservice byba

Rue des Journaliers 13, 7822 Ghislenghien, Belgium

Company Number: 0473923687

Main activity: Processor

Subcontracted manufacturing of organic products

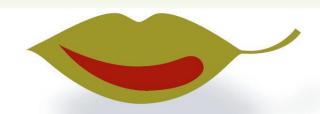
CERTISYS sprl/bvba/GmbH

Rue Joseph Bouché 57/3 B-5310 Bolinne TÉL 32(0)81 60 03 77 - FAX 32(0)81 60 03 13 K. Maria Hendrikaplein 5-6 B-9000 Gent TEL 32(0)9 245 82 36 SIÈGE SOCIAL/MAATSCHAPPELIJKE ZETEL Av. de l'Escrime, 85 Schermlaan B-1150 Bruxelles/Brussel TEL 32(0)2 779 47 21

www.certisys.eu - info@certisys.eu - TVA/BTW BE 0445.344.915 - RPM/RPR Bruxelles/Brussel - BANQUE/BANK 001-2525235-13



Your contact in Europe



european spice services

food safe herbs & spices from source country

Kleine Dweersstraat 75 9140 Temse Belgium

Tel: 003237715789

Fax: 003237712537

E-mail: info@spices.be

Nutmeg



Adulteration in nutmeg



- By adding product identic fillers
 - BWP nutmeg
 - Nutmeg fruit
 - Nutmeg shells
 - Nutmeg spent



Nutmeg fruit







Mace, nutmeg in shell, nutmeg fruit







After drying: cracking & grading

Dried nutmeg in shells

Individual cracking and grading







Critical quality parameters

- Freshly milled nutmeg
 - Made from 100% sound shrivel Siau Indonesian nutmeg
 - Crop year 2017
 - Min 5% VO after steam sterilisation & milling
 - No dark black spots
 - A fresh light brown color
 - Good fresh flavor
 - Typical bitter nutmeg taste

- Adulterated nutmeg
 - Made from:
 - Indonesian BWP nutmeg
 - Indonesian old crop nutmeg
 - Nutmeg shells
 - Nutmeg fruit powder
 - < 5% VO after steam sterilisation
 - Dark black spots
 - Dark dry off brown color
 - Off flavor
 - A 'woody' and/or 'tongue tingling' taste when shells and fruits are added.



Product demonstration

- Pure Indonesian Siau nutmeg sound shrivels
- Pure Indonesian Siau nutmeg ground > 5% VO
- Indonesian BWP nutmeg
- Indian Papua nutmeg
- Indonesian nutmeg shells
- Indonesian nutmeg fruit & powder
- Adulterated nutmeg ground with < 5% VO



Black pepper







Product identic fillers used for milling

- Mechanical Decortication from black pepper into white pepper.
- The skins retained from decortication are added into black pepper ground.
- Pin heads & light berries: are immature pepper corns
- Spent / deoiled pepper



Quality parameters pepper

- Black pepper milled
 - VO > 1,5%
 - Piperine > 3,5%
 - Organoleptical: light grey color
 - A fresh and typical flavor
- White pepper milled
 - VO > 1,5%
 - Piperine > 3%
 - Organoleptical: light creamy white color
 - A fresh and typical flavor



Product demonstration pepper

- Whole black & white pepper corns
- Black pepper lights & pin heads
- Black pepper spent
- White pepper skins
- Freshly milled Black pepper ground
- Black pepper milled with product identic fillers

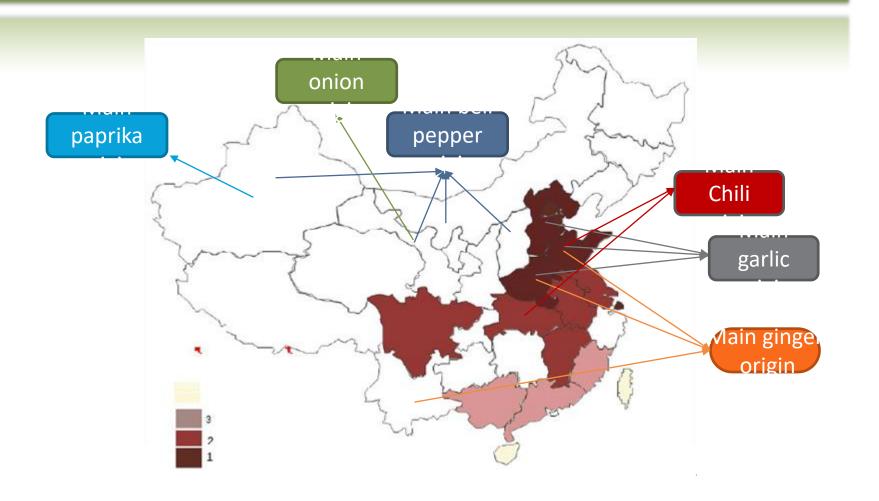


Garlic peanut crisis

- An example of unintentional cross contamination of traces of peanut in garlic coming from the upper supply chain beyond the processors control as a result of
 - crop rotations garlic with peanut as a general farming practice in China



China Main Peanut Origin

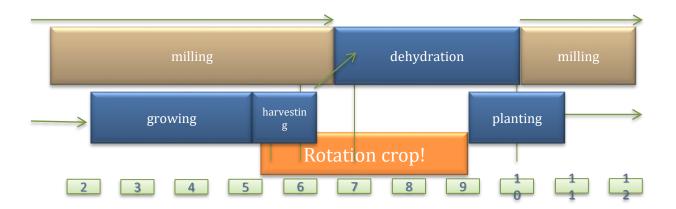




Root Cause: Upper supply Chain

Crop Rotation Peanut Allergen

- Bigger number of farmers, smaller farms
- Rotation crop: Corn / Cotton / Chili / Peanut





Root Cause: Supply Chain

Crop Rotation





Root Cause: Supply Chain

Crop Rotation





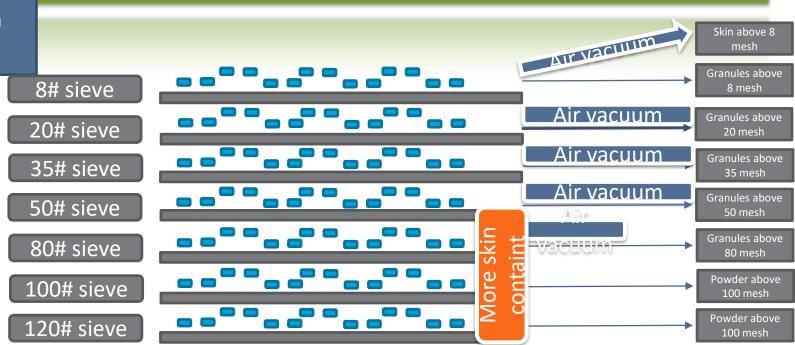
What possibly contains peanut allergen







Root Cause: Production structure





Solutions: contract farming with traceability to the field







Farmers and on site team - Management







Correction at processing Roots cutting





Additional washing prior to dehydration





How do we ensure a peanut allergen free product

- A. Selecting suppliers who have a proper allergen control procedure
- B. Buying from **contracted fields**, **own fields** excluding crop rotation with peanuts
- C. Upper Supply Chain control raw material
- D. Cutting away roots and removing skins which may give contamination. Extra washing stages. Final product will be root cut.
- E. Testing on peanuts at different stages of the production process soil flakes finished material and material check.
- F. Before shipping, testing of the final product at Eurofins hamburg, testing protein and not total peanut.
- G. Delivery of Allergen free product through our risk analysis with COA from Eurofins Hamburg (test method: Peanut ELISA Kit II (Art. Nr. M2116). Retesting should be done at the same lab with the same method.



Thank you!

Raf Nonneman
CEO
European Spice Services NV

