



# ASTA 2007 Annual Meeting & 100<sup>th</sup> Anniversary Celebration

## European Spice Association

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**CANNAMELA**

April 16 – 19, 2007

Ritz-Carlton Laguna Niguel  
Dana Point, California



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## ***TOPICS***

- Biologically active principles ( BAPs)
- Ochratoxin A
- Product Information sheets
- Adulteration / Illegal dyes
- Strategy

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# Biologically Active Principles

In this case we are talking about the isolated chemicals from plants that have an adverse effect on the human body.





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# Biologically active principles

- Methyl Chavicol
  - e.g. Basil, Chervil, Tarragon, Fennel, Star Anise etc.
- Safrole
  - e.g. Cinnamon / Cassia, Nutmeg, Star Anise etc
- Coumarin
  - Cassia ( Cinnamon)
- Methyl Eugenol
  - e.g. Cloves, Basil, Nutmeg, Star Anise etc.



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# Biologically active principles ASTA 2006

- Methyl Chavicol (MC) study by ESA
- Results indicated MC pure chemical is carcinogenic
- Result supported the fact that MC within Tarragon does not have the same effect
- Study showed that EU legislation was flawed
- Study presented to EU with request for other BAP's to be reviewed in light of this data

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All was OK

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All was OK

Christmas  
2006



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All was OK

Christmas  
2006



**CANCELLED**



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# All was not OK



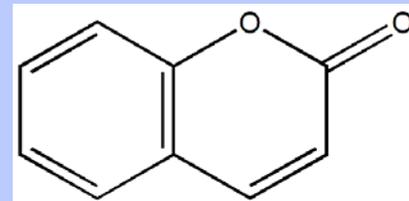
- Don't eat the cookies
- Cassia make them unsafe
- Loss of sales was huge

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# Chemistry

we have to 'manage' it



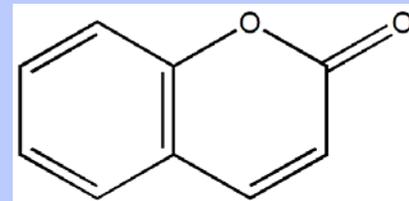
- It is present in most malignant tumors
- It is used as an industrial solvent
- It kills approx 250,00 people each year
- It contains trace elements that are toxic
- They put this stuff in our food!
- ***WATER!***

There are no safe chemicals in the world - only a  
safe dose

The logo for the European Spice Association (ESA) features the letters 'esa' in a bold, green, sans-serif font. The letter 's' is stylized to contain a small image of various spices, including what appears to be a pepper and some seeds.

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# Chemistry



- This time it was the ‘flavouring directive’
- Other ‘flavouring’ chemicals could still be a problem
- There are currently over 100 chemicals listed
- At next review the list could grow
- But as analytical techniques improve it is only a matter of time before we have the next ‘problem’

# Ochratoxin A



- Current EU legislation
  - 466/2001 Cereals, fruit juice, coffee, wine, baby foods etc.
  - Limits between 1 and 10 ppb
- Spice are not covered
  - Product recall
  - **Still no official method**
  - Latest EU legislation covers the sampling of spices

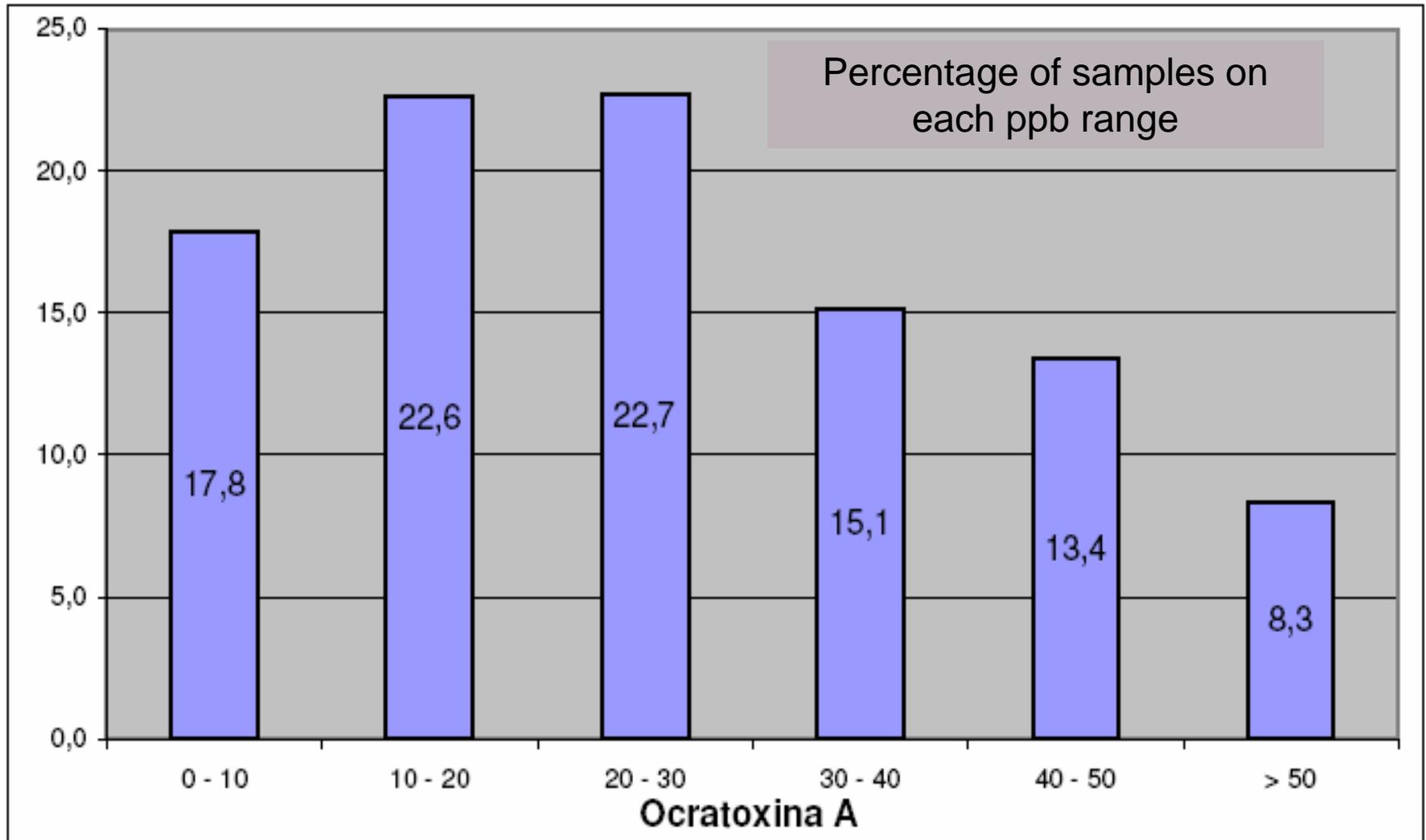


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# Ochratoxin A (OTA)

- Authorities have found high level of OTA – up to 180 ppb in spices!
- AFEXPO – Paprika Growers and Exporters Association in Spain is an ESA member
  - Tests carried out by its' members
  - Over 2000 analyses conducted
  - Various methods used
  - OTA appears to be less toxic than Aflatoxin

# Paprika of various origins





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# Ochratoxin A

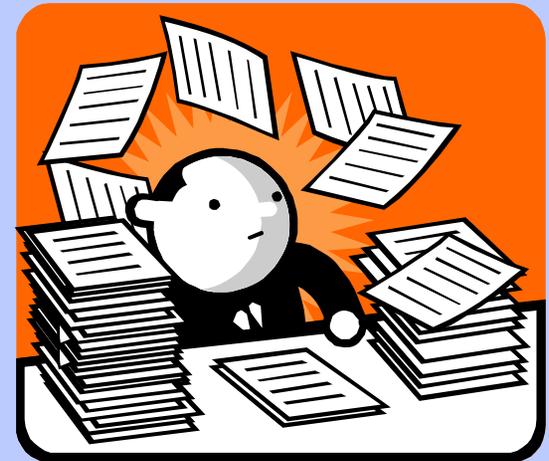
- EU Commission see Spices as a low priority item
- No or partial legislation gives rise to misinterpretation
- ESA has put forward a proposal to address the problem
- 50ppb proposed as the level to be accepted
- Should only apply to the 'mycotoxin' spices
  - Ginger, Paprika, Capsicums, Black Pepper, Nutmeg, Turmeric
- Understand / develop practices to reduce occurrence
- Method development must continue

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# Information

**We are now at 'information overload' point  
within our industry**



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# Information



- **Typical request from 10 – 50 pages**
- **Requested turn around 4hrs - 10 days**
- **Every ‘news’ item prompts request for full resubmission of all data**
- **Technical staff are becoming administrators**
- **Nut – it’s nuts!**

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# Free from

Translated from the  
original label.

This product has been  
manufactured in a facility  
that may contain nuts –  
however this guaranteed  
can not be absolute





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# Product Information Sheets

- An ESA team has developed a draft
- The format is harmonized
- Should help reduce transcription errors
- Harmonizes terminology / interpretation
- Benefits customer in data location
- Speeds up the supply of critical data



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# P.I. Sheets - contents

- General company data
- Product data – pack, ingredients declaration etc.
- Physical & Chemical
- Allergens and intolerance
- Treatments
- Contaminants
- Diet and Nutrition



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# Adulteration

- In 2006 all adulteration was deemed deliberate
- Many cases still are
  - The adding of low cost fillers
  - The replacement by ‘similar’ components
  - The adding of colours
- In 2007 some ‘adulteration’ seems accidental
- Some ‘adulteration’ is ‘traditional’



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# ESA activities

- Input into IPC meeting on white and black pepper processing – new GAP guide will cover these points
- Discussions with EU Commission with regard to ‘environmental’ contamination
- Proposing, as part of our IOSTA membership, a new generic GAP guide for all herbs and spices



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# Strategy

- The management of science is now part of ‘doing business’ in Europe, if not the world
- We have to improve our strategy on how we influence the various ‘players’
- ESA is looking to increase its funding capability
- ESA is investigating the possibility of getting closer to Brussels and the decision makers.



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## Thanks for listening

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