Positive test-results: fraud or error

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Background BIOKAP project

- Project of Dutch Organic trade and processing association
- Common monitoring database for participants
- Started in November 2008
- Aim: 1.000 - 1.500 analysis each year
- Cooperation with Wageningen University
- Cooperation with Skal certification body
- Supported by Dutch authorities
- Aim: cooperation with other organic trade and processing associations in monitoring residues

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Participants

- AgroBioConnection
- Ariza
- Bakery Van der Westen
- Biofresh
- Do it
- Horizon
- Eosta
- Machandel
- Natudis
- Organic Flavour Company
- Simon Levelt
- Stichting Skal
- Tradin
- Udea
- Vitalis
- Yarrah

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Why BIOKAP monitoring

- Responsibility to meet consumer expectation
- Pressure on quality assurance is rising
- Number of residu cases is rising
- Monitoring is the right instrument to meet the need of proces-based principle of organic and the need of “residu free” organic
- Individual companies can’t face these challenges on their own

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Choices we made

- Action value (based on BNN approach)
  - ≥ 0,01 mg/kg = 10 pbb
  - 50% incertainty
  - Dried factors (standarised)

- Laboratory:
  - QS certified
  - Experiences members→ 3 selected in 2008
  - Discount for members
  - Annual evaluation
  - 2 extra for fresh products → Oct. 2009

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Choices we made (1)

- Database system
  - KAP system conventional sector Rikilt Wageningen
  - Anonymous: min. 3 participants for each product category

- Risk based approach
  - For first year no common risk based analyzing schemes
  - Fixed quotum per company based on turnover and number of products

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Choices we made (2)

- Cooperation with Skal
  - Yes, this means also sharing of Skal data in the system
  - Effort Skal extra control of companies who do not join the BIOKAP system
  - Financial contribution
- National or international
  - Start national level in 2008-2009
  - Pilot international start in 2009-2010
  - Open for cooperation with Germany, France and Belgium for 2010-2011

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Choices we made (3)

- Cooperation
  - Louis Bolk Institute: Renske Loefs projectmanager
  - RIKILT: Gerda van Donkersgoed
- Budget
  - 4 years support by national government
  - Annual fee members and starting fee new members
  - % discount of labs

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Targets BIOKAP

- Annual 1500 analyses
- Knowledge based approach to find and eliminate causes for contaminations
- Active approach by private sector for sparring with certifying bodies and goverment(s)
- Realize pressure on companies (and their certification bodies and governments) where residues are found
- Communication-tool to customers of participants

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Database

- Monthly delivery of new data
- Anonymous
- Access to all data in the database for participants
- Extra security procedures for positive analysis (> action level)
- Rapid Alert System participant in development

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Database

- Grains, rice, maize
- Vegetables and potatoes
- Fruits
- Beans, peas, seeds, nuts
- Coffee, tea, cacao, cichorei, carob
- sweetening products
- Oil and fats
- Dairy products and eggs
- Herbs and spices

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Experiences

General results first 11 months (837):

- 83,3% of the analyses: zero residues
- 16,7% of the analyses: contaminations
- 4,2% of the analyses: contaminations above action-level

Remark:

- When a residue-problem occurs many analyses follow. This means that the real % of positive results is much lower (estimation about 50% lower → ca. 8% positive, ca. 2% above action level)

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Case 1: Turkish apricots

- Dodine found in dried apricots in several analysis harvest 2008 between 0 to 0,02 mg/kg (after correction)
- Investigations and consultancy advice during several months
- Consultancy: might be caused by fraud, but not 100% certain (could also be caused in the fields or in contaminated water for cleaning)
- Decision: decertification of lots above 0,01
- Practice: only import of analyzed lots and extra attention harvest 2009

Fraud or error? Not clear, because could be caused in the field or via washing water. More investigation needed.

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Case 2: Spanish orange juice

- Old case from summer 2008, before BIOKAP
- Some residues found on high level
- Skal asked for clarification by Spanisch certifier and authorities
- After 4 months Spanisch authorities took decision to decertify a company in this case.

Fraud or error?

Not 100% clear, but probably fraud.

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Case 3: Dutch maize

- Old case from summer 2008, before BIOKAP
- Residue found in particular harvest of particular farmer
- Investigation Skal
- Same case of contamination in UK
- Conclusion: contamination caused by conventional vinasse (natural fertilizer from sugarbeet)
- Decision Skal: no decertification
- Decision private companies: decertification of the lot

Conclusion: no fraud (conventional input as risk for contamination)

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Case 4: Dutch potatoes

- Chloorprofam in several analyses 2008
  between 0 to 0,05 mg/kg
- Start investigation in whole chain
- Problem traced in pack-stations (where conventional and organic are combined)
- Conclusion: contamination on the packaging lines
- Action: separation measures by pack-stations to prevent contamination and extra controls by Skal

Conclusion: cross-contamination where conventional and organic are combined. No fraud.

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Case 5: Cumin seed

- April 2009: metabolites of Diuron found in cumin seed lot
- Investigation: period of 4 months
- Two of our three labs don't consider this metabolite as proof of use of residue. One does. Until now the metabolite(s) is not in the definition of this substance!
- Conclusion external advice: might be proof of use…
- Decision: decertification of the lot(s) and stop of import-authorisation by Dutch government
- Further development: practical all cumin seed of different countries show the same contamination
- Market consequence: period of distinction between private companies and authorities who accept cumin seed with-without this metabolite = market disturbance

Fraud or Error? Not clear yet.

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Conclusion BIOKAP 1 year

- fraud or error remains often a question
- quality assurance for unwillingly errors is as important as quality assurance for fraude
- investigation crucial but takes often a long period and market uncertainty for company involved
- pressure on decision process is needed and EU-collaboration to meet the need of harmonisation in individual cases
- case by case approach is always needed
- monitoring is the start, not the result

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Expectations

- Organic quality can and may not be reduced to residues
- Residu monitoring is just one slices of

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- Cooperation and further harmonisation in a common approach to residues is essential
- For private companies further juridical foundation is needed
- Cooperation between labs for sharing knowledge

More info: www.biokap.com

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A strong chain of strong companies to secure organic quality

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