











## **Fruits and vegetables**

Fruits and Vegetables are healthy food. The consumption of fresh fruits and vegetables is one of the major weapons in the battle against overweight and obesity and is demanded and advanced in numerous campaigns of varied institutions.

Originally equipped with a season-depending range of products, the global trade market established offering nearly every product day-to-day independent from the calendar. As a result the international food market is affected by a multitude of fruit and vegetable grades. Even within the EU 45% of fruits and 25% of vegetables are consumed in another country as they are produced. In addition to the demand of persisting availability of a big product variety, the awareness of quality is growing on part of the consumer. Meanwhile, the authenticity of traders is sales-relevant for the sensitised consumer and is significantly influencing distribution. Therefore the organic and fair trade sector is gaining in importance more and more.

Here, the use of crop protection products plays a key role: Although pesticides are often unavoidable for predictable and continuous production, their residues are bearing health risks. This shows the need and the importance of reliable residue analysis, which brings safety and protects labels.

## **Current difficulties**

Within the last years especially the pesticide topic attracted wide media interest and therefore is of highest importance for the consumer.

In the conventional farming crop protection products are applied in a multifarious way and during all seasons. Thus, soil herbicides are deployed before sowing as well as before and after feathering of the profit culture. For the organic crop growing this has got a specific relevance, because the conventionally used pesticides can change over to organic grown products by driftage, soil residues or contaminations after harvesting.

Beyond that, questions in the field of food additive analysis like sulphur dioxide or morpholine arise as well as contaminants in packaging material.

Also, the analysis of products from genetical modified plants (GMO) becomes more and more important in the global food trade. An exceeding multilateral analysis of genetical modification is a good indicator for the performance of a progressive laboratory.

# A global network for a global branch



A global market needs a global straightened quality management. The Eurofins Group is cross-linked all over the world and therefore able to react flexibly and fastly. With the aid of our numerous partner-companies, it is possible to perform nearly worldwide sample taking as well as sample relocation and analysis in laboratories accredited according to DIN EN 17025:2005. Short communication channels provide for unobstructed activity. Here you can find a small abstract of our international integration:



### **Strong partners**



#### DFHV

(Deutsche Fruchthandelsverband e.V.) The German fruit trade association, as national head organisation of the branch, represents the interests of companies from all retail sectors of the fruit and vegetable sector. The organisation represents companies of the direct marketing, the import and export, the whole sale as well as the retail. Approximately 70% of all sales of fresh fruits and vegetables are achieved by the DFHV member companies.



#### QS

(Qualität und Sicherheit GmbH) Healthy and safe food for the customer on that the QS GmbH concentrates their whole attention. For the QS system accredited laboratories measure the compliance of defined marginal and boundary values in the context of monitoring programs.



#### GDCh (Gesellschaft Deutscher Chemiker e.V.) Amongst other things, the society of German chemists deals with quality assurance and enhancement of residue analysis. It makes references regarding sampling and sample preparation and collaborates on the development and validation of analytic methods. Moreover the GDCh advises professional colleagues with regard to legal questions.

### An overview of our supply



The Eurofins Group is your principal contact for food analysis and keeps step with the proceeding deployment of new technologies as well as with procedures, which become more and more sensitive. Eurofins, with its several special laboratories, carries processoriented solutions to attend producers, fabricators, importers and the retail industry in an optimal way. Thereby the required capabilities for advancement of analysis are at the Eurofins Group disposal.

With our work we care for a maximum of analytical assurance for your products day by day. With our long-term experience we also support you in preparing a monitoring plan which is tailored to your products and requirements.

In accordance with the global trade of fruits and vegetables, Eurofins additionally offers sampling all around the world in cooperation with different partners like Tecnosoluciones Costa Rica or Global Control. By sophisticated logistics an overnight transport is carried out to the German special laboratories, which are responsible for the analysis.

# **Our Portfolio at a Glance**



- Pesticides
  - multi methodes with more than 500 pesticides (DFG S 19 & QuEChERS)
  - group and single methodes, int. al. dithiocarbamates, phenylurea, phenoxyalkanecarboxylic acids, maleic hydrazide, glyphosate, ethephon, chlormequat, bromides, nereis toxin
- Additives, surface treatment products, waxes
  carnaubau wax, paraffines, beeswax, alkanolamines (e.g. morpholine, triethanolamine)
- Genetical modified organisms (GMO)
- Authenticity and origin
- Contaminants
  - organic contaminants, int. al. mycotoxins, PAH, dioxins
  - - inorganic contaminants, int. al. heavy metals, nitrate/nitrite
- Packaging analysis of carton, plastic and other materials
- Preservatives, int. al. sulfurous acid
- Allergens
  - herbal allergens, e.g. gluten, peanut, hazelnut
  - animal allergens, e.g. lactose, protein
  - pseudo allergens, e.g. sulphites
- Microbiological analysis
- Quality assignment
- Sensory evaluation
- Customer services
  - crisis management
  - risk-based recommendation
  - evaluation of test results
  - sample logistics



# **Welcome to Eurofins**

Eurofins is a leading international group of laboratories providing an unparalleled range of testing and support services to the pharmaceutical, food, environmental and consumer products industries, as well as to governments.

### **Quality & Safety**

The Eurofins Group has built up a global network of state-of-the-art food testing laboratories and Competence Centres that perform more than 80 million assays per year to establish the safety, composition, authenticity, origin, traceability and purity of food.

Eurofins laboratories are accredited according to DIN EN ISO/ IEC 17025:2005 and continuously participate in interlaboratory tests to verify the applied testing methods.

# Direct access to our laboratories

Eurofins OnLine (EOL) is a free online service that gives you 24/7 access to your samples and test results. Take advantage of faster turn-around times with online sample registration, an online archive for storing your results, retrieval of customer-specific statistics and export of analytical results.

Please contact your Analytical Service Manager at Eurofins to establish your free EOL access. Pesticides Microbiology

**Nutritional Analysis** 

Veterinary Drug Residues

Heavy Metals

Irradiation

Mycotoxins Sampling Dioxins GMO Allergens

Contaminants

### Eurofins - Facts & Figures 2011

- Over 150 laboratories with more than 9,500 employees
- Over 100,000 reliable methods
- Presence in more than 30 countries
- Annual revenues of over US\$ 1 billion
- Consistently profitable operation
- 250,000 m<sup>2</sup> of state-of-the-art laboratories equipped with the latest analytical technology



# **Our experts - Your contacts** Our experts - Your contacts



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