

Pesticide Residue Monitoring in Food of Plant Origin Belgium 2006



Report of Monitoring Results Concerning Directives 90/642/EEC,
76/895/EEC and 86/362/EEC and Commission Recommendation
2006/26/EC



Federal Agency for the
Safety of the Food Chain
<http://www.afsca.be>

Pesticide Residue Monitoring in Food of Plant Origin in Belgium - 2006

Summary of results

In 2006, a total number of 1539 samples of fruits, vegetables, cereals and processed products of plant origin (including baby food) were taken by the Belgian Federal Agency For the Safety of Food Chain (FASFC) on the Belgian market and analysed for the presence of pesticide residues (table 1).

Table 1: Overview of the results of the pesticide residue monitoring programme 2006.

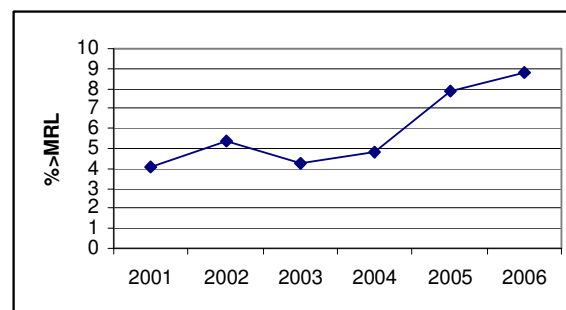
Samples	analysed	without residues	with residues at or below MRL	> MRL	Origin					
					BELGIUM			IMPORTED		
					samples	>MRL	%	samples	>MRL	%
Fruits & vegetables	1359	39,3 %	51,9 %	8,8%	770	40	5,2	589	80	13,6
Cereals	39	59 %	41 %	0						
Processed products	86	74,4 %	25,6 %	0						
Baby food	55	100 %	0 %	0						
TOTAL	1539	43,9 %	48,3 %	0						

Fruit & vegetables : 1359 samples of fresh or frozen fruit and vegetables were analysed in 2006. No residues were found in 39% of them. 8,8% of the samples analysed exceeded the maximum residue levels (MRL) set in the Belgian legislation. It should be noted that more exceedings were observed in imported foodstuffs. The rate of MRL exceeding is higher than in 2005 (+0,9%) [graph 1]. It is important to note that, as specified by the Commission guidelines, this report does not take into account the analytical uncertainty of the result. Taking into account that uncertainty, the rate of exceeding falls to 4,6%.

The main commodities showing MRL exceeding are stone fruits (peaches and plums), berries (table grapes), leguminous vegetables (beans and peas) and citrus fruit (oranges, lemons and mandarins).

Out of a list of 307 different pesticide residues analysed in fruit and vegetables, a total of 113 were found at least once during the monitoring programme.

The pesticide residues that were found most frequently are fungicides : iprodion, maneb-group, boscalid, propamocarb, imazalil, chlorpropham, thiabendazole and carbendazim.



Graph 1: MRL exceedings (%) in fruit and vegetables in Belgium from 2001 to 2006

Several factors have to be taken into account when interpreting these results:

1. The improvement of the analytical performance of the laboratories. More and more pesticides are analysed with a higher sensitivity of detection (from 141 in 2002 to 307 in 2006).
2. The national MRL. A large number of foodstuffs imported from EU Member States exceeded the Belgian MRL but did not exceed the MRL of the Member State of origin. 47% of the 120 exceedings observed in 2006 concerned non harmonized MRLs. This commercial problem will be solved in the next months by the entry into force of Regulation (CE) No 396/2005 which harmonizes all MRL in the EU.
3. The drafting of the monitoring programme is based on risk assessment. It does not provide for a total random analysis, as more samples are taken of food items expected to contain pesticides or to exceed MRLs.

Cereals: 39 samples of cereals were analysed in 2006. No exceedings of the MRL were observed.

Processed products: 141 samples of processed products, including baby food, were analysed. No exceeding of MRLs was observed.

Organisation of monitoring programmes and sampling

- **Responsibilities:** The Federal Agency for the Safety of the Food Chain (FASFC), under the responsibility of the Minister of Public Health, is the competent authority for the control of pesticides residues in foodstuffs (<http://www.afsca.be>)
- **Drafting of the monitoring plan:** The monitoring programme does not provide for a total random analysis, but is based on risk assessment. Several factors were taken into account: the exceeding in previous years in Belgium and in other Member States, the RASFF messages, the toxicity of pesticides, the importance of the foodstuffs in diets, the analytical and budgetary possibilities and all other useful information. All groups of fruits and vegetables are included in the programme and a rolling programme is applied for less important commodities. The coordinated programme of the European Commission was also included in the national programme.
- **Sampling:** Sampling was executed by trained officials according to directive 2002/63/EG, at auctions, importers, wholesalers, processors and exceptionally in retail businesses.
- **Measures taken:** In case of infringement, the responsible company/person is identified. When the exceeding of MRL is within the analytical uncertainty, a warning is issued. When the exceeding is higher, an official report is made and sent to the responsible company/person and also to the legal department of the FASFC. The legal department proposes a fine. If the fine is not paid, or in case of repeated offences, the matter is taken to court. When the dietary intake calculations indicate a risk for the consumer (estimated in accordance with document SANCO/3346/2001) a national and an international rapid alert are issued and measures to protect consumers are taken (tracing and recall of the foodstuffs for destruction). In 2006, Belgium issued one RASFF message for omethoate on Belgian table grapes. A recall was organised.

Quality insurance

- Four officially recognised laboratories were involved in the monitoring programme 2006. They are all ISO 17025 accredited for the most important analytical methods and commodities. Multiresidue methods as well as specific individual methods were performed on the samples. All certificates of accreditation can be found on the website of the Belgian Organisation for Accreditation (<http://belac.be/>). The laboratories take into account EU Quality control procedures (ref. SANCO/10232/2006).
- Three laboratories participated in the European Commission's Proficiency Tests 8 with good results.

Further information

- An MRL is not a toxicological endpoint. An exceeding of MRL seldom represents a hazard for the consumer. MRLs exceeding reflects the non compliance with good agricultural practices (product authorised on the crop, dose, delay before harvest, ...)