Controls of pesticide residues in food and feed - Belgium 2011

Results of the official controls in accordance to Regulation (CE) N°396/2005 and Commission Regulation (EC) N° 915/2010

Octobre 2012

PESTICIDE RESIDUE CONTROL RESULTS

"NATIONAL SUMMARY REPORT"

Country: *BELGIUM*

Year: *2011*

National competent authority/organisation:

FEDERAL AGENCY FOR THE SAFETY OF THE FOOD CHAIN (FASFC)

Web address where the national annual report is published:

http://www.afsca.be

1. OBJECTIVE AND DESIGN OF THE NATIONAL CONTROL PROGRAMME

The use of plant protection products during the production of fruit, vegetables and cereals can lead to the presence of residues in food and feed. Maximum residue levels (MRL) are set in the European legislation[1] in order to check the good use of plant protection products (use of authorised products according to their authorization) and to protect the consumers. Food or feed which do not comply with the MRL cannot be put on the market. An MRL exceeding content is the sign of incorrect use of a plant protection product but does not necessarily involve a risk for the health of consumers.

The approach used by the Federal Agency for the Safety of the Food Chain (FASFC) for the control of pesticide residues is risk based. The programme is drawn up following the general statistical approach developed within the FASFC[2]. Several factors are taken into account: the toxicity of the active substances, food consumption statistics, food commodities with a high residues/non-compliance rate in previous monitoring years, origin of food (domestic, EU or third country), RASFF notifications and other useful information.

All groups of fruits and vegetables are included in the programme and a rotation programme is applied for less important commodities. The coordinated control programme[3] of the European Commission and some targeted sampling (mainly targeted sampling at border controls according to Regulation 669/2009[4]) are also included in the national programme.

Adjustments of the programme can be made in the course of the year so that emerging problems can be dealt with.

The FASFC determines the target pesticides for each sample type according to a risk based approach taking into account the active substances authorised in Belgium, the result of previous control programmes in Belgium and other Member States, the RASFF and the analytical possibilities.

Sampling is done in accordance with Directive 2002/63/EC[5] that has been implemented in Belgian legislation. Samples are analysed in ISO 17025 accredited laboratories by means of multi-residues and single-residues methods which allowed in 2011 the detection of more than 600 pesticide residues and metabolites.

---

[1] Regulation (EC) N°396/2005 of the EU Parliament and the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin

[2] Maudoux J-P., Saegerman C., Rettigner C., Houins G., Van Huffel X. & Berkvens D., Food safety surveillance by a risk based control programming: approach applied by the Belgian federal agency for the safety of the food chain (FASFC), Vet. Quart. 2006, 28(4): 140-154. http://www.favv-afsca.fgov.be/publicationsthematiques/food-safety.asp

[3] Commission Regulation (EU) N° 915/2010 of 12 October 2010 concerning a coordinated multiannual control programme of the Union for 2011, 2012 and 2013 to ensure compliance with maximum levels of and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin

[4] Regulation (EC) N°669/2009 of 24 July 2009 implementing Regulation (EC) No 882/2004 of the European Parliament and of the Council as regards the increased level of official controls on imports of certain feed and food of non-animal origin

[5] Commission Directive 2002/63/EC of 11 July 2002 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin and repealing Directive 79/700/EEC

2. KEY FINDINGS, INTERPRETATION OF THE RESULTS AND COMPARABILITY WITH THE PREVIOUS YEAR RESULTS

In 2011, a total number of 3320 samples of fruits, vegetables, cereals, animal products and processed products (including baby food) were taken by the Federal Agency for the Safety of the Food Chain (FASFC) and analysed for the presence of pesticide residues. The products analysed were of Belgian origin (44,5%), EU origin (17%), non-EU origin (36%) and unknown origin (2,5%).

Table 1 summarises the results with respect to the sampling strategy.

Table 1 : Products analysed for pesticide residues in 2011 with respect to the sampling strategy

Sampling strategy	**Samples**	**Analysed**	**without residues**	**with residues at or below MRL**	**> MRL[6]**	**>MRL[7] (Non compliant)**
Surveillance	Fruit & vegetables	1891	566 (29,9%)	1216 (64,3%)	109 (5,8%)	**51 (2,7%)**
	Cereals	30	7 (23,3%)	21 (70%)	2 (6,7%)	**2 (6,7%)**
	Processed products (food)	115	71 (61,7%)	43 (37,4%)	1 (0,9%)	**0%**
	Animal products[8]	519	389 (75%)	130 (25%)	0%	**0%**
	Baby food	74	70 (94,6%)	3 (4,1%)	1 (1,3%)	**0%**
	Feed	94	55 (58,5%)	38 (40,4%)	1 (1,1%)	**0%**
		2723	**1158 (42,5%)**	**1451 (53,3%)**	**114 (4,2%)**	**53 (1,9%)**
Enforcement	Fruit, vegetables & cereals	594	223 (37,6%)	299 (50,3%)	72 (12,1%)	**43 (7,2%)**
	Feed	3	3 (100%)	0%	0%	**0%**
		597	**226 (37,8%)**	**299 (50,1%)**	**72 (12,1%)**	**42 (7%)**
	TOTAL	**3320**	**1384 (41,7%)**	**1750 (52,7%)**	**186 (5,6%)**	**95 (2,9%)**

- **Surveillance sampling**

2723 surveillance samples were analysed within the context of the control programme. 98,1% were compliant with the legislation in force.
Main MRL violations were observed in legume vegetables (peas from Kenya & lentils mainly from France), infusions (among others from China) and leafy vegetables (fresh herbs, spinach, endive and rucola mainly from Belgium). All samples of processed products, babyfood, feed and animal products were compliant. The list of MRL exceedances is available found in table D of the summary report.

[6] Measurement uncertainty is not taken into account (numerical MRL exceedances)
[7] Measurement uncertainty is taken into account (samples non compliant)
[8] Some animal products were analysed in the framework of Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products

As in previous years, more MRL violations were proportionally observed in non-EU products (3,9%) than in products grown in BE (1,2%) or the EU (1,8%) (see table A0 of the summary report). The situation of non-EU products has however improved when compared to 2010 (-1,1%)

In comparison with previous years, the number of samples reported has increased (+24% compared with 2010). This increase is explained by the reporting of samples of animal origin analysed in the framework of Directive 96/23/EC which were not included in the report of previous years. This increase has to be kept in mind when comparing the results with previous years. The total rate of MRL violations in 2011 is lower in comparison with 2010 (-0,2%). The rate of MRL violations in fruit and vegetables is however slightly higher in comparison with 2010 (+0,3%) but equivalent to 2009.

- **Enforcement sampling**

597 enforcement samples were analysed in the case of suspicion about the non compliance of a product with EU MRLs. These products were mainly targeted products analysed according to Regulation 669/2009 (products coming mainly from Thailand, the Dominican Republic, Egypt and China) and products analysed within the context of following up of violations found previously. 93% were compliant with the legislation
Main MRL violations were observed in fresh mint from Morocco (26% of the 45 samples analysed). MRL exceedances were also found in products from the Dominican Republic ((chilli-) peppers, beans & aubergines) and Thailand (coriander, basil & eggplants).

Compared to previous years, the rate of non-compliant enforcement samples observed in 2011 is lower than in 2010 (-3,6%). This can be explained among others by the decrease of MRL violations for chilli peppers.

3. NON-COMPLIANT SAMPLES: POSSIBLE REASONS, ARfD EXCEEDANCES AND ACTIONS TAKEN

When non-compliant samples are identified, the batch is seized, if available, and prevented from entering the market. An assessment of the risk for consumers is performed on all non-compliant samples and the appropriate measures such as recall and RASFF notification are taken[9].
Follow-up action is taken to verify the violation and to identify its cause. When non-compliant samples are identified, the producer or importer is subject to enhanced control and an official report is drawn up and sent to the legal department of the FASFC which proposes a fine. If the fine is not paid, or in case of repeated offences, the matter is taken to court .

Four RASFF messages were issued by Belgium in 2011 for pesticide residues in food and feed[10].

Notification	Ref. number
fosthiazate (0.091 mg/kg - ppm) in Nicola potatoes from Spain (business self-checking)	2011.0905
fluazifop-p (0.58 mg/kg - ppm) in broccoli from Italy (business self-checking)	2011.0182
unauthorised substance EPN (0.36 mg/kg - ppm) in coriander leaves from Thailand	2011.AQF
omethoate and dimethoate (sum = 0.133 mg/kg - ppm) in aubergine (eggplant) from Uganda	2011.0237
anthraquinone (18 mg/kg - ppm) in wheat fibre produced in the Netherlands, with raw material from Pakistan (business self-checking)	2011.0979

[9] The actions to be taken when an MRL is exceeded are described in a procedure available on the website of the FASFC (http://www.afsca.be/publicationsthematiques/inventaire-actions.asp).

[10] http://ec.europa.eu/food/food/rapidalert/rasff_portal_database_en.print.htm

The cause of MRL violations is searched for as far as possible. The table below gives an overview of MRL non compliances found in products of Belgian origin in 2011 and the possible cause of the non compliance.

Product	**Residue**	**Reason for MRL non compliance**	**Note**
Apples	Bromopropylate	GAP probably not respected	The use of bromopropylate is no longer authorised in Europe.
Celeriac	Clomazon	GAP probably not respected	Use of clomazon authorised in celeriac
Celery	Oxadixyl	Contamination: residues resulting from the previous use of a pesticide (soil residues taken up by succeeding crops)	MRL changed in 2012 in order to take this problem into account
Celery	Linuron	GAP probably not respected	Use of linuron authorised in celery
Celery	Cyfluthrin	GAP not respected	Use of cyfluthrin not authorised in celery
Chinese cabbage	Haloxyfop (sum)	GAP not respected	Use of haloxyfop non-authorised on Chinese cabbage
Chives	Cyfluthrin	GAP not respected	Use of cyfluthrin not authorised in chives
Currants	Lambda-cyhalothrin	GAP probably not respected	Use of lambda-cyhalothrin authorised in currants
Fennel	Prometryn	GAP probably not respected	Use of non- authorised pesticide in all crops
Infusions	Bifenazate	GAP not respected	Use of haloxyfop not authorised in infusions
Lamb's lettuce	Dieldrin (sum)	Contamination: residues resulting from the previous use of a pesticide (soil residues taken up by succeeding crops)	
Lentils	Malathion	GAP not respected	use of non-authorised pesticide in all crops
Parsley	Bitertanol	GAP not respected	Use of bitertanol not authorised in parsley
Parsley	Dithiocarbamates	GAP probably not respected :	Use of dithiocarbamates authorised in parsley
Rucola	Pymetrozine	GAP probably not respected	Use of pymetrozine authorised in rucola
Rucola	Thiacloprid	GAP probably not respected	Use of thiacloprid authorised in rucola
Spinach	Dithiocarbamates	GAP not respected	Use of dithiocarbamates not authorised in spinach
Spinach	Iprodione	GAP not respected	use of iprodione not authorised in spinach

4. QUALITY ASSURANCE

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
BE	CENTRE D'ECONOMIE RURALE – LABORATOIRE D'HORMONOLOGIE ANIMALE	CER	073-TEST (version 10.2, dd 2012-06-13)	BELAC	EUPT-AO 06 FAPAS (Test 0581)
BE	FEDERAAL LABORATORIUM VOOR DE VOEDSELVEILIGHEID TERVUREN	FLVVT	014-TEST (version 6.2, dd 2011-12-14)	BELAC	EUPT-C5/SRM6 EUPT-C6 EUPT-AO7 FAPAS (Test 19132) CAO FFSD (11-2011) KDLL (PCB11-1; PCB11-2; PCB12-1)
BE	FYTOLAB C.V.B.A.	FYTOLAB	057-TEST (version 10, dd 2012-07-27)	BELAC	EUPT-AO 06 EUPT-AO 07 EUPT-FV 13 EUPT-SRM7 EUPT-SRM6 EUPT-C5/SRM6 EUPT-C5 (total) EUPT-C6 FAPAS Test 0578)
BE	LABORATOIRE FEDERAL POUR LA SECURITE ALIMENTAIRE LIEGE	LFSAL	014-TEST (version 6.2, dd 2011-12-14)	BELAC	AGES (PTPR-H 2011) BIPEA (19G) EUPT-AO 06 FAPAS (Test 0578 ; Test 0583)
DE	LUFA-ITL GmbH	LUFA	D-PL-14082-01-00 (dd 2012-02-17)	DAkkS	EUPT-FV14 EUPT-C5/SRM6
BE	WETENSCHAPPELIJK INSTITUUT VOLKSGEZONDHEID (WIV) – INSTITUT SCIENTIFIQUE DE SANTE PUBLIQUE (ISP)	WIV-PEST	081-TEST (version 12, dd 2012-03-13)	BELAC	AGES (PTPR-H 2011) EUPT-AO 06 EUPT-FV 13 EUPT-SRM6 EUPT-C5 (total)
NL	GROND-, GEWAS- en MILIEU-LABORATORIUM "ZEEUWS VLAANDEREN" BV	ZEEUWS	L201(dd 2012-07-20)	RvA	EUPT-FV 13 EUPT-SRM6 FAPAS (Test 19115; Test 19120; Test 19121; Test 19124; Test 19125; Test 19127; Test 19128)

5. ADDITIONAL INFORMATION

- Only organic food analysed in the frame of the EU coordinated programme are part of this report. Additional controls on organic food are carried out by the Belgian Regional Authorities which are in charge of organic production. The results of these controls are reported separately to the European Commission.

- Website FASFC: http://www.afsca.be
- Contact point : pesticide.pc@afsca.be