THE PESTICIDE REDUCTION PROGRAMME

Manual for Suppliers and Producers

July 2014

Contents

Acronyms

ADI Acceptable Daily Intake

ARfD Acute Reference Dose

BfR German Institute for Risk Assessment

BW Bodyweight

CE Confirmed Exceedance

E Exceedance

EFSA European Food Safety Authority

FAO Food and Agriculture Organisation

LOD Limit of Detection

MRL Maximum Residue Level

PRP Pesticide Reduction Programme

QA Quality Assurance

SchäHöV Austrian Plant Protection regulation

SOE Sum Of Exposure

UL Upper Limit

WHO World Health Organisation

1 Introduction

Fruit and vegetables must nowadays not only have great appearance and extended perishability, but also be available all year long. Thus, conventional agriculture depends increasingly on mineral fertilizers and chemically synthesized pesticides with health implications on agricultural workers, contamination of ground and surface water as well as residue exposures in agricultural commodities.

GLOBAL 2000 decided to counter that trend by developing the Pesticide Reduction Programme (PRP) in 2002. The PRP was implemented in 2003 in cooperation with BILLA and has been running since 2006 with MERKUR and PENNY too, all members of REWE International AG.

2 The Pesticide Reduction Programme (PRP)

The Pesticide Reduction Programme (PRP) developed by GLOBAL 2000 is based upon four founding pillars: development of binding standards, cooperation with producers and suppliers, regular monitoring as well as awareness raising.

2.1 Aim

On the one hand the Pesticide Reduction Programme (PRP) aims at increasing consumers' safety by reduced residue exposures on fresh fruit and vegetables and on the other hand at protecting the environment by reducing the use of pesticides in the production.

This goal is achieved by a specific monitoring process as well as measures like the encouraged use of alternative crop protection methods.

2.2 Implementation

The PRP has set its own upper limits (PRP-UL) for residues of pesticides on fresh fruit and vegetables. In most cases thes limits are lower than the official maximum residue levels (MRL). The basis for the calculation of the PRP-UL and the Sum Of Exposure (SOE) is the so-called Acceptable Daily Intake (ADI) (see chapters 2.3.1 and 3.1). The ADI is set for each pesticide by internationally recognized committees and represents a measure of the chronic toxicity of a given active substance. Furthermore, the PRP also takes into account

MRLs (see chapters 2.3.3 und 3.4) as well as the Acute Reference Dose (ArfD) (see chapters 2.3.2 und 3.3) for analysing the samples.
Compliance with stipulated residue levels is checked on a weekly basis by taken samples of fresh fruit and vegetables from the assortment of REWE International AG.
Communication and cooperation with suppliers and producers are key components within the PRP. The results of the pesticide analyses are communicated regularly with the suppliers and potential ways of reducing residue exposure and pesticide applications are discussed and developed together with them.

2.3 Theoretical background and regulations

2.3.1 The ADI-Concept

The ADI (Acceptable Daily Intake) is an estimated value applied in health assessments of long-term exposure to an active substance in food. It is defined as the amount of a substance in relation to body weight that can be ingested daily during lifetime without any measurable health hazards. The ADI value is expressed in milligram per kilogram body weight (mg/kg BW).

2.3.2 The Acute Reference Dose (ARfD)

The ARfD is the estimated amount of a substance that can be ingested in the course of a day or during a single meal, without appreciable health hazard to the consumer.

If the ARfD of a pesticide is exceeded, even the consumption of a normal portion of fruit or vegetables may lead to health hazards. The product concerned is considered unsafe and shall not be marketed according to the Austrian law on food security and consumer protection (LMSVG, BGBI No.13/2006). (See also chapter 3.1).

2.3.3 Regulations

Maximum Residue Levels (MRLs) regulate the tolerated residue concentration for each active substance and differ from product to product. Besides toxicological longlasting effects on human and animal subjects (=chronic toxicity) the establishment of MRLs also takes into account the agricultural relevance of an active substance to a crop production. The establishment of MRLs does not far enough take into account the higher sensitivity of children exposed to residues of chemically synthesized pesticides.

On 1st September 2008 the Regulation (EC) No. 396/2005 of the European Parliament and European Council and its amendment (EC) No. 839/2008 of the European Commission on pesticide MRLs came into force. Since then all member States of the European Union have applied harmonised MRLs (See also chapter 3.2).

2.4 Monitoring and evaluation

2.4.1 Sampling plan

The sampling plan is issued weekly by the agricultural technicians of the PRP-Team. The selection of products follows seasonal and risk-oriented criteria, highly demanded products as well as those proven in the past having high pesticide residues are included more often in the sampling plan.

2.4.2 Sampling

Samples are taken at REWE's central storage in Inzersdorf as well as in their five regional storages. In order to guarantee traceability of the products, all available data are recorded on a datasheet attached to each sample (Fig. 1). Every sample is assigned an internal code for clear identification.

2.4.3 Documentation and traceability

Thorough traceability of products up to the growers is prerequisite for a quick and purposive handling of potential problems. Suppliers are informed upon sample taking by E-mail with traceability datasheet and pictures attached. Thus, they have primal opportunity to check all data and raise objections to the imputation of a product. Thereafter, the information from the datasheet is recorded into the PRP-Database for further processing.

2.4.4 Analysis

The samples are analysed in independent and officially certified laboratories. There they are tagged with lab-numbers and photographs are taken. While processing the samples, parts of the homogenised sample are retained. These homogenates can be possibly used in a subsequent analysis on the suppliers' request. Upon exceedance, the analysis is repeated using the second homogenate to confirm the results. Exceedance is only declared in case the average value of both measurements exceeds the upper limits.

2.4.5 Evaluation

The results of the analyses are recorded into the PRP-Database for evaluation. Main evaluation criteria are:

- The exhaustion of the ARfD-Upper limit (ARfD-UL) shall not exceed 100 %.
- The MRL exhaustion shall not exceed 100 %.
- Banned substances.
- The exhaustion of the PRP-Upper limits (PRP-UL) and the subsequent Sum of Exposure (SOE) shall not exceed 200 % (this takes into account the analytical tolerance margins in favour of the suppliers).After the evaluation a sample report is sent to the suppliers (Fig. 2).

bitte per E-Mail auch an proben@global2000.at und b.voss@gba-group.de

Gemeinsam mit den Proben bitte an:

GBA Gesellschaft für Bioanalytik GmbH
Standort Hamburg
Goldtschmidtstr. 5
21073 Hamburg

Probencode: **12012701**
JJ/MM/TT/LfNr.

Probenbegleitschreiben / Rapporto di prova

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Auftrag:	**Multimethode + DTC**
Produkt / Prodotto: *	pears, Kaiser Alexander
EAN Code:	(01)08032140036696(13)120127
Aufschrift Kiste / etichetta cassa:	pears, Kaiser Alexander
Aufschrift Produkt / etichetta prodotto:	L0513, 1543
Ursprungsland / origine:	Italy
Lieferant / fornitore:	X
Produzent/Unterlief. / produttore:	Y
Anmerkung / annotatione :	
Folgeprobe :	No — Folgeprobe von:
Probenahme-Ort:	Inzersdorf — im Sortiment bei: Billa
Bearbeitet von:	Max Mustermann

* Die Eigenmarken werden dem Produkt vorangestellt und zwar in alphabetischer Reihenfolge.

Kürzel: Clever – **CV,** Chef Menü – **CM**, Da komm ich her – **DKIH**,
Ich bin Österreich – **IBÖ**, Pro Planet – **PP**, Wunderlinge – **W**

Fig. 1: Example of a sample datasheet

Birnen

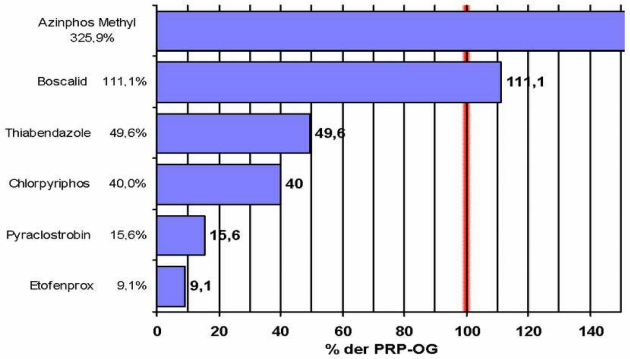
Produktbezogene Daten

Probencode	08031216
Eingang Warenlager	10.03.2008
Produktinfo	Kaiser Alexander
Produktkennzeichnung	L0510, 1543
EAN-Code	08032140036696 UEB
Herkunft	Italien
Anbauregion	
Lieferant	Lieferant X
Unterlieferant	Produzent Y
Summenbelastung	5,5137

Analysedaten

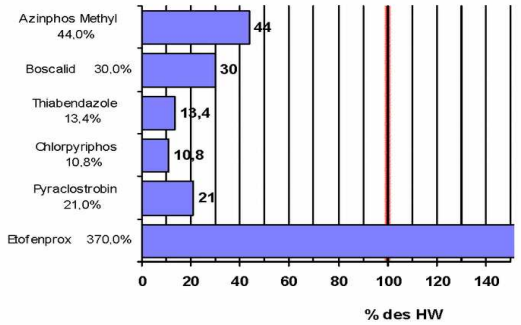
nachgewiesene Wirkstoffe	Menge [mg/kg]	gesetzl. HW [mg/kg]	% des HW	PRP Obergrenze [mg/kg]	% der PRP-OG	Belastungsgrad [/kg]	ARfD-%
Azinphos Methyl	0,220	0,500	44,0	0,067	325,9	3,259	26,7
Boscalid	0,600	2,000	30,0	0,540	111,1	1,111	0,0
Thiabendazole	0,670	5,000	13,4	1,350	49,6	0,496	20,3
Chlorpyriphos	0,054	0,500	10,8	0,135	40,0	0,400	4,9
Pyraclostrobin	0,063	0,300	21,0	0,405	15,5	0,155	19,1
Etofenprox	0,037	0,010	370,0	0,405	9,1	0,091	0,3

PRP-Obergrenzen



Die PRP-Obergrenze wird überschritten bei: Azinphos Methyl.
Die PRP-Obergrenze wird (unter Berücksichtigung der Analysetoleranz) eingehalten bei: Boscalid.

Gesetzliche Höchstwerte



Der gesetzl. Höchstwert wird überschritten bei: Etofenprox.

Feldaufzeichnungen

Keine Angaben zur Produktion erhalten.

Bemerkungen

In den Birnen mit dem Probencode 08031216 wurden Rückstände von 6 Pestiziden nachgewiesen.

Der Rückstand von Etofenprox überschreitet den gesetzlichen Höchstwert und jener von Azinphos-methyl die PRP-Obergrenze. Der Rückstand von Boscalid liegt in der Analysentoleranz der PRP-Obergrenze.

Es handelt sich dabei um die erste Überschreitung. Das bedeutet, dass zwei Folgeproben gezogen werden. Bitte stellen Sie sicher, dass die nächste Lieferung die gefordeten Obergrenzen einhält, da es bei wiederholten Überschreitungen zu einer Sperre des Produktes kommt.

Für Fragen setzen Sie sich bitte mit uns in Verbindung.

Fig. 2: Example of a sample report

2.4.6 Exceedance and ban procedures

The supplier is immediatley informed in case of non compliance of his/her product with the stipulated quality criteria and a well specified procedure comes into force (table 1). Actions taken in the frame of these procedures may range from an increase in the frequency of sampling up to a withdrawal from market and phase out of a given product. In case several quality criteria are not met within a sample, the most severe infringement applies (whereby ARfD > MRL > PRP/SOE).

Follow-up and express samples

Two follow-up samples are taken after PRP and/or Sum of Exposure exceedance to check-up the residue exposure of a product. The supplier concerned bears the costs of such follow-up samples. In case of MRL-exceedance within the analytical tolerance margin (101-200 %) an express sample is taken at the supplier's expense.

Procedure in case of ARfD-Exceedance

In case of an ARfD-Exceedance (Chap. 3.1) no tolerance margin is considered, this means an immediate ban for a minimum of 5 working days on the product of the supplier in charge, if the load of the ARfD-upper limit exceeds 100 %. The product concerned will be locked at the REWE storage and withdrawn from sale. This mode of action is considered necessary since a health hazard emerging from a one-time consumption of a product with ARfD-Exceedance cannot be excluded.

Procedure in case of MRL-Exceedance

In case of MRL-Exceedance (Chap. 3.2) within the analytical tolerance margin which means > 100 % and ≤ 200 % of the upper limit, an express analysis of the product concerned and subject to a charge is immediately ordered. If the result of that analysis shows a MRL-Exceedance above 100 % again, a ban for a minimum of 5 working days is pronounced on the product of the supplier in charge. If however, the result is below 100 % of the MRL and the other upper limits are conform, the product concerned can be delivered furthermore.

In case of MRL-Exceedance beyond the analytical tolerance margin, which means more than >200 %, an immediate ban for a minimum of 5 workings days is pronounced on the product concerned. That product will be locked at the REWE storage and withdrawn from

the market. The product is considered not marketable by European law.

Procedure in case of PRP-Exceedance

In case a product exceeds the PRP-upper limit (PRP-UL plus analytical tolerance margin) (Chap. 3.1) or the maximum allowed sum of exposure of 200 % (Chap. 3.2), two follow-up samples are taken on the supplier's costs.

If the two follow-up samples comply with the stipulated upper limits, the product is declared exceedance-free again. However, in case one of the two follow-up samples restates an exceedance once again, the first one is then confirmed (Confirmed Exceedance, CE). The product of the responsible supplier is placed on the so-called "watch list" for the next five samples.In case no exceedances are detected on the five upcoming samples of a product on the „watch list“, that status is revocated and the product declared exceedance-free again.

A ban is pronounced on a product of a supplier, if an exceedance is detected on that product within its five upcoming samples while still being on the "watch list". The minimum duration of a ban is five working days.

Procedure in case of Ban

After expiration of the minimum five-day ban, the latter can be revocated. But only if the product complies with all stipulated criteria. For this purpose the supplier has to submit pre-analyses, conducted in a QS-certified laboratory showing that the product is conform again with the stipulated upper limits for pesticides. In addition to that, the supplier has to present a quality management concept showing how all requirements will be respected in the future.

Table 1: Tabular illustration of the PRP procedures in cases of PRP-, SOE-, MRL- and ArfD-Exceedances (Status 01.10.2016)

Occasion	Result	Chargeable express analysis	Ban suggestion	Ban implement ation	suggestion withdrawal product of sale	Ban duration	Terms of ban revocation	Two chargeable follow-up samples
PRP- and/ or SOE-exceedance within AT	**> 100% ≤ 200%**	no	no		no			no
1st PRP- and/ or SOE-exceedance	**> 200%[1]**	no	no		no			yes
2nd PRP- and/ or SOE-exceedance (within the following 2 samples)	**> 200%[1]**	no	no		no			yes
3rd PRP- and/ or SOE-exceedance (within the following 3 samples)	**> 200%[1]**	no	yes	within 72 hours	no	min. 5 working days	supplier presents a current analysis from a QS certified laboratory and a quality assurance concept	no
ARfD-exceedance	**> 100%**	no	yes	immediately	yes	min. 5 working days	supplier presents a current analysis from a QS certified laboratory and a quality assurance concept	no
MRL-exceedance within AT	**> 100% ≤ 200%**	yes	Express analysis ≤ 100%: no ban Express analysis >100%: see MRL exceedance > 200%		no			no
MRL-exceedance	**> 200%**	no	yes	immediately	yes	min. 5 working days	supplier presents a current analysis from a QS certified laboratory and a quality assurance concept	no
Evidence of a banned active substance		no	yes	immediately	yes	min. 5 working days	supplier presents a current analysis from a QS certified laboratory and a quality assurance concept	no
Evidence of a substance prohibited by Pro Planet [2]		yes	Express analysis does NOT confirm the evidence: no ban		no			no
			Express analysis confirms the evidence: ban yes	immediately	yes	min. 5 working days	supplier presents a current analysis from a QS certified laboratory and a quality assurance concept	no

PRP: Pesticide Reduction Program, **SOE**: sum of exposure, **ARfD:** acute reference dosis, **MRL**: maximal residues limit, **AT**: analytical tolerance margin

[1] exception:citrus: SOE > 300

[2] Substances prohibited by Pro Planet: Chlorpropham and Maleic hydrazide for potatoes and onions

2.5 Communication and cooperation

Communication and cooperation with the suppliers and producers are essential components of the Pesticide Reduction Programme. Besides regular notifications on the current status of their products by means of traceability data, attached sheet and samples analysis report, suppliers do get a yearly statistics about the residue exposure of samples taken accross their deliveries. If needed, the supplier gets a detailed analysis of single groups of products by means of:

- Statistics
- PRP-, MRL- and ARfD-Profiles
- Exposure profile

In the past the following measures have proven effective to prevent and also to solve problems due to excessive residue exposure:

- Meticulous choice of producers
- Consultation with the PRP-Team on application of pesticides
- Suppliers do their own regular analyses – results are evauated by PRP-team on demand
- Information folders for the producers about the PRP are available– they can be requested from the PRP-Team

The PRP-Team establishes closer cooperation with the supplier in case of repeated residue problems of the same nature despite the above-mentioned measures. As a first step the causes are determined and methods of resolutions are attempted in common. Sometimes only slight changes of the active substance, adaption of the waiting period or changes of the concentration of the substance als well as an enhanced residue monitoring system installed by the suppliers might be successful in order to solve a pesticide residue problem rapidly. In case these measures cannot be implemented or do not show any success, a solution process for the long term is aimed at. Options include research, testing of alternative plant protection measures or field trials at production sites.

3 PRP upper limits

3.1 The Acute Reference Dose (ARfD)

The risk assessment of the acute health hazard is very complex, as it does not only depend on the ARfD basis value (Chap. 2.3.2.) expressed in kilogramm bodyweight but also on the average consumption and size of each product among other factors.

The German institute for risk assessment (*Das deutsche Bundesinstitut für Risikoforschung*, BfR) as well as the European Food Safety Authority (EFSA) provide calculation models for the evaluation of health hazard through short-term exposition to pesticide residue (www.bfr.bund.de/de/pflanzenschutzmittelrueckstaende-10196.html).

The underlying assets for ARfD values of several active substances needed for this calculation can be found in the EU-database at http://ec.europa.eu/sanco_pesticides/public/index.cfm (*„Active substances“*).

The exhaustion of the ARfD-upper limit by the detected residue is expressed in percentage (% ARfD-UL).

3.2 The Maximum Residue Level (MRL)

Maximum Residue Levels are defined by the European parliament and Council in the regulations EG Nr. 396/2005 and its annexes and amendements. The current EU-wide applicable MRLs for each active substance and product are provided in the EU pesticide residue database http://ec.europa.eu/sanco_pesticides/public/index.cfm.

The Austrian plant protection regulation (SchäHöV) still applies for active substances not listed in the afore-mentionned EU regulation. For substances without determined upper limits in both „SchäHöV“ and EU regulation applies the MRL of 0,01 mg/kg (=detection limit).

The exhaustion of the MRL value by the detected residue is expressed in pecentage (% MRL).

3.3 The PRP-Upper limit (PRP-UL)

PRP-upper limits are maximum acceptable pesticide residue levels defined by GLOBAL 2000. The calculation of PRP-upper limits and sum of exposure bases on the current ADI-value of each active substance (Chap. 2.3.1). The ADI-values of the several actives substances needed for the calculation can be found in the EU pesticide database

http://ec.europa.eu/sanco_pesticides/public/index.cfm (*„Active substances“*).

The compliance with the PRP-upper limits should theoretically warrant the harmless daily consumption of 1 kg fresh fruit and/or vegetables by a child of 13,5 kg bodyweight[1]. This bodyweight is representative for risk groups including children, pregnant women, elderly and sick people.

The PRP-upper limits are calculated as follows:

$$\text{PRP} - \text{OG } 2\ [\text{mg/kg}] = \frac{\text{ADI}\ [\text{mg/kg}] \times 13{,}5\ [\text{kg}]}{1\ [\text{kg}]}$$

The exhaustion of the PRP-upper limit by the detected residue is expressed in percentage of the upper limit (% PRP-UL).

3.4 The Sum Of Exposure (SOE)

Products are often exposed to more than one pesticide. The harmful potential effect of a single active substance might increase in such cases („cocktail effect“ or „mixed toxicity“). There are currently no studies allowing a standardised evaluation of the cocktail effect. Thus, GLOBAL 2000 limits this evaluation by adding individual exposures into a total called Sum Of Exposure (SOE). The sum of exposure is also expressed in percentage.

[1]The ADI always relies on current scientific knowledge. So far unknown effects are therefore disregarded. Thus, compliance with PRP-upper limits does not exlude any health implications.

4 Illustration of the exposure status

4.1 Statistics

The statistical file (Fig. 3) gives an overview of the exposure status of a given product line. Among other things information on the following details is provided:

- number of samples
- number of active substances detected in the samples
- number of exceedances
- average sum of exposure with standard deviation
- maximum sum of exposure detected
- frequency and average exposure level of the detected substances

4.2 PRP-Profile

The PRP-profile (Fig.4) gives a precise overview of substances which need particular attention with regards to the PRP-upper limits. It is shown in a graphic which pesticides in which frequency and what amount of exhausting the PRP-upper limit was (% PRP).

MRL- and ARfD-profiles similar to the PRP-profile can be issued if necessary.

Pears 2014

Anzahl Proben 62
davon Folgeproben ... 9

WIRKSTOFFANZAHL	PROBEN
2	16
3	15
4	10
1	8
5	7
0	3
6	3

KATEGORIE	ANZAHL	PRP_0	HW_0	ARFD_0	SB_0	SUMBEL_AVG	SUMBEL_STD	SUMBEL_MAX	EDC_SUMBEL_AVG	EDC_SUMBEL_STD	EDC_SUMBEL_MAX	EDC_SUM_AVG	EDC_SUM_STD	EDC_SUM_MAX	RÜCKS_AVG	RÜCKS_STD
Alle	62	3	0	0	5	83,07	101,54	609,26	61,93	94,71	603,85	0,19	0,35	2,40	0,3118	0,39

KATEGORIE1	ANZAHL	PRP_0	HW_0	ARFD_0	SB_0	SUMBEL_AVG	SUMBEL_STD	SUMBEL_MAX	EDC_SUMBEL_AVG	EDC_SUMBEL_STD	EDC_SUMBEL_MAX	EDC_SUM_AVG	EDC_SUM_STD	EDC_SUM_MAX	RÜCKS_AVG	RÜCKS_STD
Obst	62	3	0	0	5	83,07	101,54	609,26	61,93	94,71	603,85	0,19	0,35	2,40	0,3118	0,3862

KATEGORIE2	ANZAHL	PRP_0	HW_0	ARFD_0	SB_0	SUMBEL_AVG	SUMBEL_STD	SUMBEL_MAX	EDC_SUMBEL_AVG	EDC_SUMBEL_STD	EDC_SUMBEL_MAX	EDC_SUM_AVG	EDC_SUM_STD	EDC_SUM_MAX	RÜCKS_AVG	RÜCKS_STD
Kernobst	62	3	0	0	5	83,07	101,54	609,26	61,93	94,71	603,85	0,19	0,35	2,40	0,3118	0,3862

KATEGORIE3	ANZAHL	PRP_0	HW_0	ARFD_0	SB_0	SUMBEL_AVG	SUMBEL_STD	SUMBEL_MAX	EDC_SUMBEL_AVG	EDC_SUMBEL_STD	EDC_SUMBEL_MAX	EDC_SUM_AVG	EDC_SUM_STD	EDC_SUM_MAX	RÜCKS_AVG	RÜCKS_STD
Birnen	62	3	0	0	5	83,07	101,54	609,26	61,93	94,71	603,85	0,19	0,35	2,40	0,3118	0,3862

KATEGORIE4	ANZAHL	PRP_0	HW_0	ARFD_0	SB_0	SUMBEL_AVG	SUMBEL_STD	SUMBEL_MAX	EDC_SUMBEL_AVG	EDC_SUMBEL_STD	EDC_SUMBEL_MAX	EDC_SUM_AVG	EDC_SUM_STD	EDC_SUM_MAX	RÜCKS_AVG	RÜCKS_STD
Birnen	62	3	0	0	5	83,07	101,54	609,26	61,93	94,71	603,85	0,19	0,35	2,40	0,3118	0,3862

PRODUKT	ANZAHL	PRP_0	HW_0	ARFD_0	SB_0	SUMBEL_AVG	SUMBEL_STD	SUMBEL_MAX	EDC_SUMBEL_AVG	EDC_SUMBEL_STD	EDC_SUMBEL_MAX	EDC_SUM_AVG	EDC_SUM_STD	EDC_SUM_MAX	RÜCKS_AVG	RÜCKS_STD
Birnen, Abate Fetel	21	2	0	0	3	130,06	135,33	609,26	97,81	132,86	603,85	0,35	0,50	2,40	0,5275	0,5070
Birnen, Carmen	3	1	0	0	1	99,52	130,17	283,56	83,38	117,91	250,13	0,27	0,39	0,82	0,3890	0,4463
Birnen, Flamingo	1	0	0	0	0	34,81	0,00	34,81	22,22	0,00	22,22	0,03	0,00	0,03	0,2000	0,0000
Birnen, Forelle	6	0	0	0	1	85,27	68,85	202,87	75,24	65,10	193,73	0,29	0,33	0,95	0,4295	0,2846
Birnen, Guyot	1	0	0	0	0	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,0000	0,0000
Birnen, Kaiser Alexa	12	0	0	0	0	76,24	62,16	190,07	44,01	50,69	182,96	0,08	0,08	0,25	0,2322	0,2025
Birnen, Limoneras	1	0	0	0	0	6,17	0,00	6,17	6,17	0,00	6,17	0,03	0,00	0,03	0,0250	0,0000
Birnen, Nashi	1	0	0	0	0	5,71	0,00	5,71	5,19	0,00	5,19	0,01	0,00	0,01	0,0280	0,0000
Birnen, Packhams	2	0	0	0	0	4,83	4,18	9,00	4,45	4,45	8,89	0,01	0,01	0,01	0,0415	0,0055
Birnen, Red Barlett	2	0	0	0	0	0,08	0,01	0,08	0,00	0,00	0,00	0,00	0,00	0,00	0,0160	0,0020
Birnen, Santa Maria	2	0	0	0	0	134,11	19,01	153,11	128,11	17,82	145,92	0,18	0,02	0,20	0,2025	0,0105
Birnen, Williams	10	0	0	0	0	36,93	26,07	71,85	25,71	23,66	71,85	0,05	0,05	0,17	0,0952	0,0555

Anzahl Wirkstoffe gesamt.....33 Stk.

Acetamiprid:
Anzahl .....5 Stk.
Messwert (AVG) 0,042200
Messwert (STD) 0,028799
Belastungsgrad (AVG) 0,044700
Belastungsgrad (STD) 0,030468
HW % Höchstwert (AVG) 5,275000
HW % Höchstwert (STD) 3,599826
PRP % Höchstwert (AVG) 4,465608
PRP % Höchstwert (STD) 3,047472

Azinphosmethyl:
Anzahl .....1 Stk.
Messwert (AVG) 0,006000
Messwert (STD) 0,000000
Belastungsgrad (AVG) 0,088900
Belastungsgrad (STD) 0,000000
HW % Höchstwert (AVG) 12,000000
HW % Höchstwert (STD) 0,000000
PRP % Höchstwert (AVG) 8,888889

Fig. 3: Example of a statistical reporting of pears

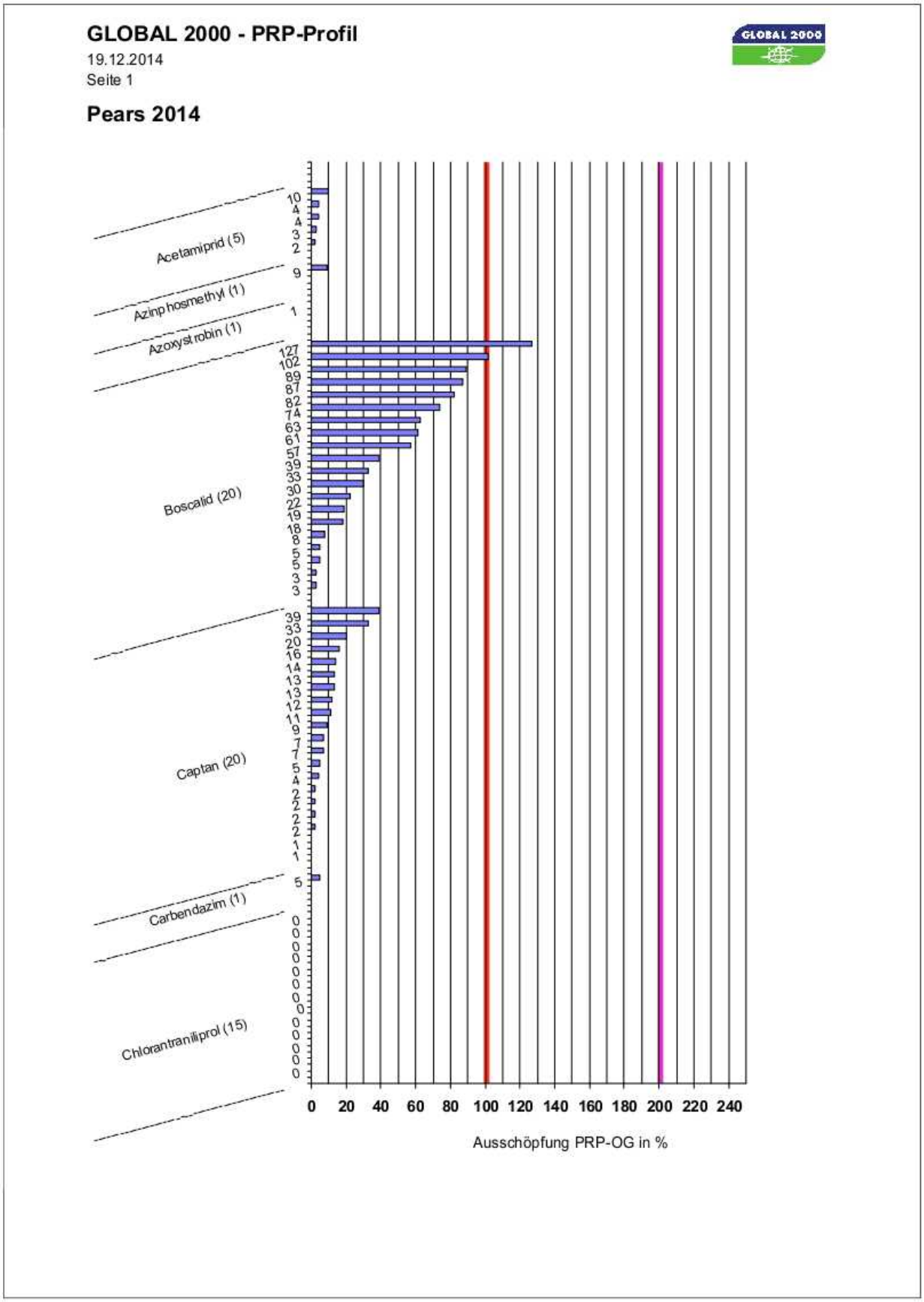


Abb. 4. Example of a PRP-Profile of pears

4.3 Exposure level

Due to their Sum Of Exposure the samples are classified into 4 different exposure levels (Table 2).

Table 2: Illustration of the evaluation of the Sum Of Exposure (SOE)

Sum of exposure	Exposure level	Meaning
SOE < LOQ	Level 0	Below limit of quantification
SOE LOQ – 100 %	Level 1	Exposure
SOE 101 – 200 %	Level 2	High exposure
SOE > 200 %	Level 3	Exceedance

The exposure profile illustrates the exposure situation of a given product line (Fig. 5). It shows how often that product line has been screened and the number of samples at each exposure level. Numbers in parentheses (97/11) indicate that residues were detected in 88 samples out of 99.

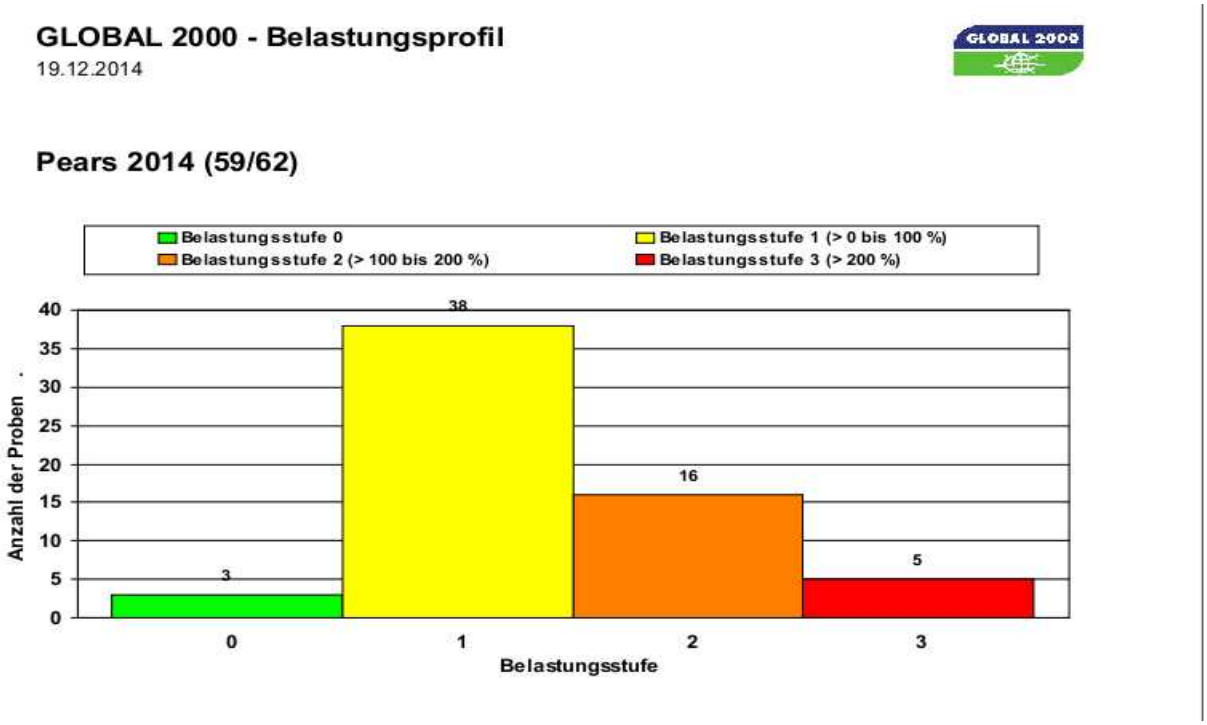


Fig. 5: Example of exposure profile of pears

5 Contact and Information

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The following documents can be requested from the PRP-Team:

- PRP-upper limits
- Folders for Suppliers in German, English, Italian or Spanish
- Tabular illustration of the PRP-Procedures (Table1) in German, English, Italian or Spanish