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Safety of the Food Chain
Pesticides and Biocides

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Working document on pesticides to be considered for inclusion in the national control programmes to ensure compliance with maximum residue levels of pesticides residues in and on food of plant and animal origin.

Contents

1. Scope

This is a non-binding document that gives recommendations to gather on a voluntary basis monitoring data on pesticides that could be considered for potential inclusion in the coordinated multiannual control programme of the EU (MACP). Based on a survey of these monitoring data and the analytical capability, the inclusion of some of these substances in the MACP will be considered.

2. Introduction

On 4 October 2013 an Expert Group Meeting on Pesticides Residues Monitoring was held in Brussels. In this meeting it was agreed not to include voluntary analyses in the Regulation concerning a MACP for 2015, 2016 and 2017. However, it is necessary to already highlight in advance certain pesticides that could be considered for inclusion in the Regulation for the MACP. These pesticides are listed in chapter 4 of this document and can be on a voluntary basis taken up in the National Control Programmes of the Member States. After an evaluation of the analytical capability and the monitoring data gathered under the National Control Programmes, their inclusion or non-inclusion in the EU MACP will be considered.

Pesticides for which monitoring data are required for specific risk management questions are taken up in Annex I of this document.

Pesticides, for which support is needed from the EURLs, are included in Annex II

Pesticides that are of interest to EFSA for cumulative risk assessment and which are not taken up in the chapter 4 of this document or the MACP, are included in Annex III to this document.

Substances of interest to be analysed in honey under national control programmes are listed in annex VII.

Commodities of interest to be analysed under the national control programmes are listed in annex VIII.

Substances that have been moved from Chapter 4 of this document into the MACP are listed in Annex IX.

Annex X provides a brief description of a project regarding the collection of samples of organic products of plant origin for the determination of background levels of dithiocarbamates (CS2), as several false positive analysis results indicate the natural occurrence of CS2 in specific plant products.

This working document will be annually revised during the expert group meeting for the preparation of the MACP.

All pesticides mentioned in this document are recommended to be analysed for their full and legal residue definition according to Reg. (EC) N° 396/2005. In order to avoid that this document would be outdated due to future changes in residue definitions, only the general name of the residue definition is mentioned. For the full details of each residue definition, as well as specific residue definitions for certain commodities, reference is made to the most recent version of Reg. (EC) No 396/2005.

3. Categorisation and prioritisation

During the SCOFCAH of 12-13 June 2014 the Member States were requested to take a position on the approach for categorisation and prioritisation of the substances that are taken up in this document. A majority of the Member States was in favour of an approach in which the pesticides are divided into specific categories. Based on a limited set of criteria each pesticide is attributed a priority and a time line for evaluation of inclusion or non-inclusion in the MACP.

3.1. Categorisation

The pesticides in chapter 4 are split up into the following categories:

- Frequent detections, MRL exceedances or RASFF notifications
- Recently approved
- Art. 12 priority list
- High toxicity
- Voluntary in Reg. (EU) N° 788/2012: this category would only be present for the first 2 years (2015-2016). It was agreed not to include any longer voluntary analysis in the

MACP. For some of the voluntary substances of Reg. (EU) N° 788/2012, it was preferred not to include them on a mandatory basis in the MACP Regulation (EU) No 400/2014. Therefore now some evaluation needs to be done whether or not to include these substances on a mandatory basis in future MACPs. For substances for which few residues are detected, at the end of the evaluation period a decision can be made not to add them to the MACP and to delete them from chapter 4 of this document. Those substances can be added to Annex IV, for information of the Member States that are interested in keeping them in their National Programs.

3.2. Prioritisation

The substances included in chapter 4 of this document are prioritised based on analytical capability.

- MRM method: priority 1
- MRM/ SRM or SRM method: priority 2
- In case no standards and/or analytical method are available for substances that qualify to the categories mentioned under chapter 3.1, the substances are not included in chapter 4. They are however taken up in Annex II to this document that lists substances for which support from the EURLs is requested.

A further refinement of the priority is made based on toxicity.

- 1A and 2A if ADI ≤ 0.1 mg/kg bw/day **or** ARfD ≤ 0.1 mg/kg bw
- 1B and 2B if ADI > 0.1 mg/kg bw/day **and** ARfD > 0.1 mg/kg bw

Based on the above , prioritization is illustrated in the following table:

Table 1. Prioritization Matrix of Active Substances

Toxicity \ Analytical Capability		Priority 1	Priority 2
		MRM	MRM/SRM or SRM
Priority A	ADI ≤ 0.1 mg/kg bw/day **or** ARfD ≤ 0.1 mg/kg bw	1A	2A
Priority B	ADI > 0.1 mg/kg bw/day **and** ARfD > 0.1 mg/kg bw **or** No Toxicological Reference Values Available	1B	2B

For pesticides with priorities 1A and 1B, the evaluation will be done after 1 year, for categories 2A and 2B after 2 years.

The sub-priorities A and B, which are linked to the toxicity, don't affect the evaluation timeline and are only for information to the MS, in case they want guidance on which substances should be prioritised.

In case of RASFF notifications it is possible to accord a higher priority to certain specific substances after discussions in the expert group.

4. Pesticides to be considered for inclusion in National Control Programmes

Per category the substances are listed in alphabetical order

4.1. Pesticides to be considered for analysis in products of plant origin

4.1.1. Frequent detections[1], MRL exceedances or RASFF notifications

Chlorfluazuron (not approved)

- Toxicity: no toxicological reference values available
- Method: MRM
- Priority: 1B
- Evaluation: after 1 year (10/2018)
- 0.01% findings (0.01% MRL exceedances) EFSA 2013 report
- 0.18% findings (0.09% MRL exceedances) EFSA 2014 report
- 0.03% findings (0.02% MRL exceedances) EFSA 2015 report
- 0.03% findings (0.03% MRL exceedances) EFSA 2016 preliminary report
- 30% labs and 46% MS analysed full RD in 2016

[1] SRM-compounds are typically analysed on specific commodities so their detection frequencies are typically higher than if they would have been analysed randomly.

Cyflufenamid

- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD 0.05 mg/kg bw
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2018)
- 0.14% findings EFSA 2013 report
- 0.20% findings EFSA 2014 report
- 0.26% findings (0.00% MRL exceedances) EFSA 2015 report
- 0.30% findings (0.01% MRL exceedances) EFSA 2016 preliminary report
- 0% labs and 0% MS analysed full RD in 2016

Fosetyl-Al

- Method: SRM
- Toxicity: ADI = 3 mg/kg bw/day, ARfD NA
- Priority: 2B
- Evaluation: after 2 years (10/2017)
- Both fosetyl and phosphonic acid are SRM substances. Whereas phosphonic acid is frequently found in virtually all types of crops, fosetyl itself is rarely found (e.g. in grapes, strawberries, cucumber, melons, lettuce, ruccola, tomatoes, zucchini)
- 1.3% Findings in vegetables, 0.5% in fruits and nuts EFSA 2011 report
- 6.36% findings EFSA 2012 report
- 33.78% findings EFSA 2013 report
- 33.26% EFSA 2014 report
- 27.66% findings (0.19% MRL exceedances) EFSA 2015 report
- 11.68% findings (0.25% MRL exceedances) EFSA 2016 preliminary report
- 38% labs and 81% MS analysed full RD in 2015
- 29% labs and 54% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Findings justify inclusion in EU MACP**
- **⇒ Include from EU MACP 2020 onwards so that more labs have the time to add this substance to their scope.**

Glufosinate ammonium

- At request of EFSA, residues are found in animal origin commodities, interesting to also check soybean which is used both as food and feed.
- Method: SRM
- Toxicity: ADI = 0.021 mg/kg bw/day, ARfD = 0.021mg/kg bw
- Priority: 2A
- Evaluation: after 2 years (10/2017) → 10/2018

- 0.3% findings in vegetables EFSA 2011 report
- 0.37% findings in 2011-2013 (EURL priority list)
- 0% findings EFSA 2012 report
- 0.26% findings EFSA 2013 report
- 0.03% findings EFSA 2014 report
- 0.26% findings (0.00% MRL exceedances) EFSA 2015 report
- 0.92% findings (0.18% MRL exceedances) EFSA 2016 preliminary report
- 6% labs and 23% MS analysed full RD in 2015
- 10% labs and 27% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **⇒ Keep extra year in Chapter 4 of WD**
- Especially relevant for apples, cultivated fungi, peaches/ nectarines, potatoes, strawberries and rice. Additionally relevant for some non-MACP commodities such as: celery, currants maize and soyabeans.

Novaluron (not approved)

- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD NA
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2018)
- 0.14% findings (0.00% MRL exceedances) EFSA 2013 report
- 0.12% findings (0.00% MRL exceedances) EFSA 2014 report
- 0.06% findings (0.00% MRL exceedances) EFSA 2015 report
- 0.03% findings (0.01% MRL exceedances) EFSA 2016 preliminary report
- 45% labs and 58% MS analysed full RD in 2016

Phosphane and phosphide salts

- Toxicity: ADI = 0.011 mg/kg bw/day, ARfD = 0.019 mg/kg bw
- Method: SRM (head-space equipment is needed)
- Priority: 2A
- Evaluation: after 2 years (10/2017)
- 27.8 % findings in cereals EFSA 2011 report
- 8.3% findings EFSA 2012 report
- 8.47% findings EFSA 2013 report
- 10% findings EFSA 2014 report
- 11.54% findings (0.00% MRL exceedances) EFSA 2015 report
- 16.22% findings (0.00% MRL exceedances) EFSA 2016 preliminary report

- 9% labs and 31% MS analysed full RD in 2015
- 6% labs and 19% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Findings justify inclusion in EU MACP**
- **⇒ Include from EU MACP 2020 onwards so that more labs have the time to add this substance to their scope.**
- Especially relevant for all cereals among the MACP commodities. (e.g. wheat, rye, oats, rice, barley). Additionally relevant for some non-MACP commodities such as: maize, nuts, oilseeds and dry pulses.

Proquinazid

- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD 0.2 mg/kg bw.
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2018)
- 0.15% findings (0.00% MRL exceedances) EFSA 2013 report
- 0.22% findings (0.00% MRL exceedances) EFSA 2014 report
- 0.14% findings (0.00% MRL exceedances) EFSA 2015 report
- 0.12% findings (0.00% MRL exceedances) EFSA preliminary report
- 52% labs and 81% MS analysed full RD in 2016

Pyridalil

- Toxicity: ADI = 0.03 mg/kg bw/day, ARfD NA
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2018)
- 0.08% findings (0.00% MRL exceedances) EFSA 2013 report
- 0.13% findings (0.00% MRL exceedances) EFSA 2014 report
- 0.18% findings (0.01% MRL exceedances) EFSA 2015 report
- 0.11% findings (0.00% MRL exceedances) EFSA 2016 preliminary report
- 35% labs and 62% MS analysed full RD in 2016

Spinetoram

- Toxicity: ADI = 0.025 mg/kg bw/day, ARfD 0.1 mg/kg bw
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2018)
- 0.12% findings (0.00% MRL exceedances) EFSA 2013 report

- 0.31% findings (0.02% MRL exceedances) EFSA 2014 report
- 0.26% findings (0.01% MRL exceedances) EFSA 2015 report
- 0.29% findings (0.03% MRL exceedances) EFSA 2016 preliminary report
- 37% labs and 54% MS analysed full RD in 2016

Tricyclazole (not approved)

- Toxicity: no toxicological reference values available
- Method: MRM
- Priority: 1B
- Evaluation: after 1 years (10/2018)
- 0.40% findings (0.01% MRL exceedances) EFSA 2013 report
- 0.58% findings (0.01% MRL exceedances) EFSA 2014 report
- 0.27% findings (0.01% MRL exceedances) EFSA 2015 report
- 0.15% findings (0.05% MRL exceedances) EFSA 2016 preliminary report
- 62% labs and 81% MS analysed full RD in 2016

4.1.2. Recently approved

Benzovindiflupyr

- Approved since 03/2016
- Method: MRM
- Toxicity: ADI 0-0.05 mg/kg bw day, ARfD 0.1 mg/kg bw
- Priority 1A
- Evaluation: after 1 year (10/2017) -> 10/2018
- No EFSA monitoring data for 2012, 2013, 2014, 2015 and 2016.
- 2% labs and 8% MS analysed full RD in 2015
- 14.4% labs and 50% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **⇒ Keep in chapter 4 of WD for an extra year**
- Relevant commodities: soybean, wheat, apples, grapes, pears, peanuts, potatoes and maize.

Fenpyrazamine

- Approved since 01/2013
- Method: MRM
- Toxicity: ADI = 0.13 mg/kg bw/day, ARfD = 0.3 mg/kg bw
- Priority: 1B

- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data EFSA 2012 report
- 0% findings EFSA 2013 report
- 64.29% findings EFSA 2014 report (only 14 samples)
- 0.40% findings (0.00% MRL exceedances) EFSA 2015 report (2728 samples)
- 0.48% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (8350 samples)
- 23% labs and 54% MS analysed full RD in 2015
- 37% labs and 69% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Findings justify inclusion in EU MACP**
- **⇒ Include from EU MACP 2020 onwards so that more labs have the time to add this substance to their scope.**

Penflufen

- Approved since 02/2014
- Method: MRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.5 mg/kg bw
- Priority: 1A
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data available EFSA 2012, 2013 or 2014 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (only 1 sample)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (4161 samples)
- 14% labs and 46% MS analysed full RD in 2015
- 26% labs and 65% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **Keep 1 extra year in chapter 4 WD**

Pyriofenone

- Approved since 2/2014
- Method and standard available in the meanwhile.
- Method MRM
- Toxicity: ADI = 0.07 mg/kg bw/day, ARfD NA
- Priority 1A
- Evaluation after 1 year (10/2018)
- No monitoring data available EFSA 2012, 2013, 2014 and 2015 report

- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (882 samples)
- 17% labs and 39% MS analysed full RD in 2016

Sulfoxaflor

- Approved since 8/2015 (EU MRLs voted June 2015, certain CXLs will be taken over in EU legislation end 2015)
- Method: MRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.25 mg/kg bw
- Priority: 1B
- Evaluation after 1 year (10/2017) → 10/2018
- No monitoring data 2012, 2013, 2014 and 2015.
- 0.05% findings (0.05% MRL exceedances) EFSA 2016 preliminary report (2020 samples)
- 6% labs and 12% MS analysed full RD in 2015
- 27% labs and 54% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Not clear findings justify inclusion in EU MACP**
- **⇒ Keep 1 extra year in chapter 4 of WD.**

4.1.3. Art. 12 priority list

Diquat

- Some CXLs proposed in 2014 were rejected due to the high background exposure from existing EU MRLs.
- Method: SRM
- Toxicity: ADI 0.002 mg/kg bw/day, ARfD NA
- Priority: 2A
- Evaluation: after 2 years (10/2017)
- 1.91 % findings EFSA 2012 report
- 0.81% findings EFSA 2013 report
- 0.78% findings EFSA 2014 report
- 0.94% findings (0.00% MRL exceedances) EFSA 2015 report
- 1.59% findings (0.00% MRL exceedances) EFSA 2016 preliminary report
- 17% labs and 50% MS analysed full RD in 2015
- 29% labs and 65% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Findings justify inclusion in EU MACP**
- **⇒ Include from EU MACP 2020 onwards so that more labs have the time to add this substance to their scope.**

- Especially relevant for potatoes, dried beans and cereals (e.g. barley, maize, oats); additionally relevant for some non-MACP commodities such as: sweet potatoes, various dry pulses (e.g. dry lentils, dry peas, soya beans), various oilseeds (e.g. borage seeds, rape seeds, sesame seeds, chia seeds, sunflower seeds, mustard seeds and linseed).

4.1.4. High toxicity

4.1.5. Voluntary in Reg. (EU) N° 788/2012

For some pesticides that were to be analysed on a voluntary basis in Reg. (EC) N° 788/2012, a footnote was added, giving further details or explanations. For clarity reasons those footnotes are indicated for the substances in this section:

- Footnote g): To be analysed on voluntary basis in 2013.

- Footnote h): Substances with difficult residue definition. The official laboratories shall analyse them for the full residue definition in accordance with the capability and capacity and report results as agreed on SSD.

- Footnote i): Substances with no high level of findings according to the 2010 official control programme shall be analysed by those official laboratories which have the method required already validated. For laboratories which have no validated method, it is not obligatory to validate a method in 2013 and 2014.

For other substances it was indicated in Reg. (EC) N° 788/2012 that the pesticide had to be only analysed in certain commodities on a voluntary basis. When this is the case, this information is also displayed under the first bullet.

<u>Amitraz (Not approved)</u>

- No footnote, remark in Reg. (EU) N° 788/2012: 'Shall be analysed in 2013 in apples and tomatoes; in 2014 on pears and in 2015 on sweet pepper. In the rest of the commodities it is to be analysed on voluntary basis.'
- Method: SRM (cleavage step)
- Toxicity: ADI 0.003 mg/kg bw/day, ARfD 0.01 mg/kg bw
- Priority 2A
- Evaluation after 2 years (10/2017) → 10/2018
- 0.03% findings 2012 EFSA report
- 0.27% findings EFSA 2013 report

- 0.04% findings EFSA 2014 report
- 0.04% findings (0.03% MRL exceedances) EFSA 2015 report
- 0.02% findings (0.01% MRL exceedances) EFSA 2016 preliminary report
- 14% labs and 54% MS analysed full RD in 2015
- 15% labs and 39% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ not clear whether findings justify inclusion in EU MACP**
- **⇒Keep 1 extra year in chaper 4 of WD**
- Especially relevant for sweet peppers, apples, tomatoes, aubergines, grapefruit, oranges, peaches and pears. Additionally relevant for chili peppers, honey, papaya, basil, green beans, okra, mandarins, cucumbers; not relevant for cereals

Prochloraz

- Footnote h) in Reg. (EC) N° 788/2012
- Method: SRM (possible future revision of residue definition that would allow MRM method)
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD = 0.025 mg/kg bw
- Not a priority for the moment
- Evaluation once article 12 review is finalised.
- 1.8% findings EFSA 2012 report
- 1.63% findings EFSA 2013 report
- 1.31% findings EFSA 2014 report
- 1.25% findings (0.05% MRL exceedances) EFSA 2015 report
- 1.30% findings (0.02% MRL exceedances) EFSA 2016 preliminary report
- 10% labs and 35% MS analysed full RD in 2015
- 11% labs and 42% MS analysed full RD in 2016
- Especially relevant for apples, bananas, broccoli, cauliflowers, cereals, cultivated fungi, grapefruit, head cabbage, kiwi, lettuce, melons, onions, oranges, pears, peppers (sweet), potatoes, strawberries, rice, table grapes, tomatoes and wheat. Additionally relevant for several non-MACP commodities such as avocados, basil, beans with pods, cherries, Chinese cabbage, clementines, mandarins, fresh herbs (coriander, celery leaves), garlic, lemons, limes, lychee, mangoes, papayas, guavas passion fruits, peas with pods, pineapples, peppers (chili), plums, pomegranates, pomelos, shallots, tea, wild fungi.

Pyrethrins

- Footnote h) in Reg. (EC) N° 788/2012
- Method: MRM/SRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.2 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017)

- 0.06% findings EFSA 2012 report
- 0.18% findings EFSA 2013 report
- 0.14% findings EFSA 2014 report
- 0.13% findings (0.00% MRL exceedances) EFSA 2015 report
- 0.11% findings (0.00% MRL exceedances) EFSA 2016 preliminary report
- 38% labs and 73% MS analysed full RD in 2015
- 43% labs and 81% MS analysed full RD in 2016
- ⇒ **Analytical capability medium**
- ⇒ **Findings justify inclusion in EU MACP**
- ⇒ **Include from EU MACP 2020 onwards so that more labs have the time to add this substance to their scope.**
- Especially relevant for all kinds of fruits, vegetables and cereals within the EU MACP scope. Additionally relevant for several non-MACP commodities such as: currants, fresh herbs (e.g. basil), nuts (e.g. almonds, coconuts, hazelnuts), pineapples, pomegranates, sunflower seeds and rucola.

4.2. Pesticides to be considered for analysis in products of animal origin

4.2.1. Frequent detections[2], MRL exceedances or RASFF notifications

4.2.2. Recently approved

Benzovindiflupyr

- Approved since 02/03/2016
- Method: MRM
- Toxicity: ADI 0-0.05 mg/kg bw day, ARfD 0.1 mg/kg bw
- Priority 1A
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data EFSA 2012, 2013, 2014, 2015, 2016 preliminary report.
- 0% labs and 0% MS analysed full RD in 2015
- 4.9% labs and 16% MS analysed full RD in 2016
- Relevant for animal fat and liver.

[2] SRM-compounds are typically analysed on specific commodities so their detection frequencies are typically higher than if they would have been analysed randomly.

- ⇒ **Analytical capability poor**
- ⇒ **Not clear whether justify inclusion in EU MACP**
- ⇒ **Keep 1 extra year in chapter 4 WD**

Fenpyrazamine

- Approved since 01/2013
- Method: MRM
- Toxicity: ADI = 0.13 mg/kg bw/day, ARfD = 0.3 mg/kg bw
- Priority: 1B
- Evaluation: after 1 year (10/2017)→ 10/2018
- No monitoring data EFSA 2012, 2013 and 2014 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (58 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (67 samples)
- 14.3% labs and 36% MS analysed full RD in 2015
- 17.3% labs and 44% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- ⇒ **Not clear whether findings justify inclusion in EU MACP**
- ⇒ **Keep 1 extra year in chapter 4 WD.**
- This substance is not expected to leave significant residues in food of animal origin.

Penflufen

- Approved since 02/2014
- Method: MRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.5 mg/kg bw
- Priority: 1A
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data available EFSA 2012, 2013, 2014 or 2015 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (50 samples)
- 6% labs and 20% MS analysed full RD in 2015
- 8.6% labs and 24% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- ⇒ **Not clear whether findings justify inclusion in EU MACP**
- ⇒ **Keep 1 extra year in chapter 4 WD.**

Penthiopyrad

- Approved since 5/2014

- Method: MRM
- Toxicity: ADI = 0.1 mg/kg bw/day, ARfD = 0.75 mg/kg bw
- Priority: 1B
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data available EFSA 2012, 2013 or 2014 report
- 0% findings EFSA 2014 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (70 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (67samples)
- 7% labs and 20% MS analysed full RD in 2015
- 18.5% labs and 44% MS analysed full RD in 2016
- This substance is not expected to leave significant residues in food of animal origin.
- ⇒ **Analytical capability poor**
- ⇒ **Not clear whether findings justify inclusion in EU MACP**
- ⇒ **Keep 1 extra year in chapter 4 WD.**

Sulfoxaflor

- Approved since 8/2015 (EU MRLs voted June 2015, certain CXLs will be taken over in EU legislation end 2015)
- Method: MRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.25 mg/kg bw
- Priority: 1B
- Evaluation after 1 year (10/2017) → 10/2018
- No monitoring data available EFSA 2012, 2013, 2014 or 2015 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (24samples)
- 3.6% labs and 12% MS analysed full RD in 2015
- 3.7% labs and 12% MS analysed full RD in 2015
- ⇒ **Analytical capability poor**
- ⇒ **Not clear whether findings justify inclusion in EU MACP**
- ⇒ **Keep 1 extra year in chapter 4 WD.**

4.2.3. Voluntary in Reg. (EU) N° 788/2012

Explanations on the footnotes from Reg. (EC) N° 788/2012, see chapter 4.1.5

Carbendazim and thiophanate methyl

- Footnote g) in Reg. (EC) N° 788/2012
- Method: MRM/SRM

- Toxicity: ADI = 0.02 mg/kg bw/day, ARfD = 0.02 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017)
- 2.28% findings EFSA 2012 report
- 0% findings EFSA 2013 report (712 samples)
- 0.37% findings EFSA 2014 report (1350 samples)
- 1.49% findings (0.00% MRL exceedances) EFSA 2015 report
- 0.28% findings (0.00% MRL exceedances) EFSA 2016 preliminary report
- 51% labs and 68% MS analysed full RD in 2015
- 42% labs and 72% MS analysed full RD in 2016
- **⇒ Analytical capability medium**
- **⇒ Findings justify inclusion in EU MACP**
- **⇒ Include from EU MACP 2020 onwards so that more labs have the time to add this substance to their scope.**
- Relevant for honey.

Chlormequat

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in cow's milk (2013) and liver (2014), it does not need to be analysed in swine meat (2013) and poultry meat (2014). Not relevant for commodities listed in 2015.'
- Method: SRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.09 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- 0 % findings EFSA 2012 report (2 samples)
- 0% findings EFSA 2013 report (100 samples)
- 0% findings EFSA 2014 (93 samples) report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (11 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (91 samples)
- 21% labs and 56% MS analysed full RD in 2015
- 26% labs and 43% MS analysed full RD in 2016
- **⇒ Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **⇒ Keep 1 extra year in chapter 4 WD.**
- Relevant for muscle, liver, kidney and cow's milk.

Fluazifop-P

- Footnote h) in Reg. (EC) N° 788/2012 and remark: 'To be analysed on voluntary basis in milk (2013) and butter (2015). It does not need to be analysed in swine meat (2013) and egg (2015). Not relevant for commodities listed in 2014.'
- Method: SRM (hydrolysis required to cover the full residue definition)
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD = 0.017 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- 0 % findings EFSA 2012 report (148 samples)
- 0% findings EFSA 2013 report
- 1.03% findings EFSA 2014 report (0.51%MRL exceedances)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (54 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (596 samples)
- 12% labs and 40% MS analysed full RD in 2015
- 10% labs and 32% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **⇒ Keep 1 extra year in chapter 4 WD**
- Relevant for animal fat, liver, kidney, eggs , cows' milk and butter.

Glufosinate-ammonium

- Footnote h) in Reg. (EC) N° 788/2012 and remark: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: SRM
- Toxicity: ADI = 0.021 mg/kg bw, ARfD = 0.021 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- No monitoring results available in EFSA 2012, 2013, 2014 and 2016 preliminary report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (26 samples)
- 4% labs and 12% MS analysed full RD in 2015
- 3% labs and 8% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **⇒ Keep 1 extra year in chapter 4 WD**
- Relevant for liver and kidney of ruminants and swine.

Haloxyfop

- Footnote g) and h) in Reg. (EC) N° 788/2012 and remark: 'To be analysed on voluntary basis in milk (2013), liver (2014) and butter (2015), it does not need to be analysed in swine meat (2013), poultry meat (2014) and egg (2015).'
- Method: SRM (hydrolysis required to cover conjugates)
- Toxicity: ADI = 0.00065 mg/kg bw/day, ARfD 0.075 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (171 samples)
- 0% findings EFSA 2014 report (258 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (16 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (486 samples)
- 14% labs and 40% MS analysed full RD in 2015
- 9% labs and 24% MS analysed full RD in 2016
- ⇒ ⇒ **Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **⇒ Keep 1 extra year in chapter 4 WD**
- Relevant for cows' milk, kidney, liver, butter and poultry fat.

Ioxynil

- 'No footnote, remark in Reg. (EC) N° 788/2012: To be analysed on voluntary basis in swine meat (2013), liver (2014) and poultry meat (2014), it does not need to be analysed in milk (2013). Not relevant for commodities listed in 2015.'
- Method: SRM
- Toxicity: ADI = 0.005 mg/kg bw/day, ARfD 0.04 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- No monitoring results available in EFSA 2012 report
- 0% findings EFSA 2013 report (177 samples)
- 0% findings EFSA 2014 report (563 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (21 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (42 samples)
- 4% labs and 12% MS analysed full RD in 2015
- 6% labs and 16% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**

- **⇒ Keep 1 extra year in chapter 4 WD**
- Relevant for ruminant fat, muscle, kidney and liver.

Maleic hydrazide

- Footnotes g) and h) in Reg. (EC) N° 788/2012.
- Method: SRM
- Toxicity: ADI = 0.25 mg/kg bw/day, ARfD NA
- Priority: 2B
- Evaluation after 2 years (10/2017) → 10/2018
- No monitoring results available in EFSA 2012 report
- 0% findings EFSA 2013 report (15 samples)
- 0% findings EFSA 2014 report (46 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (10 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (28 samples)
- 10% labs and 28% MS analysed full RD in 2015
- 12% labs and 36% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **⇒ Keep 1 extra year in chapter 4 WD**
- Relevant for all commodities of animal origin.

Mepiquat

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: SRM
- Toxicity: ADI = 0.2 mg/kg bw/day, ARfD = 0.3 mg/kg bw
- Priority: 2B
- Evaluation after 2 years (10/2017) → 10/2018
- No monitoring results available in EFSA 2012 report
- 0% findings EFSA 2013 report (30 samples)
- 0% findings EFSA 2014 report (31 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (11 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (46 samples)
- 20% labs and 52% MS analysed full RD in 2015
- 25% labs and 56% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**

- **⇒ Not clear whether findings justify inclusion in EU MACP**
- **⇒ Keep 1 extra year in chapter 4 WD**
- Relevant for ruminant's muscle and fat, liver, kidney and cow's milk.

4.3. Evaluation

The evaluation of the chapter 4 substances at the end of the specified evaluation period will be done based on the information listed in Annex V.

The data on the number of labs analysing each substance will be collected by the EURLs and stored in the EURL data pool.

The data on the number of MRL exceedances and findings will be gathered by EFSA as part of data collection for the National Programmes.

These results will then be summarised by COM and added to this document.

In the expert group a decision will be taken for moving a substance to the MACP, for deletion from the WD or for an additional evaluation period in the working document.

5. Proposals for inclusion of new substances in the working document

COM, EFSA, the EURLs and the Member States can put forward substances to be included in the working document by filling out the form in Annex VI. The proposal for inclusion of new substances should be sent to COM by June, prior to the annual expert group meeting on pesticides residues monitoring. During this meeting the submitted proposals will be discussed.

6. Procedure for development of the document

1. During the SCOFCAH of 12-13 June 2014 it was decided to develop this document according to an approach in which the pesticides are divided into specific categories. Based on a limited set of criteria each pesticide is attributed a priority and a time line for evaluation of inclusion or non-inclusion in the MACP.
2. In Rev.2 of this Working Document this approach was implemented. Details on the substances, criteria, priorities and timelines were discussed in the expert meeting on monitoring on 10 October 2014.

3. COM included the decisions taken in the expert group in Rev.3 of this document. In Rev.4 and 5 additional comments from MS experts and the EURLs were taken into account. During the PAFF Committee of 24-25 November 2014 the Member States took note of Rev 5(3).

4. Rev 5(3) was applicable to samples analysed in 2015.

5. By June 2015 COM, EFSA, the EURLs and Member States could send a proposal to COM for new substances to be included in the working document.

6. In October 2015 new substances that were proposed for inclusion in the working document were discussed in the expert group.

7. By June 2016 COM, EFSA, the EURLs and Member States could send a proposal to COM for new substances to be included in the working document.

8. By August 2016, the EURLs gathered through a survey the information on the % of labs analysing each substance (2015 analyses). By that time the Member States could also submit to EFSA the monitoring data for those substances for which the evaluation timing was set for 10/2016. EFSA summarised these data for the October/November expert group.

9. In October/ November 2016 decisions were taken in the expert group on which chapter 4 substances to move to the MACP 2018, which ones to be deleted from the WD, which ones to be evaluated for an additional period. During this meeting also new substances that were proposed for inclusion in the working document were discussed.

10. By June 2017 COM, EFSA, the EURLs and Member States could send a proposal to COM for new substances to be included in the working document.

11. By August 2017, the EURLs gathered, through a survey, the information on % of labs analysing each substance (2016 analyses). By that time the Member States could also submit to EFSA the monitoring data for those substances for which the evaluation timing was set for 10/2017. EFSA summarised these data for the October/ November expert group.

12. During the PAFF Committee of 21-22 November 2017, the Member States will take note of the Rev9(1) of the document.

13. By June 2018 COM, EFSA, the EURLs and Member States can send a proposal to COM for new substances to be included in the working document.

14. By May 2018, the EURLs will gather through a survey the information on % of labs analysing each substance (2017 analyses). By that time the Member States will also submit to EFSA the monitoring data for those substances for which the evaluation timing was set for 10/2018. EFSA will summarise these data for the October/ November expert group.

15. In October/ November 2018 decisions will be taken in the expert group on which chapter 4 substances to move to the MACP 2020, which ones to be deleted from WD, which ones to be evaluated for an additional period. During this meeting also new substances that are proposed for inclusion in the working document will be discussed.

Annex I: Substances for which information on residues is needed for specific risk management questions.

Monitoring data for these substances could be used for answering specific risk management questions. These substances are for the time being no candidates for uptake in the MACP.

- Anthraquinone, especially relevant for tea, dried herbs and dried spices.
- Benzalkonium chloride[3]
- Chlorates[4]
- Didecyldimethylammonium chloride[5]
- Glyphosate in soyabean
- Nicotine, especially relevant in mushrooms, tea, chives, brassica crops, moringa. ARfD exceedances reported.

[3] The results should be reported as mixture of alkylbenzyldimethylammonium chlorides with alkyl chain lengths of C8, C10, C12, C14, C16 and C18.

[4] The results for chlorates (including Mg, Na and K chlorates), should be expressed as chlorate.

[5] The results should be reported as mixture of alkyl-quaternary ammonium salts with alkyl chain lengths of C8, C10 and C12.

Annex II: Substances for which analytical support is requested from the EURLs

For the substances listed in this Annex, support is needed from the EURLs because no validated analytical method and/or no standards are available. To be checked with EURLs and to be updated.

Substances relevant for plant origin commodities.

(a) Support required due to residue definition

Bifenazate

- No validated method available for the full residue definition (applicable from 19/08/2014).
- Method: MRM/SRM
- 0.3% findings in vegetables (EFSA 2011 report)
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD NA
- 0.24% findings EFSA 2012 report (parent)
- 0.29% findings EFSA 2013 report (parent)
- 0.30% findings EFSA 2014 report
- 0.17% findings EFSA 2015 report
- 0.24% findings EFSA 2016 preliminary report
- 6.5% labs and 23.1% MS analysed full RD in 2016

Cyflufenamid

- No available standard (E-isomer)
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD 0.05 mg/kg bw
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2018)
- 0.14% findings EFSA 2013 report
- 0.20% findings EFSA 2014 report
- 0.26% findings (0.00% MRL exceedances) EFSA 2015 report
- 0.30% findings (0.01% MRL exceedances) EFSA 2016 preliminary report
- 0% labs and 0% MS analysed full RD in 2016

Desmethyl-chlorpyriphos-methyl

- EFSA investigated the metabolism of chlorpyrifos-methyl in post-harvest treatment in cereals. Desmethyl-chlorpyrifos-methyl was observed as a significant metabolite as a result of degradation of the parent compound under standard hydrolytic conditions. Toxicological data for desmethyl-chlorpyrifos-methyl are missing and should be provided.
- EFSA proposed an enforcement residue definition (specific to chlorpyrifos-methyl) which includes the parent compound (in all crops) and its desmethyl metabolite (in cereals and processed commodities only); chlorpyrifos-methyl can be enforced in plant commodities with a limit of quantification (LOQ) of 0.01 mg/kg, while analytical methods are not commercially available for its desmethyl metabolite and should be developed.

Fosetyl-Al

- The EURL-SRM has published a method for fosetyl and phosphonic acid (QuPPe). The method is available on-line. Standards are available. The EURL-SRM also provides OfLs isotope labelled standard of phosphonic acid, synthesized at the EURL-SRM.An interlaboratory validation study is planned.
- Method: SRM
- Toxicity: ADI = 3 mg/kg bw/day, ARfD NA
- Priority: 2B
- Evaluation: after 2 years (10/2017)
- Both fosetyl and phosphonic acid are SRM substances. Whereas phosphonic acid is frequently found in virtually all types of crops, fosetyl itself is rarely found (e.g. in grapes, strawberries, cucumber, melons, lettuce, ruccola, tomatoes, zucchini)
- 1.3% Findings in vegetables, 0.5% in fruits and nuts EFSA 2011 report
- 6.36% findings EFSA 2012 report
- 33.78% findings EFSA 2013 report
- 33.26% EFSA 2014 report
- 27.66% findings (0.19% MRL exceedances) EFSA 2015 report
- 11.68% findings (0.25% MRL exceedances) EFSA 2016 preliminary report
- 38% labs and 81% MS analysed full RD in 2015
- 29% labs and 54% MS analysed full RD in 2016

Glufosinate ammonium

- At request of EFSA, residues are found in animal origin commodities, interesting to also check soybean which is used both as food and feed.
- The EURL-SRM has published a method for glufosinate, MPPA and N-acetyl glufosinate (QuPPe). The method is available on-line and several labs use it for these compounds. Standards are available.An interlaboratory validation study is planned
- Method: SRM
- Toxicity: ADI = 0.021 mg/kg bw/day, ARfD = 0.021mg/kg bw
- Priority: 2A
- Evaluation: after 2 years (10/2017) → 10/2018

- 0.3% findings in vegetables EFSA 2011 report
- 0.37% findings in 2011-2013 (EURL priority list)
- 0% findings EFSA 2012 report
- 0.26% findings EFSA 2013 report
- 0.03% findings EFSA 2014 report
- 0.26% findings (0.00% MRL exceedances) EFSA 2015 report
- 0.92% findings (0.18% MRL exceedances) EFSA 2016 preliminary report
- 6% labs and 23% MS analysed full RD in 2015
- 10% labs and 27% MS analysed full RD in 2016
- Especially relevant for apples, cultivated fungi, peaches/ nectarines, potatoes, strawberries and rice. Additionally relevant for some non-MACP commodities such as: celery, currants maize and soybeans.

Guazatine (not approved)

- No method or standards available (standards are available but they are mixtures of compounds that do not always correspond with the formulations).
- Toxicity: ADI = 0.0048 mg/kg bw/day, ARfD = 0.04 mg/kg bw
- Especially relevant for citrus fruits and cereals based on use pattern
- No monitoring data EFSA 2012, 2013, 2014, 2015 or 2016 preliminary report

Glyphosate (future residue definition 'sum of glyphosate, AMPA and N-acetylglyphosate)

- In the upcoming Art. 12 review the residue definition for glyphosate will be changed.
- The EURL-SRM has published a method for glyphosate, N-acetyl glyphosate and AMPA (QuPPe). The method available on-line and many labs use it. An interlaboratory validation is planned. Standards are available;.

Meptyldinocap (approved since 01/04/2015)

- No method available for full residue definition, 2,4 DNOP and 2,4-DNOCP standards are available. The EURL-SRM is working on a method for this compound which should be published next year (2018).
- Toxicity: ADI = 0.016 mg/kg bw/day, ARfD = 0.12 mg/kg bw
- 0.04% findings EFSA 2012 report
- 0% findings EFSA 2013 report
- 0.04% findings EFSA 2014 report
- 0.00% findings EFSA 2015 report
- 0.13% findings EFSA 2016 preliminary report
- Especially relevant for melons, strawberries and table grapes.

Phosphane and phosphide salts

- The EURL-SRM has published a method on this compound. Standard is available.
- Toxicity: ADI = 0.011 mg/kg bw/day, ARfD = 0.019 mg/kg bw
- Method: SRM (head-space equipment is needed)
- Priority: 2A
- Evaluation: after 2 years (10/2017)
- 27.8 % findings in cereals EFSA 2011 report
- 8.3% findings EFSA 2012 report
- 8.47% findings EFSA 2013 report
- 10% findings EFSA 2014 report
- 11.54% findings (0.00% MRL exceedances) EFSA 2015 report
- 16.22% findings (0.00% MRL exceedances) EFSA 2016 preliminary report
- 9% labs and 31% MS analysed full RD in 2015
- 6% labs and 19% MS analysed full RD in 2016
- Especially relevant for all cereals among the MACP commodities. (e.g. wheat, rye, oats, rice, barley). Additionally relevant for some non-MACP commodities such as: maize, nuts, oilseeds and dry pulses.

Prochloraz

- Current SRM method does not cover full RD (possible future revision of residue definition that would allow MRM method)
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD = 0.025 mg/kg bw
- Not a priority for the moment
- Evaluation once article 12 review is finalised.
- 1.8% findings EFSA 2012 report
- 1.63% findings EFSA 2013 report
- 1.31% findings EFSA 2014 report
- 1.25% findings (0.05% MRL exceedances) EFSA 2015 report
- 1.30% findings (0.02% MRL exceedances) EFSA 2016 preliminary report
- 10% labs and 35% MS analysed full RD in 2015
- 11% labs and 42% MS analysed full RD in 2016
- Especially relevant for apples, bananas, broccoli, cauliflowers, cereals, cultivated fungi, grapefruit, head cabbage, kiwi, lettuce, melons, onions, oranges, pears, peppers (sweet), potatoes, strawberries, rice, table grapes, tomatoes and wheat. Additionally relevant for several non-MACP commodities such as avocados, basil, beans with pods, cherries, Chinese cabbage, clementines, mandarins, fresh herbs (coriander, celery leaves), garlic, lemons, limes, lychee, mangoes, papayas, guavas passion fruits, peas with pods, pineapples, peppers (chili), plums, pomegranates, pomelos, shallots, tea, wild fungi.

Triclopyr

- This substance shares the same metabolites as chlorpyriphos and chlorpyriphos-methyl. For these substances new toxicological studies are available requiring the review of certain MRLs. As these metabolites are not taken up in the current residue definition, method development should only start once the Art. 12 Regulation is voted.
- Toxicity: ADI = 0.03 mg/kg bw/day, ARfD = 0.3 mg/kg bw
- Method: MRM/SRM, method was developed by the EURL-SRM, the report will be published in the near future.
- Relevant for oranges, mandarins, apples, pears
- 0.07% findings EFSA 2012 report (parent)
- 0.03% findings EFSA 2013 report (parent)
- 0.02% findings EFSA 2014 report
- 0.00% findings EFSA 2015 report (9841 samples)
- 0.00% findings EFSA 2016 preliminary report (12304 samples)
- Especially relevant for bananas, kiwi, pears, oranges, strawberries and table grapes. Additionally relevant for some non-MACP commodities such as: apricots, mandarins/clementines, lemons, limes and plums.

Tritosulfuron

- New residue definition after Art. 12 review: separate MRLs are set for tritosulfuron and 2-amino-4-methoxy-6-(trifluormethyl)-1,3,5-triazine (AMTT).
- A method for AMTT has been developed by the EURL-SRM and it is now available on-line. AMTT standard is available.
- Toxicity parent: ADI = 0.06 mg/kg bw/day, ARfD NA
- Toxicity AMTT: ADI and ARfD 0.0001 mg/kg bw/day
- Method: MRM/SRM method for AMTT available
- Standard for AMTT is not commercially available.
- Especially relevant for rice, wheat, rye and oats
- 0% findings EFSA 2012 report
- 0% findings EFSA 2013 report
- 0% findings EFSA 2014 report (7447 samples)
- 0% findings EFSA 2015 report (4160 samples)
- 0% findings EFSA 2016 preliminary report (7002 samples)

(b) Support required due to other reasons

Benzovindiflupyr

- Approved since 03/2016
- Method: MRM
- Toxicity: ADI 0-0.05 mg/kg bw day, ARfD 0.1 mg/kg bw
- Priority 1A

- Evaluation: after 1 year (10/2017) -> 10/2018
- No EFSA monitoring data for 2012, 2013, 2014, 2015 and 2016.
- 2% labs and 8% MS analysed full RD in 2015
- 14.4% labs and 50% MS analysed full RD in 2016
- Relevant commodities: soybean, wheat, apples, grapes, pears, peanuts, potatoes and maize.

Diquat

- Some CXLs proposed in 2014 were rejected due to the high background exposure from existing EU MRLs.
- A method was developed but it does not show the robustness needed.
- Method: SRM
- Toxicity: ADI 0.002 mg/kg bw/day, ARfD NA
- Priority: 2A
- Evaluation: after 2 years (10/2017)
- 1.91 % findings EFSA 2012 report
- 0.81% findings EFSA 2013 report
- 0.78% findings EFSA 2014 report
- 0.94% findings (0.00% MRL exceedances) EFSA 2015 report
- 1.59% findings (0.00% MRL exceedances) EFSA 2016 preliminary report
- 17% labs and 50% MS analysed full RD in 2015
- 29% labs and 65% MS analysed full RD in 2016
- Especially relevant for potatoes, dried beans and cereals (e.g. barley, maize, oats); additionally relevant for some non-MACP commodities such as: sweet potatoes, various dry pulses (e.g. dry lentils, dry peas, soybeans), various oilseeds (e.g. borage seeds, rape seeds, sesame seeds, chia seeds, sunflower seeds, mustard seeds and linseed).

Fenpyrazamine

- Approved since 01/2013
- Method: MRM
- Toxicity: ADI = 0.13 mg/kg bw/day, ARfD = 0.3 mg/kg bw
- Priority: 1B
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data EFSA 2012 report
- 0% findings EFSA 2013 report
- 64.29% findings EFSA 2014 report (only 14 samples)
- 0.40% findings (0.00% MRL exceedances) EFSA 2015 report (2728 samples)
- 0.48% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (8350 samples)

- 23% labs and 54% MS analysed full RD in 2015
- 37% labs and 69% MS analysed full RD in 2016

Fluensulfone

- Not approved in EU, recently approved outside EU
- No method available
- ADI 0-0.01 mg/kg bw day, ARfD 0.1 mg/kg bw
- Relevant commodities: fruiting vegetables

Lambda-cyhalothrin, Gamma-cyhalothrin

- Cyhalothrin is not approved in the EU since 1994, hence the default MRL of 0.01* mg/kg applies. It is constituted by four isomers (2 diastereomeric pairs): R,R; R,S; S,R and S,S, as follows:
  1: (R)-α-cyano-3-phenoxybenzyl (1R)-cis-3-[(Z)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate;
  2: (R)-α-cyano-3-phenoxybenzyl (1S)-cis-3-[(Z)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate;
  3: (S)-α-cyano-3-phenoxybenzyl (1R)-cis-3-[(Z)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate;
  4: (S)-α-cyano-3-phenoxybenzyl (1S)-cis-3-[(Z)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate.

  Lambda-cyhalothrin is a 1:1 mixture of two of the four cyhalothrin components, the R,R and S,R isomers (numbers 1 and 3) and its approval was renewed by Regulation (EU) 2016/146 of 4 February 2016. Gamma-cyhalothrin is constituted by only the most toxic of the four components, the S,R isomer (the third one), which is also contained in lambda-cyhalothrin. As a result, gamma cyhalothrin is twice as toxic as lambda-cyhalothin and four times more toxic than cyhalothrin. It is an approved active substance under Regulation (EU) 1334/2014 of 16 December 2014.

- Following a Commission investigation in September 2016, it was found that most authorisations of gamma-cyhalothrin PPPs in MSs are based on reference to lambda-cyhalothrin, i.e to a less toxic compound of isomers than the actual substance used in the PPPs.

- Currently no validated analytical methods are available to distinguish between the more toxic residues of gamma-cyhalothrin and the residues of lambda-cyhalothrin, while both share the same residue definition.

- As part of the outcome of the discussion held during the SC PAFF of 21-22 September 2017 it was requested that the EURLs would continue their effort to develop a routine method which can discriminate between the two substances.

Paraquat

- For the analysis of paraquat in soybean (high fat matrix) it is challenging to enforce the MRL set at the LOQ of 0.02* mg/kg. A method was developed but it does not show the robustness needed.
- The EURLs are requested to validate a method and to circulate it to the labs.
- The analysis of paraquat in soyabean is no candidate for the EU MACP. It can be considered for the national programmes.

Penflufen

- Approved since 02/2014
- Method: MRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.5 mg/kg bw
- Priority: 1A
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data available EFSA 2012, 2013 or 2014 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (only 1 sample)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (4161 samples)
- 14% labs and 46% MS analysed full RD in 2015
- 26% labs and 65% MS analysed full RD in 2016

Pyridalil

- Toxicity: ADI = 0.03 mg/kg bw/day, ARfD NA
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2018)
- 0.08% findings (0.00% MRL exceedances) EFSA 2013 report
- 0.13% findings (0.00% MRL exceedances) EFSA 2014 report
- 0.18% findings (0.01% MRL exceedances) EFSA 2015 report
- 0.11% findings (0.00% MRL exceedances) EFSA 2016 preliminary report
- 35% labs and 62% MS analysed full RD in 2016

Pyriofenone

- Approved since 2/2014
- Method and standard available in the meanwhile.

- Method MRM
- Toxicity: ADI = 0.07 mg/kg bw/day, ARfD NA
- Priority 1A
- Evaluation after 1 year (10/2018)
- No monitoring data available EFSA 2012, 2013, 2014 and 2015 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (882 samples)
- 17% labs and 39% MS analysed full RD in 2016

Spinetoram

- Toxicity: ADI = 0.025 mg/kg bw/day, ARfD 0.1 mg/kg bw
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2018)
- 0.12% findings (0.00% MRL exceedances) EFSA 2013 report
- 0.31% findings (0.02% MRL exceedances) EFSA 2014 report
- 0.26% findings (0.01% MRL exceedances) EFSA 2015 report
- 0.29% findings (0.03% MRL exceedances) EFSA 2016 preliminary report
- 37% labs and 54% MS analysed full RD in 2016

Substances relevant for animal origin commodities

(a) Support required due to residue definition

Boscalid

- No method available for the full AO residue definition, standard M510F01 is commercially available, but the development of an analytical method is pending.
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD NA
- 0 % findings EFSA 2012 report
- 0 % findings EFSA 2013 report
- 0.30% findings EFSA 2014 report
- 0.39% findings EFSA 2015 report
- 0.20% findings EFSA 2016 preliminary report
- Relevant for ruminant's and poultry liver and ruminant's kidney.

Chlorpropham

- No method available for the full AO residue definition; a method for 4-HAS and its validation are pending (not needed for the analysis of code 1016000 (poultry) and 1030000 (eggs).
- Toxicity: ADI = 0.05 mg/kg bw/day, ARfD = 0.5 mg/kg bw

- 0.19 % findings EFSA 2012 report
- 0 % findings EFSA 2013 report
- 0% findings EFSA 2014 report (866 samples)
- 0% findings EFSA 2015 report (268 samples)
- 0% findings EFSA 2016 preliminary report (117 samples)
- Relevant for ruminant's and swine kidney.

Fenpropidin

- No method available for full AO residue definition, standards of 2-methyl-2-[4-(2-methyl-3- piperidin-1-yl-propyl)-phenyl]propionic acid commercially not available
- Toxicity: ADI = 0.02 mg/kg bw/day, ARfD = 0.02 mg/kg bw
- 0 % findings EFSA 2012 report
- 0 % findings EFSA 2013 report
- 0% finding EFSA 2014 report (356 samples)
- 0% findings EFSA 2015 report (294 samples)
- 0% findings EFSA 2016 preliminary report (449 samples)
- Relevant for ruminant's and swine liver and kidney.

Fenpropimorph

- No validated method available for the full AO residue definition
- Method MRM/ SRM. The standard for metabolite fenpropimorph carboxylic acid is now commercially available. Succesfull validation at 0.01 mg/kg by EURL-SRM using QuEChERS without PSA cleanup in milk and swine meat. Data publication pending.
- Toxicity: ADI = 0.003 mg/kg bw/day, ARfD = 0.03 mg/kg bw
- 0 % findings EFSA 2012 report (396 sample)
- 0 % findings EFSA 2013 report (453 samples)
- 0% findings EFSA 2014 report (238 samples)
- 0% findings EFSA 2015 report (154 samples)
- 0% findings EFSA 2016 preliminary report (519 samples)
- Relevant for ruminant's fat, swine and ruminant's muscle, liver and kidney and cow's milk.

Fluazifop-P

- Method: SRM (hydrolysis required to cover the full residue definition)
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD = 0.017 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- 0 % findings EFSA 2012 report (148 samples)

- 0% findings EFSA 2013 report
- 1.03% findings EFSA 2014 report (0.51%MRL exceedances)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (54 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (596 samples)
- 12% labs and 40% MS analysed full RD in 2015
- 10% labs and 32% MS analysed full RD in 2016
- Relevant for animal fat, liver, kidney, eggs , cows' milk and butter.

Fluopyram

- Footnote g) in Reg. (EC) N° 788/2012
- No method available for the full AO residue definition.
- Toxicity: ADI = 0.012 mg/kg bw/day, ARfD = 0.5 mg/kg bw
- 0 % findings EFSA 2012 report
- 0 % findings EFSA 2013 report (83 samples)
- 0% findings EFSA 2014 report (173 samples)
- 0% findings EFSA 2015 report (107 samples)
- 0% findings EFSA 2016 preliminary report (90 samples)

Glufosinate-ammonium

- Method: SRM, but validation is needed for products of animal origin.
- Toxicity: ADI = 0.021 mg/kg bw, ARfD = 0.021 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- No monitoring results available in EFSA 2012, 2013, 2014 and 2016 preliminary report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (26 samples)
- 4% labs and 12% MS analysed full RD in 2015
- 3% labs and 8% MS analysed full RD in 2016
- Relevant for liver and kidney of ruminants and swine.

Glyphosate (future residue definition 'sum of glyphosate, AMPA and N-acetylglyphosate)

- In the upcoming Art. 12 review the residue definition for glyphosate will be changed.
- The EURL-SRM has published a method for glyphosate, N-acetyl glyphosate and AMPA (QuPPe), but validation is needed for products of animal origin

Haloxyfop

- Footnote g) and h) in Reg. (EC) N° 788/2012 and remark: 'To be analysed on voluntary basis in milk (2013), liver (2014) and butter (2015), it does not need to be analysed in swine meat (2013), poultry meat (2014) and egg (2015).'
- Method: SRM (hydrolysis required to cover conjugates). Method for food of animal origin (including conjugates) is pending.
- Toxicity: ADI = 0.00065 mg/kg bw/day, ARfD 0.075 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (171 samples)
- 0% findings EFSA 2014 report (258 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (16 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (486 samples)
- 14% labs and 40% MS analysed full RD in 2015
- 9% labs and 24% MS analysed full RD in 2016
- Relevant for cows' milk, kidney, liver, butter and poultry fat.

Ioxynil

- Method: SRM. Method for food of animal origin (including conjugates) is pending.
- Toxicity: ADI = 0.005 mg/kg bw/day, ARfD 0.04 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- No monitoring results available in EFSA 2012 report
- 0% findings EFSA 2013 report (177 samples)
- 0% findings EFSA 2014 report (563 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (21 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (42 samples)
- 4% labs and 12% MS analysed full RD in 2015
- 6% labs and 16% MS analysed full RD in 2016
- Relevant for ruminant fat, muscle, kidney and liver.

Spiroxamine

- No method available for full AO residue definition, standard spiroxamine carboxylic acid is commercially not available
- Toxicity: ADI = 0.025 mg/kg bw/day, ARfD = 0.1 mg/kg bw
- 0 % findings EFSA 2012 report (395 samples)

- 0 % findings EFSA 2013 report (428 samples)
- 0% findings EFSA 2014 report (636 samples)
- 0% findings EFSA 2015 report (92 samples)
- 0% findings EFSA 2016 preliminary report (84 samples)
- Relevant for cows' milk and liver.

Tebuconazole

- Standard hydroxy-tebuconazole is now commercially available
- Method: SRM (hydrolysis needed to cover conjugates of hydroxyl-tebuconazole). Method development (for covering conjugates) and validation is pending.
- Toxicity: ADI = 0.03 mg/kg bw/day, ARfD = 0.03 mg/kg bw
- 0.13 % findings EFSA 2012 report (parent)
- 0 % findings EFSA 2013 report (parent)
- 0% findings EFSA 2014 report parent (1885 samples)
- 0% findings EFSA 2015 report (117 samples)
- 0% findings EFSA 2016 preliminary report (485 samples)
- Relevant for all commodities of animal origin.

(b) Support required due to other reasons

Aminocyclopyrachlor

- Not approved in EU, recently approved outside EU
- ADI 0-3 mg/kg bw day, ARfD N/A
- Standard commercially available. Successfully validated by EURL-SRM using QuPPe in food of plant origin. Validations in products of animal origin are pending.
- Relevant commodities animal fat, milk, liver and kidney.

Benzovindiflupyr

- Approved since 02/03/2016
- Method: MRM
- Toxicity: ADI 0-0.05 mg/kg bw day, ARfD 0.1 mg/kg bw
- Priority 1A
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data EFSA 2012, 2013, 2014, 2015, 2016 preliminary report.
- 0% labs and 0% MS analysed full RD in 2015
- 4.9% labs and 16% MS analysed full RD in 2016
- Relevant for animal fat and liver.

Chlormequat

- Method: SRM. Validation is needed for products of animal origin.
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.09 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017) → 10/2018
- 0 % findings EFSA 2012 report (2 samples)
- 0% findings EFSA 2013 report (100 samples)
- 0% findings EFSA 2014 (93 samples) report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (11 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (91 samples)
- 21% labs and 56% MS analysed full RD in 2015
- 26% labs and 43% MS analysed full RD in 2016
- Relevant for muscle, liver, kidney and cow's milk.

Fenpyrazamine

- Approved since 01/2013
- Method: MRM
- Toxicity: ADI = 0.13 mg/kg bw/day, ARfD = 0.3 mg/kg bw
- Priority: 1B
- Evaluation: after 1 year (10/2017)→ 10/2018
- No monitoring data EFSA 2012, 2013 and 2014 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (58 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (67 samples)
- 14.3% labs and 36% MS analysed full RD in 2015
- 17.3% labs and 44% MS analysed full RD in 2016

Maleic hydrazide

- Method: SRM. QuPPe amenable but validation is needed for products of animal origin.
- Toxicity: ADI = 0.25 mg/kg bw/day, ARfD NA
- Priority: 2B
- Evaluation after 2 years (10/2017) → 10/2018
- No monitoring results available in EFSA 2012 report
- 0% findings EFSA 2013 report (15 samples)
- 0% findings EFSA 2014 report (46 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (10 samples)

- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (28 samples)
- 10% labs and 28% MS analysed full RD in 2015
- 12% labs and 36% MS analysed full RD in 2016
- Relevant for all commodities of animal origin.

Mepiquat

- Method: SRM. QuPPe amenable but validation is needed for products of animal origin.
- Toxicity: ADI = 0.2 mg/kg bw/day, ARfD = 0.3 mg/kg bw
- Priority: 2B
- Evaluation after 2 years (10/2017) → 10/2018
- No monitoring results available in EFSA 2012 report
- 0% findings EFSA 2013 report (30 samples)
- 0% findings EFSA 2014 report (31 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (11 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (46 samples)
- 20% labs and 52% MS analysed full RD in 2015
- 25% labs and 56% MS analysed full RD in 2016
- Relevant for ruminant's muscle and fat, liver, kidney and cow's milk.

Penflufen

- Approved since 02/2014
- Method: MRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.5 mg/kg bw
- Priority: 1A
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data available EFSA 2012, 2013, 2014 or 2015 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (50 samples)
- 6% labs and 20% MS analysed full RD in 2015
- 8.6% labs and 24% MS analysed full RD in 2016

Penthiopyrad

- Approved since 5/2014
- Method: MRM
- Toxicity: ADI = 0.1 mg/kg bw/day, ARfD = 0.75 mg/kg bw

- Priority: 1B
- Evaluation: after 1 year (10/2017) → 10/2018
- No monitoring data available EFSA 2012, 2013 or 2014 report
- 0% findings EFSA 2014 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (70 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (67samples)
- 7% labs and 20% MS analysed full RD in 2015
- 18.5% labs and 44% MS analysed full RD in 2016
- This substance is not expected to leave significant residues in food of animal origin.

Sulfoxaflor

- Approved since 8/2015 (EU MRLs voted June 2015, certain CXLs will be taken over in EU legislation end 2015)
- Method: MRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD = 0.25 mg/kg bw
- Priority: 1B
- Evaluation after 1 year (10/2017) → 10/2018
- No monitoring data available EFSA 2012, 2013, 2014 or 2015 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (24samples)
- 3.6% labs and 12% MS analysed full RD in 2015
- 3.7% labs and 12% MS analysed full RD in 2015

Annex III: Substances that are of interest for cumulative risk assessment

EFSA is currently establishing common assessment groups for cumulative risk assessment. In order to have sufficient data to calculate the background exposure, monitoring results would be needed for compounds from the acute neurotoxicity group, the chronic neurotoxicity group and the thyroid group. Some of these pesticides are not taken up in the MACP or in chapter 4 of this document that lists pesticides that could be considered for future uptake in the MACP. However, since monitoring data for these substances would be of interest for the further development of the CRA methodology, they are listed in this annex, for information only.

- 2,4-DB (especially relevant for citrus fruits and pome fruits. Additionally relevant for the non-MACP commodity: chamomile)
- Amitrole
- Cyhalofop-butyl (especially relevant for rice)
- Dazomet
- Flufenacet (especially relevant for beans with pods, grapes, potatoes, rye, oats, strawberries, leek, lettuce, wheat, cucumber and rice. Additionally relevant for several non-MACP commodities such as: celeriac, chives, currants, dill, fennel, raspberries, parsley, strawberries)
- Glufosinate ammonium (especially relevant for potatoes, strawberries and rice. Additionally relevant for several non-MACP commodities such as: berries, tea)
- Ioxynil (especially relevant for cereals, leek, lettuce, tomatoes. Additionally relevant for the non-MACP commodity: chives and dill)
- Isoxaflutole
- MCPA and MCPB (especially relevant for aubergines, cultivated fungi, head cabbage, table grapes, lettuce, peaches, wheat, rye and strawberries. Additionally relevant for several non-MACP commodities such as: Chamomile, berries, cherries, mint, thyme, lentils, tea)
- Milbemectin (this substance has two isomers A3 and A4 of 1920 £ each, relevant for strawberries)
- Metconazole
- Molinate
- Oxadiargyl

- Oxasulfuron
- Oxyfluorfen
- Picolinafen
- Propaquizafop
- Pyridate (especially relevant for grapefruit, oranges, sweet pepper. Additionally relevant for several non-MACP commodities such as: avocado, Brussel's sprouts, celery, dill, leek, mandarins and tea) (SRM method, support EURLs needed)
- Quinoclamine
- Quizalofop, including quizalfop-P (especially relevant for carrots, head cabbage, spinach, broccoli, spinach and potatoes Additionally relevant for several non-MACP commodities such as: celeriac, parsley, coriander, caraway, fennel. dill, herbs (balm, basil, mint, thyme); beet, chard, artichoke, chicory)
- Sulfuryl fluoride (especially relevant for nuts, oilseeds and dried fruit)
- Tri-allate

Annex IV: Substances with a low level of findings

This annex entails substances for which few residues were detected during their evaluation under chapter 4. They were moved to this annex for information of the Member States that are interested of keeping them in their National Programmes as most of them are analysed by a large fraction of laboratories and Member States.

Pesticides relevant to products of plant origin

Previously listed in Chapter 4.1.1 (Frequent detections, MRL exceedances or RASFF notifications)

Benalaxyl including other mixtures of constituent isomers including benalaxyl-M

- Method: MRM
- Toxicity: ADI = 0.04 mg/kg bw/day, ARfD NA
- Priority: 1A
- Evaluation: after 1 year (10/2016)
- 0.1% findings in vegetables (EFSA 2011 report)
- 0.05% findings EFSA 2012 report
- 0.02% findings EFSA 2013 report
- 0.02% findings EFSA 2014 report
- 0.04% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 66% labs and 85% MS analysed full RD in 2015

⇒ **Analytical capability good**

⇒ **Few findings**

Clomazone

- Method: MRM
- Toxicity: ADI = 0.133 mg/kg bw/day, ARfD NA
- Priority: 1B
- Evaluation: after 1 year (10/2016)
- 0.1% findings in vegetables (EFSA 2011 report)
- 0.05% findings EFSA 2012 report
- 0.03% findings EFSA 2013 report

- 0.04% findings EFSA 2014 report
- 0.08% findings, 0.01% MRL exceedances 2015 preliminary EFSA data
- 57% labs and 81 % MS analysed full RD in 2015

⇒ **Analytical capability medium**

⇒ **Few findings**

Heptachlor (Not approved)

- Method: MRM
- Toxicity: ADI = 0.0001 mg/kg bw/day, ARfD = NA
- Priority: 1A
- Evaluation: after 1 year (10/2016)
- 0.3% findings in animal commodities, 0.1% in vegetables EFSA 2011 report
- 0.06% findings EFSA 2012 report
- 0.05% findings EFSA 2013 report
- 0.02% findings EFSA 2014 report
- 0.01% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 67% labs and 92% MS analysed full RD in 2015

⇒ **Analytical capability good**

⇒ **Few findings**

Quintozene (Not approved)

- Method: MRM
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD NA
- Priority: 1A
- Evaluation: after 1 year (10/2016)
- 0.1 % findings EFSA 2011 report
- 0.04% findings EFSA 2012 report
- 0.01% findings EFSA 2013 report
- 0.03% findings EFSA 2014 report
- 0.02% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 48% labs and 89% MS analysed full RD in 2015

⇒ **Analytical capability medium**

⇒ **Low findings**

Previously listed in Chapter 4.1.2 (Recently Approved)

Fluxapyroxad

- Approved since 1/2013
- Method: MRM
- Toxicity: ADI = 0.02 mg/kg bw/day, ARfD = 0.25 mg/kg bw
- Priority: 1A
- Evaluation: after 1 year (10/2016, extended to 10/2017)
- 0% findings EFSA 2012 report
- 0.12% findings EFSA 2013 report
- 0.01% findings EFSA 2014 report
- 0.04% findings (0.01% MRL exceedances) EFSA 2015 report (19016 samples)
- 0.01% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (21906 samples)
- 42% labs and 85% MS analysed full RD in 2015
- 45% labs and 81% MS analysed full RD in 2016

⇒ Findings don't justify inclusion in EU MACP

⇒ Medium analytical capability

Isopyrazam

- approved since 4/2013
- Method: MRM
- Toxicity: ADI = 0.03 mg/kg bw/day, ARfD = 0.2 mg/kg bw
- Priority: 1A
- Evaluation: after 1 year (10/2016) extended with an extra year (10/2017)
- No monitoring results EFSA 2012 report
- 0% findings EFSA 2013 report (473 samples)
- 0% findings EFSA 2014 report
- 0.04% findings (0.00% MRL exceedances) EFSA 2015 report (2668 samples)
- 0.05% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (6568 samples)
- 27% labs and 69% MS analysed full RD in 2015
- 42% labs and 73% MS analysed full RD in 2016

⇒ Analytical capability medium

⇒ Findings don't justify inclusion in EU MACP

Penthiopyrad

- Approved since 5/2014
- Method: MRM
- Toxicity: ADI = 0.1 mg/kg bw/day, ARfD = 0.75 mg/kg bw
- Priority: 1B

- Evaluation: after 1 year (10/2017)
- No monitoring data available EFSA 2012 report
- No monitoring data available EFSA 2013 report
- 0.08% findings EFSA 2014 report
- 0.04% findings (0.00% MRL exceedances) EFSA 2015 report (2595 samples)
- 0.06% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (8298 samples)
- 19% labs and 50% MS analysed full RD in 2015
- 40% labs and 77% MS analysed full RD in 2016
- **⇒ Analytical capability medium**
- **⇒ Findings don't justify inclusion in EU MACP**

Previously listed in Chapter 4.1.4 (High toxicity)

Ethoprophos

- Toxicity: ADI = 0.0004 mg/kg bw/day, ARfD = 0.01 mg/kg bw
- Method: MRM
- Priority: 1A
- Evaluation: after 1 year (10/2016)
- 0.01% findings EFSA 2012 report
- 0.02% findings EFSA 2013 report
- 0.01% findings EFSA 2014 report
- 0.01% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 83% labs and 100% MS analysed full RD in 2015
- EURL comment: a lot of laboratories use this as an internal standard. If there are significant findings then this practice is called into question. Also this compound is unstable in protic solvents and therefore is unlikely to be found

⇒ Analytical capability good

⇒ Few findings

Previously listed in Chapter 4.1.5 (Voluntary in Reg. (EU) N° 788/2012)

Phenthoate (Not approved)

- Footnote i) in Reg. (EC) N° 788/2012
- Method MRM
- Toxicity: ADI = 0.003 mg/kg bw/day, ARfD NA
- Priority: 1A
- Evaluation after 1 year (10/2016)

- 0.01% findings EFSA 2012 report
- 0% findings EFSA 2013 report
- 0.03% findings EFSA 2014 report
- 0.01% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 78% labs and 100% MS analysed full RD in 2015

⇒ Analytical capability good

⇒ Few findings

Prothiofos (Not approved)

- Footnote g) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity: no ADI or ARfD available in database
- Priority: 1B
- Evaluation after 1 year (10/2016)
- 0.01% findings EFSA 2012 report
- 0.01% findings EFSA 2013 report
- 0.01% findings EFSA 2014 report
- 0.01% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 66% labs and 96% MS analysed full RD in 2015

⇒ Low findings

⇒ Substance mainly of interest for imported commodities

⇒ Good analytical capability

Rotenone (Not approved)

- Footnote g) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity: no ADI or ARfD in database
- Priority: 1B
- Evaluation after 1 year (10/2016)
- 0% findings EFSA 2012 report
- 0% findings EFSA 2013 report
- 0.01% findings EFSA 2014 report
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 50% labs and 89% MS analysed full RD in 2015

⇒ Low findings

⇒ Medium analytical capability

Tetramethrin (Not approved)

- Footnotes g) and i) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity: no ADI or ARfD in database
- Priority: 1B
- Evaluation after 1 year (10/2016)
- 0.02% findings EFSA 2012 report
- 0.02% findings EFSA 2013 report
- 0.02% findings EFSA 2014 report
- 0.01% findings, 0.01% MRL exceedances 2015 preliminary EFSA data
- 68% labs and 92% MS analysed full RD in 2015

⇒ **Low findings**

⇒ **Good analytical capability**

Triticonazole

- Footnote i) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity ADI = 0.025 mg/kg bw/day, ARfD = 0.05 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0% findings EFSA 2012 report
- 0% findings EFSA 2013 report
- 0.02% findings EFSA 2014 report
- 0.01% findings, 0.01% MRL exceedances 2015 preliminary EFSA data
- 77% labs and 100% MS analysed full RD in 2015

⇒ **Low findings**

⇒ **Good analytical capability**

Pesticides for analysis in products of animal origin

Previously listed in Chapter 4.2.1 (Frequent detections, MRL exceedances or RASFF notification)

Azinphos ethyl (Not approved)

- Method: MRM
- Toxicity: no toxicological information available
- Priority: 1B

- Evaluation after 1 year (10/2017)
- 0% findings EFSA 2012 report
- 0.12% findings EFSA 2013 report
- 0% findings EFSA 2014 report
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (73 samples)
- 0.00% findings (0.00% MRL exceedances) preliminary EFSA report (2092 samples)
- 62% labs and 92% MS analysed full RD in 2015
- ⇒ **Analytical capability good**
- ⇒ **Findings don't justify inclusion in EU MACP**
- ⇒ **Move to annex IV.**
- Relevant for animal muscle and fat.

Previously listed in Chapter 4.2.3 (Voluntary in Reg. (EU) N° 788/2012)

Bixafen

- Remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in milk and swine meat (2013) and butter and egg (2015). Not relevant for commodities listed in 2014.'
- Method: MRM
- Toxicity: ADI = 0.02 mg/kg bw/day, ARfD = 0.2 mg/kg bw
- Priority 1A.
- Evaluation after 1 year (10/2017)
- 0 % findings EFSA 2012 report (133 samples)
- 0 % findings EFSA 2013 report (527 samples)
- 0 % findings EFSA 2014 report (480samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (22854 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (104 samples)
- 0% labs and 0% MS analysed full RD in 2015
- 1% labs and 4% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- ⇒ **Findings don't justify inclusion in EU MACP**
- Relevant for cows' milk, animal muscle and fat, butter and eggs.

Chlorobenzilate (not approved)

- Footnotes g) and i) in Reg. (EC) N° 788/2012.
- Method: MRM
- Toxicity: ADI = 0.02 mg/kg bw/day, ARfD NA
- Priority: 1A

- Evaluation after 1 year (10/2016)
- 0.96 % findings EFSA 2012 report
- 0.03% findings EFSA 2013 report
- 0.05% findings EFSA 2014 report
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 55% labs and 84% MS analysed full RD in 2015
- Relevant for animal fat, milk and eggs.

⇒ Analytical capability medium

⇒ Findings don't justify inclusion in EU MACP

Cyfluthrin

- Footnote i) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity: ADI = 0.003 mg/kg bw/day, ARfD = 0.02 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (3531 samples)
- 0% findings EFSA 2014 report (4189 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 82% labs and 96% MS analysed full RD in 2015
- Relevant for animal fat.

⇒ Analytical capability good

⇒ No findings

Cyproconazole

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: MRM
- Toxicity: ADI = 0.02 mg/kg bw/day, ARfD = 0.02 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (902 samples)
- 0% findings EFSA 2014 report (2164 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 46% labs and 76% MS analysed full RD in 2015

- Relevant for liver.

⇒ **Analytical capability medium**

⇒ **No findings**

Dichlorprop (Not approved)

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: SRM (hydrolysis required to cover conjugates)
- Toxicity: no ADI or ARfD in COM database, non-approved substance
- Priority: 2B
- Evaluation after 2 years (10/2017)
- 0 % findings EFSA 2012 report (124 samples)
- 0 % findings EFSA 2013 report (234samples)
- 0 % findings EFSA 2014 report (531 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (53 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (111 samples)
- 16% labs and 40% MS analysed full RD in 2015
- 27% labs and 44% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- ⇒ **Findings don't justify inclusion in EU MACP**
- Relevant for liver and kidney.

Epoxiconazole

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: MRM
- Toxicity: ADI = 0.008 mg/kg bw/day, ARfD = 0.023 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0 % findings EFSA 2013 report (854 samples)
- 0 % findings EFSA 2014 report (1848 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 43% labs and 76% MS analysed full RD in 2015
- Relevant for liver

⇒ **Analytical capability medium**

⇒ **No findings**

Etofenprox

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in milk (2013) and butter (2015), it does not need to be analysed in swine meat (2013) and egg (2015). Not relevant for commodities listed in 2014.'
- Method: MRM
- Toxicity: ADI = 0.03 mg/kg bw/day, ARfD = 1 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0 % findings EFSA 2013 report (1366 samples)
- 0 % findings EFSA 2014 report (1959 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 44% labs and 80% MS analysed full RD in 2015
- Relevant for animal fat, cows' milk and butter.

⇒ **Analytical capability medium**

⇒ **No findings**

Fenthion (Not approved)

- Footnote i) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity: ADI = 0.007 mg/kg bw/day, ARfD = 0.01 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0 % findings EFSA 2013 report (2260 samples)
- 0 % findings EFSA 2014 report (3598 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 31% labs and % MS analysed full RD in 2015
- Relevant for animal fat and liver.

⇒ **Analytical capability low**

⇒ **No findings**

Fluquinconazole

- No footnote, remark h) in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in milk (2013), liver (2014) and butter (2015), it does not need to be analysed in swine meat (2013), poultry meat (2014) and egg (2015).'

- Method: MRM
- Toxicity: ADI = 0.002 mg/kg bw/day, ARfD = 0.02 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0.35 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (1280 samples)
- 0% findings EFSA 2014 report (2703 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 48% labs and 76% MS analysed full RD in 2015
- Relevant for cows' milk, liver and butter.

⇒ **Analytical capability medium**

⇒ **Few findings**

Flusilazole (not approved)

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in swine meat (2013) and liver (2014), it does not need to be analysed in milk (2013) and poultry meat (2014). Not relevant for commodities listed in 2015.'
- Method: MRM
- Toxicity: ADI = 0.002 mg/kg bw/day, ARfD = 0.005 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (669 samples)
- 0% findings EFSA 2013 report (1074 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 1% labs and 4% MS analysed full RD in 2015
- Relevant for animal fat, kidney and liver.

⇒ **Analytical capability low**

⇒ **No findings**

Metaflumizone No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in swine meat (2013), poultry meat, (2014) and egg (2015), it does not need to be analysed in milk (2013), liver (2014) and butter (2015).'

- Method: MRM
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD = 0.13 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016).
- 0 % findings EFSA 2012 report

- 0% findings EFSA 2013 report (222 samples)
- 0% findings EFSA 2014 report (1027 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 31% labs and 72% MS analysed full RD in 2015
- Relevant for swine muscle, poultry muscle and eggs.

⇒ Analytical capability low

⇒ No findings

Metazachlor

- Footnote h) in Reg. (EC) N° 788/2012 and remark: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: SRM
- Toxicity: ADI = 0.08 mg/kg bw/day, ARfD = 0.5 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (701 samples)
- 0% findings EFSA 2014 report (1650 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (821 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (51 samples)
- 1% labs and 4% MS analysed full RD in 2015
- 6% labs and 16% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- **⇒ Findings don't justify inclusion in EU MACP**
- Relevant for liver and kidney of swine and ruminants.

Methidathion (Not approved)

- Footnote i) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity: ADI = 0.001 mg/kg bw/day, ARfD = 0.01 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (3707 samples)
- 0% findings EFSA 2014 report (4804 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 70% labs and 92% MS analysed full RD in 2015

- Relevant for animal fat, muscle, milk and eggs.

⇒ **Analytical capability good**

⇒ **No findings**

Parathion-methyl (Not approved)

- Footnote i) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity: ADI = 0.003 mg/kg bw/day, ARfD = 0.03 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (3342 samples)
- 0% findings EFSA 2014 report (4097 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 52% labs and 88% MS analysed full RD in 2015
- Relevant for animal muscle, fat, milk and eggs.

⇒ **Analytical capability medium**

⇒ **No findings**

Prochloraz

- Footnote h) in Reg. (EC) N° 788/2012 and remark: 'To be analysed on voluntary basis in swine meat (2013), poultry meat (2014) and liver (2014), it does not need to be analysed in milk (2013). Not relevant for commodities listed in 2015.'
- Method: SRM (possible future revision of residue definition that would allow MRM method)
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD = 0.025 mg/kg bw
- Not a priority for the moment
- Evaluation once Art. 12 review is finalised
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (1052 samples)
- 0% findings EFSA 2014 report (1916 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (342 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (306 samples)
- 0% labs and 0% MS analysed full RD in 2015
- 6% labs and 20% MS analysed full RD in 2016
- ⇒ **Analytical capability poor**
- **⇒ Findings don't justify inclusion in EU MACP**
- Relevant for ruminant's fat, liver and kidney.

Profenofos (Not approved)

- Footnote i) in Reg. (EC) N° 788/2012:
- Method: MRM
- Toxicity: ADI = 0.03 mg/kg bw/day, ARfD = 1 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (3048 samples)
- 0% findings EFSA 2014 report (4290 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 70% labs and 92% MS analysed full RD in 2015
- Relevant for animal fat, milk and eggs.

⇒ Analytical capability good

⇒ No findings

Prothioconazole

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: MRM/ SRM
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD = 0.01 mg/kg bw
- Priority: 2A
- Evaluation after 2 years (10/2017)
- 0 % findings EFSA 2012 report
- Relevant for ruminant's and swine liver and kidney.
- 0% findings EFSA 2013 report (157 samples)
- 0% findings EFSA 2014 report (405 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2015 report (342 samples)
- 0.00% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (96 samples)
- 2% labs and 8% MS analysed full RD in 2015
- No 2016 data available for analytical capability
- ⇒ **Analytical capability poor**
- **⇒ Findings don't justify inclusion in EU MACP**

Resmethrin (Not approved)

- Footnote i) in Reg. (EC) N° 788/2012
- Method: MRM

- Toxicity: ADI = 0.03 mg/kg bw/day, ARfD = NA
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (2872 samples)
- 0.06% findings EFSA 2014 report (3372 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 19% labs and 40% MS analysed full RD in 2015
- Relevant for animal fat, muscle, liver, kidney, cow's milk and eggs.

⇒ Analytical capability low

⇒ Few findings

Tau-fluvalinate

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in milk (2013) and butter (2015), it does not need to be analysed in swine meat (2013) and egg (2015). Not relevant for commodities listed in 2014.'
- Method: MRM
- Toxicity: ADI = 0.005 mg/kg bw/day, ARfD = 0.05 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (1308 samples)
- 0% findings EFSA 2014 report (2417 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 6% labs and 84% MS analysed full RD in 2015
- Relevant for cows' milk and butter

⇒ Analytical capability low

⇒ No findings

Tetraconazole

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in milk (2013), liver (2014) and butter (2015), it does not need to be analysed in swine meat (2013), poultry meat (2014) and egg (2015).'
- Method: MRM
- Toxicity: ADI = 0.004 mg/kg bw/day, ARfD = 0.05 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (1834 samples)

- 0% findings EFSA 2014 report (3058 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 51% labs and 80% MS analysed full RD in 2015
- Relevant for cows' milk, liver and butter.

⇒ Analytical capability medium

⇒ No findings

Thiacloprid

- No footnote, remark in Reg. (EC) N° 788/2012: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: MRM
- Toxicity: ADI = 0.01 mg/kg bw/day, ARfD = 0.03 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (856 samples)
- 4.27% findings EFSA 2014 report (0.06% MRL exceedances)
- 2015 preliminary EFSA data 26.6% findings, 0.5% MRL exceedances in honey. Not tested on other AO commodities.
- 26.60% findings, 0.50% MRL exceedances 2015 preliminary EFSA data
- 41% labs and 76% MS analysed full RD in 2015
- Relevant for liver, kidney and honey.

⇒ Analytical capability medium

⇒ Some findings in honey, that is currently not included in EU MACP

Topramezone (Approval pending)

- Footnote h) in Reg. (EC) N° 788/2012 and remark: 'To be analysed on voluntary basis in liver (2014), it does not need to be analysed in poultry meat (2014). Not relevant for commodities listed in 2013/2015.'
- Method: MRM
- Toxicity: ADI = 0.001 mg/kg bw/day, ARfD = 0.001 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- No monitoring results available in EFSA 2012 report
- 0% findings EFSA 2013 report (120 samples)
- 0% findings EFSA 2014 report (182 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data (47 samples)
- 8% labs and 24% MS analysed full RD in 2015

- Relevant for ruminant's liver and kidney.

⇒ **Analytical capability low**

⇒ **No findings**

Triazophos (Not approved)

- Footnote i) in Reg. (EC) N° 788/2012
- Method: MRM
- Toxicity: ADI = 0.001 mg/kg bw/day, ARfD = 0.001 mg/kg bw
- Priority: 1A
- Evaluation after 1 year (10/2016)
- 0 % findings EFSA 2012 report
- 0% findings EFSA 2013 report (3385 samples)
- 0% findings EFSA 2014 report (4687 samples)
- 0.00% findings, 0.00% MRL exceedances 2015 preliminary EFSA data
- 69% labs and 88% MS analysed full RD in 2015
- Relevant for animal fat, eggs and milk.

⇒ **Analytical capability good**

⇒ **No findings**

Annex V: Evaluation at the end of the evaluation period

Information to be gathered for evaluation at the end of the evaluation period

Pesticide X

- Analytical capability (data collection via EURLs)
    - % of labs that took part in the survey
    - % of Member States that took part in the survey
    - % of the labs that is able to analyse the full residue definition
    - % of the labs that analyses part of the residue definition
    - % of the Member States that is able to analyse the full residue definition
    - % of the Member States that analyses part of the residue definition
- MRL exceedances/ findings (data collection by EFSA as part of the data collection for the National Programmes)
    - N° of samples analysed
    - % of samples with findings > LOQ
    - % of samples numerically exceeding the MRL
    - % of samples analysed according to full residue definition (SSD code P005)
    - % of samples analysed for part of the residue definition (SSD code P004)
    - N° of RASFF notifications
    - N° of ARfD exceedances (not systematically calculated by EFSA, only mentioned if specific MS information is available)

Evaluation summarised by COM in Working Document

Pesticide X

- % of labs that is able to analyse the full residue definition
- % of samples with residues > MRL
- % of findings
- N° of RASSF notifications

Annex VI: Proposals for uptake of new substances in the Working Document

Proposal sheet to be filled out by COM, EFSA, EURLs or Member States

Proposal made by:

Substance:

Proposed category or annex:

Findings and/or MRL exceedances:

Method:

Toxicity:

Proposed priority:

Proposed evaluation period:

Relevant commodities:

Additional information:

Annex VII: Substances of interest to be analysed in honey under the national control programmes

EFSA recommended in its 2014 annual report to analyse honey samples for the substances that are listed in the EU MACP in commodities of plant origin, in order to allow estimating the exposure of bees and adapting certain MRLs for honey. Member States are encouraged to conduct these analyses under their national programmes and to clearly report to EFSA which MRL (pesticides MRL or veterinary medicinal product MRL) was used for the evaluation. For honey the residue definition for plant products applies. Next to residue information for the residue definition for plant products, also information on residues in line with the residue definition for animal origin can be useful to get a view on other specific metabolites that might occur in bees.

Substances for which residues frequently occur in honey:

- Acetamiprid
- Amitraz (veterinary medicinal product)
- Azoxystrobin
- Benzalkonium chloride
- Boscalid
- Carbendazim and thiophanate methyl
- Clothianidin
- Chlorfenvinphos
- Coumaphos (veterinary medicinal product)
- Didecyldimethylammonium chloride[6]

[6] The results should be reported as mixture of alkyl-quaternary ammonium salts with alkyl chain lengths of C8, C10 and C12.

- Dimoxystrobin
- Iprodione
- Imidacloprid
- Lambda-cyhalothrin
- Orthophenylphenol
- Thiacloprid

Annex VIII: Commodities of interest to be analysed under the national programmes

EFSA recommended focusing monitoring activities on commodities that frequently contain pesticides residues or that have the potential to result in a significant short-term intake:

- Small fruits and berries
- Grapefruits
- Rucola
- Apricots
- Celeriacs
- Brussels sprouts
- Cherries
- Tea

As currently little monitoring data are available for pesticides residues in feed, EFSA recommended to include animal feed commodities in the monitoring programmes in order to get a view on the animal exposure. On the basis of residue data for feed EFSA is able to estimate the exposure of humans to the pesticides residues.

- Rapeseed
- Soybean

Annex IX: Substances moved from the working document to the EU MACP

- Ametoctradin (2019 EU MACP)
- Cyazofamid (2019 EU MACP)
- Emamectin benzoate B1a, expressed as emamectin (2019 EU MACP)
- Etoxazole (2019 EU MACP)
- Fluopicolide (2018 EU MACP)
- Glyphosate[7] (2019 EU MACP)
- Metrafenone (2019 EU MACP)
- Prothioconazole (2018 EU MACP)
- Prosulfocarb (2018 EU MACP)
- Spirotetramat (2019 EU MACP)

[7] Products of Animal Origin. Analytical capability of full RD:
2015 (survey on 84 labs/25MSs): 23% of labs, 48% of MSs
2016 (survey on 81 labs/25MSs): 24% of labs, 48% of MSs
3.17% findings (0.00% MRL exceedances) EFSA 2016 preliminary report (63 samples)
Relevant for ruminant kidney and liver. To be checked whether relevant for cows' milk, animal muscle and fat.

Annex X: Special Project on dithiocarbamates (CS2) in organic samples

The existence of naturally occurring dithiocarbamates (CS2) in specific plant commodities can lead to false positive results of MRL exceedances. An effort from the Commission, EFSA and the EURLs has been initiated to examine the background levels of dithiocarbamates in certain plant products.

In order to better understand this issue and in view of the preparation of Art.12 reviews, data on dithiocarbamates background levels in organic products should be made available to EFSA by December 2019. As such MSs should include sampling of organic products for the analysis of dithiocarbamates their National Control Programs in 2018 and deliver the results to EFSA.

Further details on the project can be found following the path below on CIRCA BC:

CIRCABC > SANTE > EURLs for Pesticides

Then in the Library section follow the path:

Library > eurl-pesticides-srm > Project on Phytogenic Levels of Carbon Disulfide (Dithiocarbamates)