

Review of the existing MRLs for pymetrozine

Competent Authority Draft Reasoned Opinion

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DRAFT

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Summary

This assessment is a draft only and outlines proposed recommendations for the MRLs for the active substance pymetrozine.

According to Article 12 of Regulation (EC) No 396/2005,¹ HSE as a competent authority has reviewed the Maximum Residue Levels (MRLs) currently established in Great Britain (GB) for the pesticide active substance pymetrozine. This review of the MRLs has been undertaken by HSE under the GB regulatory regime following the UK leaving the EU. It was required following the earlier non-approval decision for the active substance pymetrozine under the EU plant protection product regulatory regime (Regulation (EC) No 1107/2009),² and the subsequent withdrawal of all plant protection authorisations in GB. This EU non-approval decision came into force while the UK was still an EU Member State, and was therefore retained in the national regulatory regime after the UK's departure from the EU.

Based on the review of the MRLs, HSE prepared a Reasoned Opinion (RO). HSE took into account the assessment report and EFSA Conclusion prepared under Regulation (EC) No 1107/2009 for the renewal of the approval of the active substance (the renewal assessment).

Pymetrozine does not meet the requirements to be exempt from MRLs and therefore it is not suitable for inclusion in Part 4 (active substances not subject to MRLs) of the GB MRL Statutory Register.

Sufficiently validated analytical methods for the determination of pymetrozine in plants and animals, except milk, are available to enforce MRLs at an LOQ of 0.02 mg/kg for plants and for animals at an LOQ of 0.01 mg/kg. For milk sufficiently validated analytical methods are available to determine the sum of pymetrozine, 6-hydroxymethylpymetrozine and its phosphate conjugate, expressed as pymetrozine, and enforce MRLs at an LOQ of 0.02 mg/kg.

¹ Retained [Regulation \(EC\) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin](#) (as it applies in Great Britain, pursuant to the European Union (Withdrawal) Act 2018 and European Union (Withdrawal Agreement Act 2020). Great Britain ("GB") refers to England, Scotland and Wales. All references to this regulation are the retained regulation as it applies in GB.

² EU [Regulation \(EC\) No 1107/2009 concerning the placing of plant protection products on the market](#). All references to this regulation are the EU regulation as it applied to the UK as an EU MS.

Toxicological reference values were established in the renewal assessment: an ADI of 0.03 mg/kg bw/day and an ARfD of 0.1 mg/kg bw were established for pymetrozine.

In the renewal assessment robust residue definitions for risk assessment for plants could not be established. The risk assessment was unable to demonstrate that the necessary requirements had been met for the major plant metabolites GS23199, CGA294849, CGA266591 and CGA128632; no toxicological reference values were established and the residue definition for plants for risk assessment was only provisional.

For animals, the residue definition for risk assessment and enforcement were only regarded as provisional in the absence of robust residue definitions for plants.

With regards to the residue definitions for enforcement for livestock, HSE recommends retaining the current definitions within the GB MRL Statutory Register. However, for milk the residue definition should be expressed slightly differently to aid clarity.

The data provided for the renewal assessment are not sufficient to establish robust processing factors for pymetrozine. At this time Part 6 of the GB MRL Statutory Register has not been established.

A number of the current MRLs in force have footnotes for the submission of supplementary information (MRL confirmatory data). These footnotes are as a result of the review of the MRLs undertaken following the approval decision delivered in 2001. HSE recommends that these footnotes are now deleted as all MRLs are proposed to be lowered to the LOQ.

Proposed Recommendations

Based on the risk assessment conducted in the renewal assessment, HSE concludes that harmful effects on human health cannot be excluded for residues of pymetrozine occurring in food. There is evidence of a potential risk for consumers from exposure to metabolites for which no toxicological reference values could be established, and this includes evidence of a potential genotoxic risk to consumers. This conclusion applies to all the current substantive GB MRLs in the Statutory Register. As the required level of protection has not been met, HSE proposes that all MRLs are set at the limit of quantification.

The MRLs proposed by HSE are outlined in Table 8.1.

The MRLs should be established on the basis of the following residue definitions:

The residue definition for enforcement (RD-Enf) in plants:

- Pymetrozine

The residue definition for enforcement (RD-Enf) in animals:

All products except milk

- Pymetrozine

Milk

- The sum of pymetrozine and 6-hydroxymethylpymetrozine, including its phosphate conjugate, expressed as pymetrozine

Notification of the proposed MRLs

To meet the UK's international trade obligations, the measures have been notified to the World Trade Organization (WTO). The WTO/SPS notification can be found at the following link and searching for pymetrozine and United Kingdom as the notifying member:

[Home - ePing SPS&TBT platform \(epingalert.org\)](http://epingalert.org)

- **There may be a delay between publication of this draft RO and the notification appearing in the Sanitary and Phytosanitary Information Management System**
- **The notification includes the proposed date of adoption/publication and the proposed date of entry in force of the new MRLs.**

Background

Article 12 of Regulation (EC) No 396/2005 requires the Competent Authority to undertake a review of the GB Maximum Residue Levels (MRLs).

A non-approval decision,³ was delivered for pymetrozine on 9 October 2018 and all plant protection product authorisations in GB have been withdrawn. HSE therefore initiated a review of the current MRLs taking into account the assessment report and EFSA Conclusion prepared under Regulation (EC) No 1107/2009 for the renewal of the approval of the active substance (the renewal assessment). As outlined in Article 12 (3) of Regulation (EC) No 396/2005 the following points have been considered within this review:

- The existing MRLs for pymetrozine set out in Part 2 or 3 of the GB MRL Statutory Register
- The necessity of setting a new MRL for pymetrozine, or its inclusion in Part 4 of the MRLs register
- Specific processing factors as referred to in Article 20(2) that may be needed for pymetrozine
- MRLs which the competent authority may consider including in Part 2 or 3 of the MRLs register and those MRLs related to pymetrozine which may be deleted

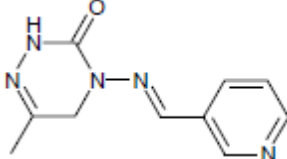
This review is the basis of HSE's draft reasoned opinion: HSE recommends that all the MRLs for pymetrozine are lowered to the limit of quantification.

³ [Commission Implementing Regulation \(EU\) 2018/1501 of 9 October 2018](#) concerning the non-renewal of the approval of the active substance pymetrozine, in accordance with Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market, and amending Commission Implementing Regulation (EU) No 540/2011. The non-approval decision adopted when the UK was an EU MS.

The active substance and its use pattern

Information on the active substance pymetrozine is outlined in Table 0.1.

Table 0.1 Information on the active substance

Common name (ISO)	Pymetrozine
Chemical name (IUPAC)	6-methyl-4-{{(E)-pyridin-3-ylmethylidene]amino}-4,5-dihydro-1,2,4-triazin-3(2H)-one
CAS number	123312-89-0
Structural formula	
Molecular formula	C ₁₀ H ₁₁ N ₅ O
Molecular mass	217.2 g/mol

Pymetrozine is not an approved active substance in GB and all plant protection product authorisations have been withdrawn.

A Renewal Assessment Report (RAR) (Germany, 2013) and an EFSA Conclusion on the peer review of the renewal assessment (EFSA, 2014) are available.

MRLs are established for pymetrozine in Part 2 of the GB MRL Statutory Register.

Pymetrozine is a pyridine azomethine insecticide and exerts selective activity against homopteran insects (aphids and whiteflies) as well as pollen beetle.

There are no Codex MRLs (CXLs) for pymetrozine. However, the JMPR (Joint Meeting of the FAO/WHO on Pesticide Residues) evaluated pymetrozine as a new active substance in 2014.⁴ The JMPR was unable to conclude on residue definitions for risk assessment for both plants and animals and therefore no MRLs were recommended. It is also noted that concerns on a number of metabolites were raised, including potential genotoxic concerns, and the JMPR made a number of recommendations for future work/information, which reflect some of the data gaps highlighted in the renewal assessment.

The proposed recommendations for GB MRLs therefore reflect the decision of the JMPR.

⁴ [JMPR \(Joint Meeting of the FAO/WHO on Pesticide Residues\), 2014. Report 2014](#)

Assessment

1 Methods of Analysis

1.1 Methods for enforcement and monitoring of residues in food of plant origin

The current residue definition for enforcement is:

- Pymetrozine

No changes to this residue definition are proposed as a result of this review.

Analytical methods for the determination of pymetrozine in plant commodities were considered in the renewal assessment and also in the previous MRL review (EFSA, 2012).

In the renewal assessment an LC-MS/MS method was validated for commodities of a high water content, high oil content, high acid content and dry commodities. The LOQ validated was 0.01 mg/kg and an ILV was available.

In the previous MRL review, it is reported that the multi-residue method (described in European Standard EN 15637:2008) could not be validated at an LOQ of 0.01 mg/kg for high water commodities. Overall it was concluded that pymetrozine could be enforced in products of plant origin with an LOQ of 0.02 mg/kg for high water and high acid commodities and with an LOQ of 0.01 mg/kg for high oil and dry commodities

The current default LOQ MRL for products of plant origin for pymetrozine is 0.02* mg/kg. HSE recommends that this default LOQ MRL is retained taking into account the LOQ reported specifically for the multi-residue method; laboratories specifically involved in compliance and enforcement activities are more likely to make use of the multi-residue method compared to a single residue method.

Enforcement of MRLs for products of plant origin at an LOQ of 0.02 mg/kg has been demonstrated.

No specific analytical methods are available for the difficult to analyse matrices. Therefore, the default uncertainty factors outlined as footnotes for Table 8.1 will be applied.

1.2 Methods for enforcement and monitoring of residues in food of animal origin

The current residue definition for enforcement (except milk) is:

- Pymetrozine

The current residue definition for enforcement for milk is:

- Pymetrozine, 6-hydroxymethylpymetrozine and its phosphate conjugate, expressed as pymetrozine

No changes to these residue definitions are proposed as a result of this review. However, the wording of the residue definition for milk will be modified slightly for clarity (see section 4). The RD-Enf will be expressed as:

- The sum of pymetrozine and 6-hydroxymethylpymetrozine, including its phosphate conjugate, expressed as pymetrozine

Analytical methods for the determination of pymetrozine and 6-hydroxymethylpymetrozine in animal commodities (meat, fat, liver, kidney, eggs and milk) were considered in the renewal assessment. For 6-hydroxymethylpymetrozine the method included a hydrolysis step to convert the phosphate conjugate to 6-hydroxymethylpymetrozine. The LC-MS/MS methods were validated with an LOQ of 0.01 mg/kg for both analytes. An ILV was available.

Enforcement of MRLs for muscle, fat, liver, kidney and eggs at an LOQ of 0.01 mg/kg has been demonstrated. For milk, enforcement of MRLs at a combined LOQ of 0.02 mg/kg has been demonstrated.

2 Mammalian toxicology

The toxicological end points established in the renewal assessment are summarised in Table 2.1

Table 2.1 Overview of the toxicological reference values for pymetrozine

TRVs	Source	Year	Value	Study relied upon	Safety factor
ADI	EFSA Conclusion	2014	0.03 mg/kg bw per day	Overall 90-d and 1-yr, dog	100
ARfD	EFSA Conclusion	2014	0.1 mg/kg bw	Developmental toxicity, rabbit and 28-d gavage, rat	100

Toxicological reference values could not be established for the metabolites GS23199, CGA294849, CGA266591 and CGA128632.

3 Residues in Plants

The renewal assessment should be consulted for all the available data to support residues in plants.

The consideration of the inclusion in Part 4 of the GB MRL Statutory Register

Pymetrozine does not meet the requirements to be exempt from MRLs:

- Active substances approved as a basic substance
- Active substances listed Part 1 of the GB MRL Statutory Register
- Active substances with no identified hazards
- The consumer exposure associated with the use of the active substance as a PPP is negligible compared to other sources/natural background exposure
- The method of application of the PPP will lead to no consumer exposure

Therefore, HSE does not recommend that pymetrozine is included in Part 4 (active substances not subject to MRLs) of the GB MRL Statutory Register.

All authorisations in GB have been withdrawn on the basis of the non-approval decision for pymetrozine. As outlined in section 7 of this Reasoned Opinion, the renewal assessment establishes that harmful effects for human health cannot be excluded and therefore the required level of protection has not been met.

HSE recommends that all MRLs for products of plant origin are set at the limit of quantification. Therefore, no additional residues data are presented in this Reasoned Opinion. The following is a summary only of the available information from the renewal assessment:

Residues in primary crops

The metabolism of pymetrozine in fruit crops (tomatoes), root crops (potatoes), pulses and oilseed crops (cotton) following foliar application and in cereals (rice) following a granular application was assessed in the renewal assessment. The relevant residues were pymetrozine and metabolites GS 23199, CGA 128632 (free and conjugates), CGA 294849 and CGA 266591.

It is not possible to conclude on the residues that may be found in plants and hence the residues that humans and livestock may be exposed to from the consumption of treated

commodities; the risk assessment was unable to demonstrate the necessary requirements were met and consequently, no toxicological reference values were established.

It is also noted that pymetrozine may degrade on storage of the samples from residue trials and the rate of degradation may be matrix specific. There may also be stability issues for the extracts from the samples. In any new residue trials, the stability of pymetrozine would need to be considered.

Residues in rotational crops

With respect to residues in rotational crops, all UK authorisations have been withdrawn and therefore no residues in crops grown in rotation in GB are expected.

Based on the available data in the renewal assessment, residues in rotational crops are not expected to be relevant to imported crops. However, this will need a further consideration in order to establish substantive MRLs, noting that the JMPR (JMPR, 2014) listed the need for further rotational crop field trial data in their assessment.

Residues in processed commodities

No data are available on the stability on processing of pymetrozine and the various metabolites found in crops. Environmental hydrolysis data indicates that pymetrozine may be unstable on processing and metabolites GS 23199 and CGA 300407 may be relevant in processed foods.

The JMPR (JMPR, 2014) noted the following with regards to the metabolite CGA 300407:

The processing degradate CGA300407 does not have a structural alert for genotoxicity but the Meeting was made aware that positive genotoxicity results, in vitro and in vivo, exist for this compound. No conclusion on the relevance of CGA300407 can be made.

A further consideration would be required in order to establish substantive MRLs; a standard hydrolysis study and magnitude of residue studies may be required. The toxicological profile of the metabolites would need to be addressed.

The data provided in the renewal assessment are not sufficient to establish processing factors for pymetrozine.

Residue definitions for enforcement

Within the renewal assessment the following residue definition for enforcement (RD-Enf) was proposed:

- Pymetrozine

The current RD-Enf in the GB MRL Statutory Register is pymetrozine.

Residue definitions for risk assessment

Within the renewal assessment a provisional residue definition for risk assessment (RD-RA) was proposed:

- Pymetrozine and the metabolites GS 23199 and CGA 128632 (including conjugates), CGA 294849 and CGA 266591 expressed as pymetrozine

The residue definition for risk assessment was only considered provisional as the risk assessment could not establish the toxicological profile of the plant metabolites.

It is noted that the uses on potatoes and oilseed rape, considered in the renewal assessment, resulted in residues of pymetrozine and the metabolites below the LOQ. The MRLs for potatoes and oilseeds are set at the LOQ and hence residues of the metabolites are not expected. Provided residues of pymetrozine do not exceed the LOQ MRL, then there should be no exposure to the plant metabolites. The MRLs are set at the LOQ for root and tuber vegetables, bulb vegetables, pulses, oilseeds (except cotton seeds), cereals and products of animal origin.

Substantive MRLs are established for fruits, fruiting vegetables, a range of leafy crops, stem vegetables, legumes and herbal infusions. A similar range of crops were considered by the JMPR (JMPR, 2014) with quantifiable residues of pymetrozine obtained and therefore quantifiable residues of the various metabolites may occur. The risk assessment was unable to conclude on the potential for the exposure to these metabolites, with the JMPR noting that metabolite CGA 294849 has structural alerts for genotoxicity and the dietary exposures exceed the generic threshold. Therefore, harmful effects for human health cannot be excluded.

For processing the following residue definition was proposed:

- Pymetrozine and the metabolites GS 23199 and CGA 300407 expressed as pymetrozine

A standard hydrolysis study would be required to confirm the residue definition for processed products. In addition, as outlined above, the JMPR assessment from 2014 raised concerns on the metabolite CGA 300407.

The full details are outlined in the EFSA Conclusion.

As a result of this review no additional conclusions are made on a suitable residue definition for risk assessment. The provisional residue definitions outlined in the EFSA Conclusion remain applicable for risk assessment in the absence of additional information.

4 Residues in livestock

The renewal assessment should be consulted for all the available data to support residues in livestock.

As outlined in Section 3, the residue definitions for plants are only provisional. It is therefore not known what specific residues will occur in animal feeds. Hence it is not known what residues livestock will be exposed to and it not possible to undertake an accurate assessment of the livestock dietary burden.

Livestock metabolism data were assessed in the renewal assessment. Ruminant and poultry metabolism data were assessed for pymetrozine only in the renewal assessment. The predominant residues were pymetrozine and 6-hydroxymethylpymetrozine (free and conjugated).

Based on the uncertainties around the residues that livestock may be exposed to, it is not possible to establish a robust residue definition for risk assessment for livestock. HSE recommends that all MRLs for products of animal origin are set at the limit of quantification.

Residue definitions for enforcement

Within the renewal assessment the following residue definitions for enforcement (RD-Enf) were proposed:

All products except milk

- Pymetrozine

Milk

- 6-hydroxymethylpymetrozine expressed as pymetrozine

For all commodities (except milk) the current RD-Enf in the GB MRL Statutory Register is pymetrozine. For milk the current RD-Enf in the GB MRL Statutory Register includes pymetrozine, 6-hydroxymethylpymetrozine and the phosphate conjugate:

- Pymetrozine, 6-hydroxymethylpymetrozine and its phosphate conjugate, expressed as pymetrozine

In milk pymetrozine was only found at low levels (3 % of the TRR). The dominant residue was 6-hydroxymethyl pymetrozine (40 % and 36.3 % of the TRR) and its phosphate conjugate (40.7 % and 38.9 % of the TRR). 6 -hydroxymethyl pymetrozine and its

phosphate conjugate would appear to be sufficient as a marker to enforce MRLs. However, at this time the RD-RA for plants is only provisional and a dietary burden of livestock cannot be undertaken. Therefore HSE recommends that pymetrozine is included in the RD-Enf at this time ie the current RD-Enf is retained. For clarity the RD-Enf should be expressed as follows:

- The sum of pymetrozine and 6-hydroxymethylpymetrozine, including its phosphate conjugate, expressed as pymetrozine

Residue definitions for risk assessment

Within the renewal assessment provisional residue definitions for risk assessment (RD-RA) were proposed:

All products except milk

- Pymetrozine

Milk

- Pymetrozine, 6-hydroxymethylpymetrozine and its phosphate conjugate, expressed as pymetrozine

These residue definitions are provisional as a conclusion on the residues that livestock will be exposed to cannot be established.

As a result of this review no additional conclusions are made on a suitable residue definition for risk assessment. The provisional residue definition outlined in the EFSA Conclusion remains applicable for risk assessment in the absence of additional information.

5 Residues in honey

The potential for residues arising in honey is not relevant as there are no authorisations in GB. The MRL for honey should be set at the default LOQ MRL (for honey) of 0.05* mg/kg. This is based on a RD-Enf of pymetrozine.

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6 MRLs for products not covered in sections 3 and 4

This section is to cover MRLs that can be extrapolated to other products included in Part 1 of the GB MRL Statutory Register but are not covered in sections 3 and 4 of this review. Examples include MRLs for edible offals (other than liver and kidney) or MRLs to cover products derived from other species such as goat or equine.

The MRLs for pymetrozine for all products of plant and animal origin are recommended to be set at the limit of quantification and therefore a consideration of the extrapolation of MRLs to additional products is not required.

7 Consumer risk assessment

7.1 Dietary Exposure

The following issue was identified in the renewal assessment that are relevant to consumer exposure:

- It is not possible to establish residues definitions for risk assessment for plants and livestock. Consequently, it is not known what residues humans and livestock may be exposed to as a result of crops treated with pymetrozine. The risk assessment is unable to demonstrate that the necessary requirements are satisfied.
- The risk assessment was unable to demonstrate that the necessary requirements had been met for a range of metabolites that consumers will be exposed to (GS23199, CGA294849, CGA266591, CGA128632 and CGA 300407) and toxicological reference values have not been established.
- There is evidence of a potential genotoxic risk to consumers.

The full list of issues identified in the renewal assessment are available in the EFSA Conclusion.

The outcome of the risk assessment for the renewal of pymetrozine is directly relevant to all uses and hence all substantive GB MRLs in the Statutory Register. Therefore, consumer intake calculations have not been performed.

It is recognised that for the specific uses on potatoes and oilseed rape considered in the renewal assessment the dietary exposure assessments were undertaken; for oilseed rape and potato intakes were less than 1 % of the ADI and less than 2 % of the ARfD. However, the GAPs considered resulted in residues of pymetrozine < 0.02* mg/kg and as such, exposure to the various plant metabolites was highly unlikely. The MRLs for potatoes and rapeseeds are already set at the default LOQ MRL of 0.02* mg/kg. All other substantive MRLs should also be lowered to the LOQ, to ensure there is no exposure to the metabolites.

Based on the risk assessment conducted in the renewal assessment, HSE concludes that harmful effects on human health cannot be excluded for residues of pymetrozine occurring in food. There is evidence of a potential risk to consumers from exposure to metabolites for which no toxicological reference values could be established. Consequently, the required level of protection has not been met. All substantive MRLs should be lowered to the LOQ.

7.2 Other routes of exposure

As there are no authorisations in GB then exposure as a result of metabolites being present in drinking water/ground water is not of concern.

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8 The draft conclusion of the competent authority

This assessment is a draft only and outlines proposed recommendations for the MRLs for the active substance pymetrozine.

According to Article 12 of Regulation (EC) No 396/2005, HSE as a competent authority has reviewed the Maximum Residue Levels (MRLs) currently established in Great Britain (GB) for the pesticide active substance pymetrozine. This review of the MRLs has been undertaken by HSE under the GB regulatory regime following the UK leaving the EU. It was required following the earlier non-approval decision for the active substance pymetrozine under the EU plant protection product regulatory regime (Regulation (EC) No 1107/2009), and the subsequent withdrawal of all plant protection authorisations in GB. This EU non-approval decision came into force while the UK was still an EU Member State, and was therefore retained in the national regulatory regime after the UK's departure from the EU.

Based on the review of the MRLs, HSE prepared a Reasoned Opinion (RO). HSE took into account the assessment report and EFSA Conclusion prepared under Regulation (EC) No 1107/2009 for the renewal of the approval of the active substance (the renewal assessment).

Pymetrozine does not meet the requirements to be exempt from MRLs and therefore it is not suitable for inclusion in Part 4 (active substances not subject to MRLs) of the GB MRL Statutory Register.

Sufficiently validated analytical methods for the determination of pymetrozine in plants and animals, except milk, are available to enforce MRLs at an LOQ of 0.02 mg/kg for plants and for animals at an LOQ of 0.01 mg/kg. For milk sufficiently validated analytical methods are available to determine the sum of pymetrozine, 6-hydroxymethylpymetrozine and its phosphate conjugate, expressed as pymetrozine, and enforce MRLs at an LOQ of 0.02 mg/kg.

Toxicological reference values were established in the renewal assessment: an ADI of 0.03 mg/kg bw/day and an ARfD of 0.1 mg/kg bw were established for pymetrozine.

In the renewal assessment robust residue definitions for risk assessment for plants could not be established. The risk assessment was unable to demonstrate that the necessary requirements had been met for the major plant metabolites GS23199, CGA294849,

CGA266591 and CGA128632; no toxicological reference values were established and the residue definition for plants for risk assessment was only provisional.

For animals, the residue definition for risk assessment was only regarded as provisional in the absence of robust residue definitions for plants.

With regards to the residue definitions for enforcement for livestock, HSE recommends retaining the current definitions within the GB MRL Statutory Register. However, for milk the residue definition should be expressed slightly differently to aid clarity.

The data provided for the renewal assessment are not sufficient to establish robust processing factors for pymetrozine. At this time Part 6 of the GB MRL Statutory Register has not been established.

A number of the current MRLs in force have footnotes for the submission of supplementary information (MRL confirmatory data). These footnotes are as a result of the review of the MRLs undertaken following the approval decision delivered in 2001. HSE recommends that these footnotes are now deleted as all MRLs are proposed to be lowered to the LOQ.

Proposed Recommendations

Based on the risk assessment conducted in the renewal assessment, HSE concludes that harmful effects on human health cannot be excluded for residues of pymetrozine occurring in food. This includes evidence of a potential risk to consumers from exposure to metabolites for which no toxicological reference values could be established, and this includes evidence of a potential genotoxic risk to consumers. This conclusion applies to all the current substantive GB MRLs in the Statutory Register. As the required level of protection has not been met, HSE proposes that all MRLs are set at the limit of quantification.

The MRLs proposed by HSE are outlined in Table 8.1.

The MRLs should be established on the basis of the following residue definitions:

The residue definition for enforcement (RD-Enf) in plants:

- Pymetrozine

The residue definition for enforcement (RD-Enf) in animals:

All products except milk

- Pymetrozine

Milk

- The sum of pymetrozine and 6-hydroxymethylpymetrozine, including its phosphate conjugate, expressed as pymetrozine

Notification of the proposed MRLs

To meet the UK's international trade obligations, the measures have been notified to the World Trade Organization (WTO). The WTO/SPS notification can be found at the following link and searching for pymetrozine and United Kingdom as the notifying member:

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- **The notification includes the proposed date of adoption/publication and the proposed date of entry in force of the new MRLs.**

Table 8.1 MRLs proposed by HSE

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
Enforcement residue definition for products of plant origin: Pymetrozine			
0100000	FRUITS, FRESH or FROZEN; TREE NUTS	-	-
0110000	Citrus fruits	-	-
0110010	Grapefruits	0.3	0.02*
0110020	Oranges	0.3	0.02*
0110030	Lemons	0.3	0.02*
0110040	Limes	0.3	0.02*
0110050	Mandarins	0.3	0.02*
0110990	Others - Citrus Fruit	0.3	0.02*
0120000	Tree Nuts	-	-
0120010	Almonds	0.02*	0.02*
0120020	Brazil nuts	0.02*	0.02*
0120030	Cashew nuts	0.02*	0.02*
0120040	Chestnuts	0.05	0.02*
0120050	Coconuts	0.02*	0.02*
0120060	Hazelnuts/cobnuts	0.05	0.02*
0120070	Macadamias	0.02*	0.02*
0120080	Pecans	0.02*	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0120090	Pine nut kernels	0.02*	0.02*
0120100	Pistachios	0.02*	0.02*
0120110	Walnuts	0.05	0.02*
0120990	Others - Tree nuts	0.02*	0.02*
0130000	Pome fruits	-	-
0130010	Apples	0.02*	0.02*
0130020	Pears	0.02*	0.02*
0130030	Quinces	0.02*	0.02*
0130040	Medlars	0.02*	0.02*
0130050	Loquats/Japanese medlars	0.02*	0.02*
0130990	Others - Pome fruit	0.02*	0.02*
0140000	Stone fruits	-	-
0140010	Apricots	0.03	0.02*
0140020	Cherries (sweet)	0.02*	0.02*
0140030	Peaches	0.03	0.02*
0140040	Plums	0.02*	0.02*
0140990	Others - Stone fruit	0.02*	0.02*
0150000	Berries and small fruits	-	-
0151000	Grapes	-	-

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0151010	Table grapes	0.02*	0.02*
0151020	Wine grapes	0.02*	0.02*
0152000	Strawberries	-	-
0152000	Strawberries	0.3	0.02*
0153000	Cane fruits	-	-
0153010	Blackberries	3	0.02*
0153020	Dewberries	0.02*	0.02*
0153030	Raspberries (red and yellow)	3	0.02*
0153990	Others - Cane fruit	0.02*	0.02*
0154000	Other small fruits and berries	-	-
0154010	Blueberries	0.7	0.02*
0154020	Cranberries	0.02*	0.02*
0154030	Currants (black, red and white)	0.7	0.02*
0154040	Gooseberries (green, red and yellow)	0.7	0.02*
0154050	Rose hips	0.02*	0.02*
0154060	Mulberries (black and white)	0.02*	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0154070	Azaroles/Mediterranean medlars	0.7	0.02*
0154080	Elderberries	0.02*	0.02*
0154990	Others - Other small fruit and berries	0.02*	0.02*
0160000	Miscellaneous fruits with	-	-
0161000	Edible peel	-	-
0161010	Dates	0.02*	0.02*
0161020	Figs	0.02*	0.02*
0161030	Table olives	0.05*	0.02*
0161040	Kumquats	0.02*	0.02*
0161050	Carambolas	0.02*	0.02*
0161060	Kaki/Japanese persimmons	0.02*	0.02*
0161070	Jambuls/jambolans	0.02*	0.02*
0161990	Others - Edible peel	0.02*	0.02*
0162000	Inedible peel, small	-	-
0162010	Kiwi fruits (green, red, yellow)	0.02*	0.02*
0162020	Litchis/lychees	0.02*	0.02*
0162030	Passionfruits/maracujas	0.02*	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0162040	Prickly pears/cactus fruits	0.02*	0.02*
0162050	Star apples/cainitos	0.02*	0.02*
0162060	American persimmons/Virginia kaki	0.02*	0.02*
0162990	Others - Inedible peel, small	0.02*	0.02*
0163000	Inedible peel, large	-	-
0163010	Avocados	0.05*	0.02*
0163020	Bananas	0.02*	0.02*
0163030	Mangoes	0.02*	0.02*
0163040	Papayas	0.02*	0.02*
0163050	Granate apples/pomegranates	0.02*	0.02*
0163060	Cherimoyas	0.02*	0.02*
0163070	Guavas	0.02*	0.02*
0163080	Pineapples	0.02*	0.02*
0163090	Breadfruits	0.02*	0.02*
0163100	Durians	0.02*	0.02*
0163110	Soursops/guanabanas	0.02*	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0163990	Others - Inedible peel, large	0.02*	0.02*
0200000	VEGETABLES, FRESH or FROZEN	-	-
0210000	Root and tuber vegetables	-	-
0211000	Potatoes	-	-
0211000	Potatoes	0.02*	0.02*
0212000	Tropical root and tuber vegetables	-	-
0212010	Cassava roots/manioc	0.02*	0.02*
0212020	Sweet potatoes	0.02*	0.02*
0212030	Yams	0.02*	0.02*
0212040	Arrowroots	0.02*	0.02*
0212990	Others - Tropical root and tuber vegetables	0.02*	0.02*
0213000	Other root and tuber vegetables except sugar beets	-	-
0213010	Beetroots	0.02*	0.02*
0213020	Carrots	0.02*	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0213030	Celeriacs/turnip rooted celeries	0.02*	0.02*
0213040	Horseradishes	0.02*	0.02*
0213050	Jerusalem artichokes	0.02*	0.02*
0213060	Parsnips	0.02*	0.02*
0213070	Parsley roots/Hamburg roots parsley	0.02*	0.02*
0213080	Radishes	0.02*	0.02*
0213090	Salsifies	0.02*	0.02*
0213100	Swedes/rutabagas	0.02*	0.02*
0213110	Turnips	0.02*	0.02*
0213990	Others - Other root and tuber vegetables except sugar beet	0.02*	0.02*
0220000	Bulb vegetables	-	-
0220010	Garlic	0.02*	0.02*
0220020	Onions	0.02*	0.02*
0220030	Shallots	0.02*	0.02*
0220040	Spring onions/green onions and Welsh onions	0.02*	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0220990	Others - bulb vegetables	0.02*	0.02*
0230000	Fruiting vegetables	-	-
0231000	Solanaceae and Malvaceae	-	-
0231010	Tomatoes	0.5	0.02*
0231020	Sweet peppers/bell peppers	3	0.02*
0231030	Aubergines/eggplants	0.5	0.02*
0231040	Okra/lady's fingers	0.02*	0.02*
0231990	Others - Solanacea	0.02*	0.02*
0232000	Cucurbits with edible peel	-	-
0232010	Cucumbers	1	0.02*
0232020	Gherkins	1	0.02*
0232030	Courgettes	1	0.02*
0232990	Others - Cucurbits-edible peel	1	0.02*
0233000	Cucurbits with inedible peel	-	-
0233010	Melons	0.3	0.02*
0233020	Pumpkins	0.3	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0233030	Watermelons	0.3	0.02*
0233990	Others - Cucurbits - inedible peel	0.3	0.02*
0234000	Sweet corn		
0234000	Sweet corn	0.02*	0.02*
0239000	Other fruiting vegetables	-	-
0239000	Other fruiting vegetables	0.02*	0.02*
0240000	Brassica vegetables (excluding brassica roots and brassica baby leaf crops)	-	-
0241000	Flowering brassica	-	-
0241010	Broccoli	0.03	0.02*
0241020	Cauliflowers	0.03	0.02*
0241990	Others - Flowering Brassicas	0.03	0.02*
0242000	Head brassica	-	-
0242010	Brussels sprouts	0.08	0.02*
0242020	Head cabbages	0.05	0.02*
0242990	Others - Head Brassicas	0.02*	0.02*
0243000	Leafy brassica	-	-

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0243010	Chinese cabbages/pe-tsai	0.2	0.02*
0243020	Kales	0.2	0.02*
0243990	Others - Leafy Brassicas	0.2	0.02*
0244000	Kohlrabies	-	-
0244000	Kohlrabies	0.02*	0.02*
0250000	Leaf vegetables, herbs and edible flowers	-	-
0251000	Lettuces and salad plants	-	-
0251010	Lamb's lettuces/corn salads	3	0.02*
0251020	Lettuces	3	0.02*
0251030	Escaroles/broad-leaved endives	0.6	0.02*
0251040	Cresses and other sprouts and shoots	0.6	0.02*
0251050	Land cresses	3	0.02*
0251060	Roman rocket/rucola	3	0.02*
0251070	Red mustards	0.6	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0251080	Baby leaf crops (including brassica species)	3	0.02*
0251990	Others - Lettuce and other salad plants including brassica	0.02*	0.02*
0252000	Spinaches and similar leaves	-	-
0252010	Spinaches	0.6	0.02*
0252020	Purslanes	0.4	0.02*
0252030	Chards/beet leaves	0.6	0.02*
0252990	Others - Spinach and similar (leaves)	0.02*	0.02*
0253000	Grape leaves and similar species	-	-
0253000	Grape leaves and similar species	0.02*	0.02*
0254000	Watercresses	-	-
0254000	Watercresses	0.02*	0.02*
0255000	Witloofs/Belgian endives	-	-
0255000	Witloofs/Belgian endives	0.02*	0.02*
0256000	Herbs and edible flowers	-	-

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0256010	Chervil	3	0.05*
0256020	Chives	3	0.05*
0256030	Celery leaves	3	0.05*
0256040	Parsley	3	0.05*
0256050	Sage	3	0.05*
0256060	Rosemary	3	0.05*
0256070	Thyme	3	0.05*
0256080	Basil and edible flowers	3	0.05*
0256090	Laurel/bay leaves	3	0.05*
0256100	Tarragon	3	0.05*
0256990	Others - Herbs	3	0.05*
0260000	Legume vegetables	-	-
0260010	Beans (with pods)	2	0.02*
0260020	Beans (without pods)	0.02*	0.02*
0260030	Peas (with pods)	0.02*	0.02*
0260040	Peas (without pods)	0.02*	0.02*
0260050	Lentils	0.02*	0.02*
0260990	Others - Legume vegetables (fresh)	0.02*	0.02*
0270000	Stem vegetables	-	-

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0270010	Asparagus	0.02*	0.02*
0270020	Cardoons	0.02*	0.02*
0270030	Celeries	0.04	0.02*
0270040	Florence fennels	0.04	0.02*
0270050	Globe artichokes	0.02*	0.02*
0270060	Leeks	0.02*	0.02*
0270070	Rhubarbs	0.02*	0.02*
0270080	Bamboo shoots	0.02*	0.02*
0270090	Palm hearts	0.02*	0.02*
0270990	Others - Stem vegetables (fresh)	0.02*	0.02*
0280000	Fungi, mosses and lichens	-	-
0280010	Cultivated fungi	0.02*	0.02*
0280020	Wild fungi	0.02*	0.02*
0280990	Mosses and lichens	0.02*	0.02*
0290000	Algae and prokaryotes organisms	-	-
0290000	Algae and prokaryotes organisms	0.02*	0.02*
0300000	PULSES, DRY		

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0300010	Beans	0.05*	0.02*
0300020	Lentils	0.05*	0.02*
0300030	Peas	0.05*	0.02*
0300040	Lupins/lupini beans	0.05*	0.02*
0300990	Others - pulses	0.05*	0.02*
0400000	OILSEEDS AND OIL FRUITS	-	-
0401000	Oilseeds	-	-
0401010	Linseeds	0.02*	0.02*
0401020	Peanuts/groundnuts	0.02*	0.02*
0401030	Poppy seeds	0.02*	0.02*
0401040	Sesame seeds	0.02*	0.02*
0401050	Sunflower seeds	0.02*	0.02*
0401060	Rapeseeds/canola seeds	0.02*	0.02*
0401070	Soyabeans	0.02*	0.02*
0401080	Mustard seeds	0.02*	0.02*
0401090	Cotton seeds	0.03	0.02*
0401100	Pumpkin seeds	0.02*	0.02*
0401110	Safflower seeds	0.02*	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0401120	Borage seeds	0.02*	0.02*
0401130	Gold of pleasure seeds	0.02*	0.02*
0401140	Hemp seeds	0.02*	0.02*
0401150	Castor beans	0.02*	0.02*
0401990	Others - Oilseeds	0.02*	0.02*
0402000	Oil fruits	-	-
0402010	Olives for oil production	0.05*	0.02*
0402020	Oil palms kernels	0.05*	0.02*
0402030	Oil palms fruits	0.05*	0.02*
0402040	Kapok	0.05*	0.02*
0402990	Others - Oilfruits	0.05*	0.02*
0500000	CEREALS	-	-
0500010	Barley	0.05*	0.02*
0500020	Buckwheat and other pseudocereals	0.05*	0.02*
0500030	Maize/corn	0.05*	0.02*
0500040	Common millet/proso millet	0.05*	0.02*
0500050	Oat	0.05*	0.02*
0500060	Rice	0.05*	0.02*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0500070	Rye	0.05*	0.02*
0500080	Sorghum	0.05*	0.02*
0500090	Wheat	0.05*	0.02*
0500990	Others - cereals	0.05*	0.02*
0600000	TEAS, COFFEE, HERBAL INFUSIONS, COCOA AND CAROBS	-	-
0610000	Teas	-	-
0610000	Teas	0.1*	0.1*
0620000	Coffee beans	-	-
0620000	Coffee beans	0.1*	0.1*
0630000	Herbal infusions from Dried product	-	-
0631000	Flowers	-	-
0631010	Chamomile	5	0.1*
0631020	Hibiscus/roselle	5	0.1*
0631030	Rose	5	0.1*
0631040	Jasmine	5	0.1*
0631050	Lime/linden	5	0.1*
0631990	Others - Flowers	5	0.1*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0632000	Leaves and herbs		
0632010	Strawberry	5	0.1*
0632020	Rooibos	5	0.1*
0632030	Mate	5	0.1*
0632990	Others - Herbal infusions (leaves and herbs)	5	0.1*
0633000	Roots	-	-
0633010	Valerian	0.1*	0.1*
0633020	Ginseng	0.1*	0.1*
0633990	Others - Roots	0.1*	0.1*
0639000	Other herbal Infusions - Parts of the plant other than flowers, leaves and herbs, and roots	-	-
0639000	Any other parts of the plant	0.1*	0.1*
0640000	Cocoa beans	-	-
0640000	Cocoa beans	0.1*	0.1*
0650000	Carobs/Saint John's breads	-	-

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0650000	Carobs/Saint John's breads	0.1*	0.1*
0700000	HOPS	-	-
0700000	Hops	15	0.1*
0800000	SPICES	-	-
0810000	Seed spices	-	-
0810010	Anise/aniseed	0.1*	0.1*
0810020	Black caraway/black cumin	0.1*	0.1*
0810030	Celery seed	0.1*	0.1*
0810040	Coriander seed	0.1*	0.1*
0810050	Cumin seed	0.1*	0.1*
0810060	Dill seed	0.1*	0.1*
0810070	Fennel seed	0.1*	0.1*
0810080	Fenugreek	0.1*	0.1*
0810090	Nutmeg	0.1*	0.1*
0810990	Others - Seeds	0.1*	0.1*
0820000	Fruit spices	-	-
0820010	Allspice/pimento	0.1*	0.1*
0820020	Sichuan pepper	0.1*	0.1*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0820030	Caraway	0.1*	0.1*
0820040	Cardamom	0.1*	0.1*
0820050	Juniper berry	0.1*	0.1*
0820060	Peppercorn (black, green and white)	0.1*	0.1*
0820070	Vanilla	0.1*	0.1*
0820080	Tamarind	0.1*	0.1*
0820990	Others - Fruit spices	0.1*	0.1*
0830000	Bark spices	-	-
0830010	Cinnamon	0.1*	0.1*
0830990	Others - Bark	0.1*	0.1*
0840000	Root and rhizome spices		
0840010	Liquorice	0.1*	0.1*
0840020	Ginger	0.1*	0.1*
0840030	Turmeric/curcuma	0.1*	0.1*
0840040	Horseradish	0.02*	0.1*
0840990	Others - Roots or rhizome	0.1*	0.1*
0850000	Bud spices		
0850010	Cloves	0.1*	0.1*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0850020	Capers	0.1*	0.1*
0850990	Others - Buds	0.1*	0.1*
0860000	Flower pistil spices	-	-
0860010	Saffron	0.1*	0.1*
0860990	Others - Flower pistil spices	0.1*	0.1*
0870000	Aril spices	-	-
0870010	Mace	0.1*	0.1*
0870990	Others - Aril spices	0.1*	0.1*
0900000	SUGAR PLANTS	-	-
0900010	Sugar beet roots	0.02*	0.02*
0900020	Sugar canes	0.02*	0.02*
0900030	Chicory roots	0.02*	0.02*
0900990	Others - Sugar plants	0.02*	0.02*
<p>Enforcement residue definition for products of animal origin: Pymetrozine</p> <p>Except milk (code 1020000) for which the residue definition is:</p> <p>The sum of pymetrozine and 6-hydroxymethylpymetrozine, including its phosphate conjugate, expressed as pymetrozine</p>			

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1000000	PRODUCTS OF ANIMAL ORIGIN - TERRESTRIAL ANIMALS	-	-
1010000	Commodities from	-	-
1011000	Swine	-	-
1011010	Muscle - swine	0.01*	0.01*
1011020	Fat - swine	0.01*	0.01*
1011030	Liver - swine	0.01*	0.01*
1011040	Kidney - swine	0.01*	0.01*
1011050	Edible offals (other than liver and kidney) - swine	0.01*	0.01*
1011990	Others - swine	0.01*	0.01*
1012000	Bovine	-	-
1012010	Muscle - bovine	0.01*	0.01*
1012020	Fat - bovine	0.01*	0.01*
1012030	Liver - bovine	0.01*	0.01*
1012040	Kidney - bovine	0.01*	0.01*
1012050	Edible offals (other than liver and kidney) - bovine	0.01*	0.01*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1012990	Others - bovine	0.01*	0.01*
1013000	Sheep	-	-
1013010	Muscle - sheep	0.01*	0.01*
1013020	Fat - sheep	0.01*	0.01*
1013030	Liver - sheep	0.01*	0.01*
1013040	Kidney - sheep	0.01*	0.01*
1013050	Edible offals (other than liver and kidney) - sheep	0.01*	0.01*
1013990	Others - sheep	0.01*	0.01*
1014000	Goat	-	-
1014010	Muscle - goat	0.01*	0.01*
1014020	Fat - goat	0.01*	0.01*
1014030	Liver - goat	0.01*	0.01*
1014040	Kidney - goat	0.01*	0.01*
1014050	Edible offals (other than liver and kidney) - goat	0.01*	0.01*
1014990	Others - goat	0.01*	0.01*
1015000	Equine	-	-
1015010	Muscle - equine	0.01*	0.01*
1015020	Fat - equine	0.01*	0.01*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1015030	Liver - equine	0.01*	0.01*
1015040	Kidney - equine	0.01*	0.01*
1015050	Edible offals (other than liver and kidney) - equine	0.01*	0.01*
1015990	Others - equine	0.01*	0.01*
1016000	Poultry	-	-
1016010	Muscle - poultry	0.01*	0.01*
1016020	Fat - poultry	0.01*	0.01*
1016030	Liver - poultry	0.01*	0.01*
1016040	Kidney - poultry	0.01*	0.01*
1016050	Edible offals (other than liver and kidney) - poultry	0.01*	0.01*
1016990	Others - poultry	0.01*	0.01*
1017000	Other farmed terrestrial animals	-	-
1017010	Muscle - other farmed terrestrial animals	0.01*	0.01*
1017020	Fat - other farmed terrestrial animals	0.01*	0.01*

The review of the existing MRLs for pymetrozine – proposed MRLs

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1017030	Liver - other farmed terrestrial animals	0.01*	0.01*
1017040	Kidney - other farmed terrestrial animals	0.01*	0.01*
1017050	Edible offals (other than liver and kidney) - other farmed terrestrial animals	0.01*	0.01*
1017990	Others - Other farm animals	0.01*	0.01*
1020000	Milk	-	-
1020010	Cattle - milk	0.02*	0.02*
1020020	Sheep - milk	0.02*	0.02*
1020030	Goat - milk	0.02*	0.02*
1020040	Horse - milk	0.02*	0.02*
1020990	Others - Milk and cream	0.02*	0.02*
1030000	Birds eggs	-	-
1030010	Chicken - eggs	0.01*	0.01*
1030020	Duck - eggs	0.01*	0.01*
1030030	Geese - eggs	0.01*	0.01*
1030040	Quail - eggs	0.01*	0.01*

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1030990	Others - Birds' eggs	0.01*	0.01*
1040000	Honey and other apiculture products	-	-
1040000	Honey and other apiculture products	0.05*	0.05*
1050000	Amphibians and reptiles	-	-
1050000	Amphibians and reptiles	0.01*	0.01*
1060000	Terrestrial invertebrate animals	-	-
1060000	Terrestrial invertebrate animals	0.01*	0.01*
1070000	Wild terrestrial vertebrate animals	-	-
1070000	Wild terrestrial vertebrate animals	0.01*	0.01*

* denotes an MRL at the limit of quantification/ limit of determination

MRL changes are highlighted in **bold**

Notes

- Herbs and edible flowers (code 0256000) are regarded as difficult to analyse matrices and therefore the default LOQ MRL for these products should be set at 2 x 0.02* mg/kg. Taking note of the MRL classes outlined in SANCO 7039/VI/95 for LOQ MRLs the MRLs for these commodities are set at 0.05* mg/kg.

- Teas, coffee, herbal infusions, cocoa and carobs (code 0600000), hops (code 0700000) and spices (code 0800000) are regarded as difficult to analyse matrices and therefore the default LOQ MRL for these products should be set at $5 \times 0.02^*$ mg/kg.
- The default LOQ MRL for honey is 0.05^* mg/kg.

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References

EFSA (European Food Safety Authority), 2012. Reasoned opinion on the review of the existing maximum residue levels (MRLs) for pymetrozine according to Article 12 of Regulation (EC) No 396/2005, EFSA Journal 2012;10 (10): 2919

EFSA (European Food Safety Authority), 2014. Peer review of the pesticide risk assessment of the active substance pymetrozine, EFSA Journal 2014;12 (9): 3817

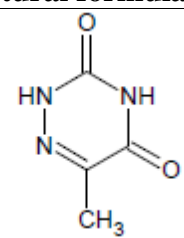
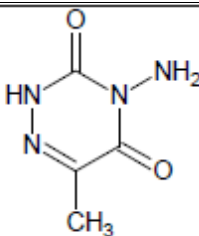
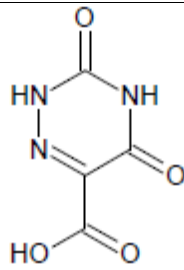
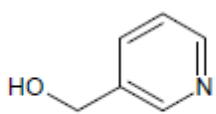
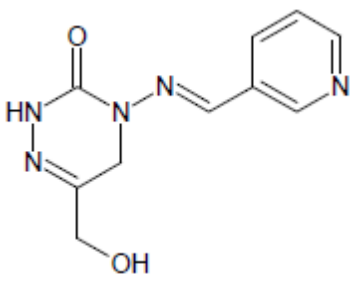
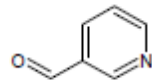
Germany, 2013. Renewal Assessment Report (RAR) on the active substance pymetrozine, prepared by the rapporteur Member State Germany in the framework of Regulation (EC) No 1107/2009, May 2013

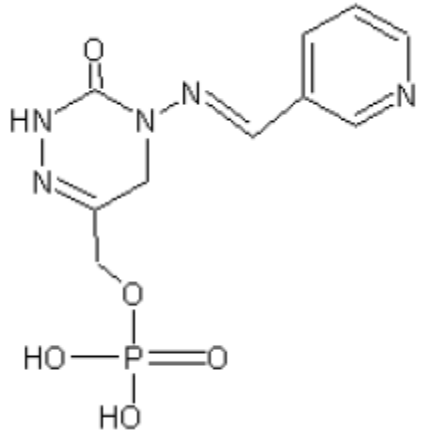
JMPR (Joint Meeting of the FAO/WHO on Pesticide Residues), 2014. Report 2014

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Appendix A – Compound codes

Table A.1 List of metabolites identified

Code/Trivial name	Chemical name	Structural formula
GS 23199	6-methyl-1,2,4-triazine-3,5(2 <i>H</i> ,4 <i>H</i>)-dione	
CGA 294849	4-amino-6-methyl-1,2,4-triazine-3,5(2 <i>H</i> ,4 <i>H</i>)-dione	
CGA 266591	3,5-dioxo-2,3,4,5-tetrahydro-1,2,4-triazine-6-carboxylic acid	
CGA 128632	pyridin-3-ylmethanol	
CGA 313124 6-hydroxymethyl pymetrozine	6-(hydroxymethyl)-4- {[(<i>E</i>)-pyridin-3- ylmethylene]amino}-4,5- dihydro-1,2,4-triazin- 3(2 <i>H</i>)- one	
CGA 300407	Nicotinaldehyde	

Code/Trivial name	Chemical name	Structural formula
Phosphate conjugate of 6-hydroxymethyl pymetrozine	Phosphate conjugate of 6-hydroxymethyl pymetrozine	

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Appendix B – Abbreviations

Acute_consumer_ver1.2 UK consumer model for acute dietary intake assessments

ADI acceptable daily intake

ADME absorption, distribution, metabolism and excretion

ALARA Principle as low as reasonably achievable

Animal model 2017 EFSA model used to calculate the dietary burden of livestock using the OECD feeding studies

ARfD acute reference dose

a.s. active substance

BBCH growth stages of mono- and dicotyledonous plants

bw body weight

CA Competent authority

Chronic_consumer_ver1.1 UK consumer model for chronic dietary intake assessments

CRD Chemicals Regulation Division of the HSE

CXL Codex maximum residue level

DA Devolved Administrations

DAR draft assessment report

DAT days after treatment

Defra Department of Environment, Food and Rural Affairs

DT90 period required for 90% dissipation (define method of estimation)

DT 50 period required for 50 % dissipation (define method of estimation)

FAO Food and Agriculture Organization of the United Nations

GAP Good Agricultural Practice

HPLC-MS/MS high-performance liquid chromatography with tandem mass spectrometry

HPLC-UVD high-performance liquid chromatography with ultraviolet detector

HR highest residue

HSE Health and Safety Executive

IEDI international estimated daily intake

IESTI international estimated short-term intake

ISO International Organisation for Standardisation

IUPAC International Union of Pure and Applied Chemistry

JMPR Joint FAO/WHO Meeting on Pesticide Residues

LOD limit of detection or limit of determination (should be defined)

LOQ limit of quantification

NB the limit of quantification and limit of determination are the same.

Regulation (EC) No 396/2005 refers to the limit of determination

Regulation (EC) No 1107/2009 refers to the limit of quantification

MRLs marked with an asterisk (e.g. 0.01* mg/kg) are MRLs set at the limit of quantification/determination

MRL maximum residue level

NEDI national estimated daily intake

NESTI national estimated short-term intake

NRL National reference laboratory

OECD Organisation for Economic Co-operation and Development

PBI plant-back interval

PHI preharvest interval

POAO products of animal origin

PRIMo (EFSA) Pesticide Residues Intake Model

QuEChERS Quick, Easy, Cheap, Effective, Rugged, and Safe (analytical method)

RA risk assessment

RAR Renewal Assessment Report

RD residue definition

RD-Enf residue definition for enforcement (also referred to as RD-Mo i.e. residue definition for monitoring)

RD-RA residue definition for risk assessment

RTI re-treatment interval

SC suspension concentrate

STMR supervised trials median residue

TRR total radioactive residue

WG water-dispersible granule

WHO World Health Organization

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