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Proposed Maximum Residue Limit

PMRL2020-35

Pyrethrins

(publié aussi en français)

20 October 2020

This document is published by the Health Canada Pest Management Regulatory Agency. For further information, please contact:

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ISSN: 1925-0835 (print)
1925-0843 (online)

Catalogue number: H113-24/2020-35E (print version)
H113-24/2020-35E-PDF (PDF version)

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Under the authority of the [Pest Control Products Act](#), Health Canada's Pest Management Regulatory Agency (PMRA) has concluded that the addition of new uses on various commodities to the product label of PyGanic Crop Protection EC 1.4 II, containing technical grade pyrethrins, is acceptable. The specific uses approved in Canada are detailed on the label of PyGanic Crop Protection EC 1.4 II, *Pest Control Products Act* Registration Number 30164.

The evaluation of this pyrethrins application indicated that the end-use product has value and the human health and environmental risks associated with the new uses are acceptable.

Before registering a pesticide for food use in Canada, the PMRA must determine the quantity of residues that are likely to remain in or on the food when the pesticide is used according to label directions and that such residues will not be a concern to human health. This quantity is then legally established as a maximum residue limit (MRL). An MRL applies to the identified raw agricultural food commodity as well as to any processed food product that contains it, except where separate MRLs are specified for the raw agricultural commodity and a processed product made from it.

Consultation on the proposed MRLs for pyrethrins is being conducted via this document (see Next steps). A summary of the field trial data used to support the proposed MRLs can be found in Appendix I.

To comply with Canada's international trade obligations, consultation on the proposed MRLs is also being conducted internationally by notifying the [World Trade Organization](#), as coordinated by the [Canada's Notification Authority and Enquiry Point](#).

The proposed MRLs, to replace or be added to the MRLs already established for pyrethrins, are as follows.

Table 1 Proposed maximum residue limits for pyrethrins

Common name	Residue definition	MRL (ppm) ¹	Food commodity
Pyrethrins	4-hydroxy-3-methyl-2-(2,4-pentadienyl)-2-cyclopenten-1-one 2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate	1.0	Blueberries ²
	and 4-hydroxy-3-methyl-2-(2,4-pentadienyl)-2-cyclopenten-1-one 1-methyl 3-carboxy- α ,2,2-trimethylcyclopropaneacrylate ester	0.15	Low growing berries (crop subgroup 13-07G, except lowbush blueberries) ³

¹ ppm = parts per million

² The established MRL of 1.0 ppm for blueberries is proposed to be revised to "highbush blueberries" and "lowbush blueberries" to reflect current terminology.

³ Lowbush blueberries are excluded from this MRL action as a 1.0 ppm MRL is already established for this commodity.

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the [Residue Chemistry Crop Groups](#) webpage in the Pesticides section of the Canada.ca website.

MRLs established in Canada may be found using the [Maximum Residue Limit Database](#) on the [Maximum Residue Limits for Pesticides](#) webpage. The database allows users to search for established MRLs, regulated under the *Pest Control Products Act*, both for pesticides or for food commodities.

International situation and trade implications

Currently, there are no American tolerances for pyrethrins on the petitioned commodities listed in the [Electronic Code of Federal Regulations](#), 40 CFR Part 180, by pesticide, nor are there Codex MRLs¹ listed for pyrethrins in or on the petitioned commodities on the Codex Alimentarius [Pesticide Index](#) webpage.

Next steps

The PMRA invites the public to submit written comments on the proposed MRLs for pyrethrins up to 75 days from the date of publication of this document. Please forward your comments to Publications (see the contact information on the cover page of this document). The PMRA will consider all comments received before making a final decision on the proposed MRLs. Comments received will be addressed in a separate document linked to this PMRL. The established MRLs will be legally in effect as of the date that they are entered into the [Maximum Residue Limit Database](#).

¹ The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.

Appendix I

Summary of field trial data used to support the proposed maximum residue limits

Residue data for pyrethrins in strawberries were submitted to support the domestic use of PyGanic Crop Protection EC 1.4 II on low growing berries (crop subgroup 13-07G).

Maximum residue limits

The recommendation for maximum residue limits (MRLs) for pyrethrins was based upon the submitted field trial data, and the guidance provided in the [OECD MRL Calculator](#). Table A1 summarizes the residue data used to calculate the proposed MRLs for low growing berries (crop subgroup 13-07G; except lowbush blueberries).

Table A1 Summary of field trial data used to support the MRLs

Commodity	Application method/ Total application rate (g a.i./ha) ¹	Preharvest interval (days)	Lowest average field trial residues (ppm)	Highest average field trial residues (ppm)
Strawberries	Foliar application/ 566–618	0	<0.04	0.084

¹ g a.i./ha = grams of active ingredient per hectare

Following the review of all available data, MRLs as proposed in Table 1 are recommended to cover residues of pyrethrins. Residues of pyrethrins in these crop commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.