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Proposed Maximum Residue Limit

PMRL2013-90

Spinosad

(publié aussi en français)

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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 walnuts to the product label of GF-120 NF Naturalyte Fruit Fly Bait, containing technical grade spinosad, is acceptable. The specific uses approved in Canada are detailed on the label of GF-120 NF Naturalyte Fruit Fly Bait, *Pest Control Products Act* Registration Number 28336.

The evaluation of this spinosad application indicated that the end-use product has merit and 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 spinosad is being conducted via this document (see Next Steps, the last section of this document). 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 Standards Council of Canada.

The proposed MRLs, to be added to the MRLs already established for spinosad, are as follows.

Table 1 Proposed Maximum Residue Limits for Spinosad

Common Name	Residue Definition	MRL (ppm)	Food Commodity
Spinosad	<p><u>Spinosyn A</u>: (2<i>R</i>,3<i>aS</i>,5<i>aR</i>,5<i>bS</i>,9<i>S</i>,13<i>S</i>,14<i>R</i>,16<i>aS</i>,16<i>bR</i>)-2-[(6-deoxy-2,3,4-tri-<i>O</i>-methyl-α-L-mannopyranosyl)oxy]-13-[[2<i>R</i>,5<i>S</i>,6<i>R</i>)-5-(dimethylamino)-tetrahydro-6-methyl-2<i>H</i>-pyran-2yl]oxy]-9-ethyl- 2,3,3<i>a</i>,5<i>a</i>,5<i>b</i>,6,9,10,11,12,13,14,16<i>a</i>,16<i>b</i>-tetradecahydro-14-methyl-1<i>H</i>-as-indaceno[3,2-<i>d</i>]oxacyclododecin-7,15-dione</p> <p>and</p> <p><u>Spinosyn D</u>: (2<i>S</i>,3<i>aR</i>,5<i>aR</i>,5<i>bS</i>,9<i>S</i>,13<i>S</i>,14<i>R</i>,16<i>aS</i>,16<i>bR</i>)-2-[(6-deoxy-2,3,4-tri-<i>O</i>-methyl-α-L-mannopyranosyl)oxy]-13-[[2<i>R</i>,5<i>S</i>,6<i>R</i>)-5-(dimethylamino)-tetrahydro-6-methyl-2<i>H</i>-pyran-2yl]oxy]-9-ethyl- 2,3,3<i>a</i>,5<i>a</i>,5<i>b</i>,6,9,10,11,12,13,14,16<i>a</i>,16<i>b</i>-tetradecahydro-4,14-dimethyl-1<i>H</i>-as-indaceno[3,2-<i>d</i>]oxacyclododecin-7,15-dione</p>	0.02	Tree Nuts Group (Crop Group 14)

ppm = parts per million

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the Residue Chemistry Crop Groups webpage in the Pesticides and Pest Management section of Health Canada's 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

MRLs may vary from one country to another for a number of reasons, including differences in pesticide use patterns and the locations of the field crop trials used to generate residue chemistry data.

Table 2 compares the MRLs proposed for spinosad in Canada with corresponding American tolerances and Codex MRLs.¹ American tolerances are listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide. A listing of established Codex MRLs is available on the Codex Alimentarius Pesticide Residues in Food website, by pesticide or commodity.

**Table 2 Comparison of Canadian MRLs, American Tolerances and Codex MRLs
(where different)**

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Tree Nuts Group (Crop Group 14)	0.02	0.1 (Nut, tree, group 14)	0.01 (Almonds)

Next Steps

The PMRA invites the public to submit written comments on the proposed MRLs for spinosad 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 from supervised residue trials conducted in the United States were submitted to support the domestic use of GF-120 NF Naturalyte Fruit Fly Bait on walnuts. Spinosad was applied to almonds and pecans at exaggerated rates.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for spinosad was based upon the submitted field trial data, guidance provided in PRO2005-04, *Guidance for setting Pesticide Maximum Residue Limits Based on Field Trial Data*, and the North American Free Trade Agreement calculator as the MRL statistical methodology. Table A1 summarizes the data used to calculate the proposed MRLs for Tree Nuts (Crop Group 14).

Table A1 Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits

Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)	
			Min	Max
Almond nutmeats	Foliar/ 500.4–533.2	14	<0.02	<0.02
Pecan nutmeats	Foliar/ 536.8–545.9	13–14	<0.001	0.0076

PHI = preharvest interval; ppm = parts per million

Following the review of all available data, an MRL of 0.02 ppm is recommended to cover residues of spinosad. Residues of spinosad in Tree Nuts at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.