

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
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WORLD
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AGENDA ITEM NO. 5(B)

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

**CODEX COMMITTEE ON FOOD LABELLING
THIRTY-SEVENTH SESSION
CALGARY, CANADA, MAY 4 - 8, 2009**

***GUIDELINES FOR THE PRODUCTION, PROCESSING,
LABELLING AND MARKETING OF ORGANICALLY PRODUCED FOODS:
ANNEX 2: DELETION OF ROTENONE
(CL 2008/27-FL)***

GOVERNMENT COMMENTS AT STEP 3

COMMENTS FROM:

**ARGENTINA
AUSTRALIA
IRAN
JAPAN
KENYA
MEXICO
PHILIPPINES
THAILAND
UNITED STATES**

INTERNATIONAL FEDERATION OF ORGANIC AGRICULTURE MOVEMENTS (IFOAM)

GUIDELINES FOR THE PRODUCTION, PROCESSING, LABELLING AND MARKETING OF ORGANICALLY PRODUCED FOODS:**ANNEX 2: DELETION OF ROTENONE
(CL 2008/27-FL)****GOVERNMENT COMMENTS AT STEP 3****ARGENTINA:**

In reply to the Proposed Draft Amendment to Table 2 of Annex 2 of the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods at step 3 of the procedure, that will be analyzed at the 37th Session of the Committee on Food Labelling (Calgary, Canada, 4-8 May 2009), the position of Argentina is:

To delete “preparations of Rotenone from *Derris elliptica*, *Lonchocarpus*, *Thephrosia* spp”

The impact on fish life and its possible consequences for the applicators justify this measure. It is also understood that technological alternatives are available for pest control that fall within the organic production principles and the criteria established by this same Guideline.

We expressed the same opinion during the 35th Session of the aforesaid Committee in 2007.

AUSTRALIA:

Australia is pleased to provide the following comments in response to CL 2008/27-FL – Proposed Draft Amendment to the *Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods: Rotenone*.

While Australia acknowledges that Rotenone if used incorrectly can be detrimental to fish if it is allowed to flow into waterways, we do not support the deletion of the substance from Table 2 of Annex 2 of the *Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods* as Rotenone is a valuable pesticide that complies with criteria used for organic production as outlined below:

- When rotenone is used in accordance with good agricultural practice, there should be no residues in aquatic systems;
- No scientific studies have been provided to prove that rotenone kills fish and other aquatic species when used in accordance with good agricultural practice;
- The toxicity tests used to establish serious adverse health effects in mammals, involved large doses injected into the stomach. These tests are not relevant to the routes of exposure when used in accordance to good agricultural practice;
- The toxicity tests used to establish good agricultural practice show that this product is safe when used in accordance to the label requirements;
- It biodegrades very rapidly. Most residues are broken down within 24 hours;

- It has very low mammalian and human long term toxicity as normal body heat degrades it very quickly – within hours; and
- It fits within the organic criteria for allowable pesticides as it is a natural substance extracted from a plant.

Australia therefore supports the second part of the proposal to include the statement “the substance should be used in such a way to prevent its flowing into waterways” to be included under ‘precautions’ in Annex 2 and the ‘conditions of use’ in Table 2 of Annex 2.

IRAN:

Comments and recommendations on the topic from the Iranian Codex Committee on Food Labelling:

- The current precautionary regulatory system applied to synthetic pesticides does not cover Rotenone; a pesticide with a ‘natural’ image. Hence we face insufficient usage data and inconclusive studies regarding its potential health hazards. The production and use of rotenoids (the rotenone-related materials) should come under the same stringent regulatory controls that are applied to other synthetic agrochemicals.
- Along similar lines, rotenone should also be included in the regulatory food residues programme.
- The utilization of rotenone in organic agriculture should be limited to closed greenhouse environments where its application is controlled and the safety of the operators handling Rotenone is guaranteed, all under the supervision of the organic agriculture inspectorates concerned.
- Above all, Rotenone should only be used under the condition that there is no risk whatsoever of the substance polluting waterways, whether through overflow, drainage, seepage or residue carryover.

JAPAN:

Japan is pleased to provide the following comments on CL 2008/27-FL.

Japan would like to delete “preparations of Rotenone from *Derris elliptica*, *Lonchocarpus*, *Thephrosia* spp.” from Table 2 of Annex 2 of the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods.

As Japan explained in the document CX/FL 08/36/7, the acute toxicity of Rotenone is quite high to animals, especially to fish. Use and disposal of Rotenone may negatively impact on the environment because of its toxicity to fish if Rotenone goes into waterways.

With regard to high acute toxicity to animals, combining the International Programme on Chemical Safety (IPCS) study results and the criteria established by the Globally Harmonized

System of Classification and Labelling of Chemicals (GHS), Rotenone should be classified as “Fatal if swallowed” and “Fatal in contact with skin” (4.b. of CX/FL 08/36/7).

Concerning the toxicity to fish, the data from the United States Environment Protection Agency, USEPA, shows that Rotenone should be classified as “Very toxic to aquatic life” in accordance with GHS (4.c. of CX/FL 08/36/7).

Japan is concerned about the current situation where such a substance can be used only through the recognition of the certification body or authority.

Japan believes that natural Pyrethrins, Neem and mechanical control devices such as sticky bands could be alternatives to Rotenone. Especially, Pyrethrins has a potential to become an alternative to Rotenone because its insecticidal spectrum is similar to Rotenone’s.

Therefore, Japan would like to delete of Rotenone from the Guidelines.

However, Japan understands that Rotenone generally has the characteristics of rapid degradation and therefore chronic effect on aquatic environment will not be so large. Japan also understands that there are no alternatives in some areas.

Thus, it might also be acceptable for Japan to include “the substances should be used in such a way as to prevent its flowing into waterways” to find a compromise.

KENIA:

Kenya proposes that we delete due to toxicity and good manufacturing practices are not always practiced properly.

MEXICO:

Mexico accepts that to include "the substance should be used in such a way as to prevent its flowing into waterways" in the conditions for use.

PHILIPPINES:

Proposal	Position	Justification
To delete “preparations of rotenone from <i>Derris elliptica</i> , <i>Lonchocarpus</i> , <i>Thephrosia</i> spp” from Table 2 of Annex 2 or to include “the substance should be used in such a way as to prevent its flowing into waterways” in the conditions for use.	The Philippines maintains its previous position on the use of rotenone with appropriate restriction. The Philippines supports the inclusion of the statement “the substance should be used in such a way as to prevent its flowing into the waterways” in the conditions for use.	Rotenone is currently listed under restricted substances for use in organic agriculture in the Philippine National Standards (PNS/BAFPS 07:2003). Organic farmers use rotenone derived from the indigenous plant “tubli” (<i>Derris elliptica</i> root) as an alternative pest control measure for crops. Its restriction in the PNS is due to its harmful systemic effects to

		aquatic animals. However, due to the absence of an appropriate and readily available substitute for rotenone, it is allowed with some restrictions. Its harmful effects can be mitigated by the guidelines/conditions of use as set by the National standard.
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THAILAND:

Thailand does not agree with the proposal to delete the preparation of rotenone from Annex 2 since rotenone has been used effectively, widely and safely in the production of organic crops. It, however, is acceptable for us to restrict the use of rotenone to prevent its flowing into waterways.

UNITED STATES:

The United States appreciates the opportunity to comment on CL 2008/27-FL – Proposed Draft Amendment to Table 2 of Annex 2 of the *Guidelines for the Production, Processing, Labeling and Marketing of Organically Produced Foods*.

Regarding the proposal to delete “preparations of Rotenone from *Derris elliptica*, *Lonchocarpus*, *Thephrosia* spp.” from Table 2 of Annex 2, the United States does not support the deletion of Rotenone from the table. As a natural substance, Rotenone is commonly used in organic production either as an insecticide or as a piscicide and should be used in accordance with label instructions in the specific way identified on that label. Further, the lists contained in Annex 2 “do not attempt to be all inclusive or exclusive or a finite regulatory tool but rather provide advice to governments on internationally agreed inputs.” (CODEX Alimentarius Organically Produced Foods Third Edition) We recall at the 36th session of the CCFL, other member countries and NGO organizations were not in support of the deletion of Rotenone, as alternative natural substances were not readily available in some countries.

Finally, regarding the second part of the proposal to include the statement “the substance should be used in such a way as to prevent its flowing into waterways” in the conditions for use in Table 2 of Annex 2, the United States would not object to this proposed statement.

INTERNATIONAL FEDERATION OF ORGANIC AGRICULTURE MOVEMENTS (IFOAM):

Background

It was proposed at the last meeting of the CCFL of Codex Alimentarius in May 2008 to amend Table 2 of Annex 2 of the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods as follows:

1. to delete “preparations of Rotenone from *Derris elliptica*, *Lonchocarpus*, *Thephrosia* spp” from Table 2 of Annex 2; or

2. to include “the substance should be used in such a way as to prevent its flowing into waterways” in the conditions for use.

IFOAM, representing the private sector of Organic Agriculture world-wide, has elaborated the following comments to be considered at the CCFL-Meeting in May 2009.

Consistency of rotenone with the principles of organic production

The careful use of plant extracts as insecticides in conjunction with the biological and cultural practices described in Annex I.A.1.6 is consistent with principles of organic production.

Necessity of rotenone for its uses

Worldwide, rotenone is used on a wide range of commodities to control a great variety of different pest insects.

- In most cases, rotenone is used as a last resort to save high value specialty crops on which farmers in tropical countries depend for their livelihoods.
- Certification bodies and authorities require a proven need to approve use of rotenone.
- Against some of these pests, alternatives are available (e.g. pyrethrins, neem, *Bacillus thuringiensis*, mechanical control devices). Against other pests, especially beetles (Coleoptera), there are no alternatives to rotenone available, which are effective and acceptable in organic agriculture.
- In developing countries, the alternatives may also be locally unavailable or unaffordable to many farmers, while rotenone can be manufactured from locally grown plants.
- In cases where a single alternative is available, it is advisable to keep rotenone for resistance management of the pest populations.

In conclusion, necessity must be determined separately for each crop-pest combination. Rotenone is essential for some uses, but non-essential for other uses. Research and education is needed for farmers to develop and adopt alternatives. Extension services, certification bodies and authorities need to be informed of these alternatives so that they can help eliminate the unnecessary use of rotenone and reduce the cases where it is necessary.

Note: rotenone has also been used for fishing. IFOAM does not support this practice. However, this practice is not subject of the present request, because it is a use as a biocide, not as a pesticide.

Effects on the environment

The manufacturing process of rotenone does not create any harmful effect on the environment. After application, rotenone photo-degrades and biodegrades into non-toxic compounds.

- Proper use and disposal safeguards that rotenone does not leak into waterways. In this case, there are no severe negative impacts on the environment.
- If rotenone is applied in direct vicinity to water bodies (improper use), or if empty containers are thrown into the water (improper disposal), rotenone may leak into water. In this case, it may present a hazard to fish (see below).

Impact on human or animal health and quality of life

Fish: If rotenone is used properly, it does not come into contact with water bodies, and therefore with fish (see above). In the case of improper use, it may come into contact with waterbodies. In this case, it presents a health hazard to fish, because it is highly toxic to fish.

Humans and farm animals: The available information on toxicity to mammals is not conclusive. Therefore, as an element of proper use, the farmer must take the necessary measures to prevent that rotenone comes into contact with humans or farm animals. However, this is a general safety precaution for all pesticides, and not specific for rotenone.

IFOAM's conclusions

Organic farming must ensure that all uses of pesticides are safe for the environment. In the case of rotenone, fish are particularly at risk. Therefore, it must be ensured that rotenone does not come into contact with water bodies. Proposal 2 is a suitable tool to achieve this goal.

Proposal 2 is therefore supported by IFOAM.

By contrast, proposal 1 overshoots the mark. Deletion of rotenone solves the problem of fish toxicity, but it will create problems with the control of numerous insect pests, particularly in developing countries. Deletion of rotenone could be envisaged for some point in the future, when viable and available alternatives have been developed for most uses of rotenone, or it might have to be reconsidered, if there is additional evidence of adverse effects on human health. All concerns raised in the dossier presented to Codex Alimentarius can be addressed by proposal 2, and the dossier does not contain evidence which would justify any action beyond proposal 2. At the present time, proposal 1 is premature and creates unnecessary problems.

Proposal 1 is therefore not supported by IFOAM at the present time.