



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**  
**CODEX COMMITTEE ON RESIDUES OF VETERINARY DRUGS IN FOODS**  
**Twenty-fourth Session**

**COMMENTS AT STEP 6 ON THE DRAFT RMR FOR GENTIAN VIOLET**

replies to CL 2017/72-OCS/RVDF of Albania, Cook Island, Costa Rica, Chile, Cuba, Egypt, European Union, Iraq, Kazakhstan, Norway, Paraguay, Philippines, Trinidad and Tobago and EAPA

**ALBANIA**

Ok

**COOK ISLANDS**

No comment

**COSTA RICA**

As a follow-up to the conclusions of the JECFA evaluation: 78<sup>th</sup> JECFA meeting (2013), as relates to the recommended risk management measures, “there is no safe level of residues of gentian violet or its metabolites in food that represents an acceptable risk to consumers.” Costa Rica affirms the importance of authorities implementing the necessary measures to prevent the use of gentian violet in food producing animals, in order to prevent the presence of residues of this substance in food.

Costa Rica maintains its position that the following text be maintained: “This can be accomplished by not using gentian violet in food producing animals” (taken from the original Option 1), based on the following observations:

- a. Regarding gentian violet, JECFA concluded that “there is no safe level of residues of gentian violet or its metabolites in food that represents an acceptable risk to consumers,” based on the scientific information on the carcinogenic and genotoxic harm associated with this substance. This leads us to determine that this is a public health concern and that there is a duty to protect our consumers.
- b. The same JECFA meeting established that gentian violet is structurally similar to malachite green and should, thus, be subject to the same regulatory oversight due to public health concerns.
- c. By using the verb “can” in this form (“This *can* be accomplished by not using gentian violet in food producing animals”), competent authorities in countries are able to establish the risk profile and evaluate their capacity to implement the control measures. The verb “can” is defined as “to be able to do, make, or accomplish” (Merriam-Webster).

**CHILE**

Chile supports the risk management recommendation (RMR) for gentian violet

Justification: This type of recommendation has already been supported with other products like: Carbadox, Chloramphenicol, Chlorpromazine, Stilbens, Furazolidone, Nitrofuraz, Olaquinox, and Malachite Green, as per CAC/MRL 2-2015.

Chile believes that the sentence “This can be accomplished by not using gentian violet in food producing animals” is, in all aspects, a recommendation, given the inclusion of the word “can.” This is useful for countries that do not conduct risk analysis and wish to adopt Codex recommendations. Moreover, it is broad enough to grant national competent authorities the risk-management decisions they deem appropriate.

**CUBA**

Cuba appreciates these comments. Bearing in mind that there is no safe level of residues of gentian violet or its metabolites in food that represents an acceptable risk to consumers, we agree that the use of gentian violet should be prevented in food producing animals.

**EGYPT**

Egypt supports the proposed risk management recommendation.

**EUROPEAN UNION**

The European Union supports the adoption of the draft risk management recommendation for gentian violet as circulated for comments at step 6.

**IRAQ**

Iraq do not accept any level of residues of Gentian Violet in food of animal origin which is considered carcinogenic and toxic and used as an antimicrobial, fungal and parasite.

**KAZAKHSTAN**

Kazakhstan supports JECFA conclusion regarding the unsafe level of residues of gentian violet of its metabolites. In Kazakhstan we use gentian violet just as a reagent in microbiologica tests.

**NORWAY**

Norway supports the adoption of the draft risk management recommendation for gentian violet as circulated for comments at step 6.

**PARAGUAY**

Paraguay appreciates the opportunity to comment on this Committee document. Based on the facts and background, we support the risk management recommendation, such that competent authorities should prevent the presence of gentian violet residues in food and that any use of the substance should be in keeping with veterinary good practices.

**PHILIPPINES**

The Philippines will further circulate the adopted texts for the RMR of Gentian violet to concerned stakeholders through public consultations in time for the upcoming General Session of the CCRVDF.

**TRINIDAD AND TOBAGO**

Gentian violet is an inexpensive drug with a long history of topical use, as well as systemic use, especially in the prevention of Chagas disease through sterilization of blood transfusions in endemic areas of South America. Given that it is stable at room temperature for years, it has become a staple of dermatologic treatment in underdeveloped countries. However, several factors, including the development of antibiotic resistance, use of catheters and indwelling devices, suggest that GV should be used more extensively in the developed world as well. Gentian violet (1% solution) is approved for use in human medicine for topical use.

Concerns about the safety of Gentian violet have been raised following reports of adverse reactions and toxicity such as buccal ulceration, stomatitis, kerato-conjunctivitis, irritation and sensitivity reactions encountered with the use of products containing this dye, but these are not relevant to the evaluation of the safety of gentian violet in food.

Gentian violet is not currently authorized for use in aquaculture in most developed countries. However, because of its antibacterial and antifungal properties, and its similarities with malachite green, there is a potential for it to be used in aquaculture to mitigate bacterial or fungal infections in some countries. Fish products imported to a number of countries, including Canada, EU member states and the United States of America have occasionally tested positive for gentian violet or its metabolite, leucogentian violet.

Because of its industrial usage, contamination of the environment can occur, as about 10–15% of all dyes are lost directly to wastewater in the dyeing process. Gentian violet in water originating from contamination as a result of its industrial applications or from its illegal use in aquaculture is efficiently taken up from the water by fish. Currently gentian violet is not approved for aquaculture in Trinidad and Tobago. Gentian violet is widely used in various ways other than as an authorized veterinary drug, and there may be residues in fish from unauthorized use or from environmental exposures. Therefore, irrespective of whether it is used as a veterinary drug, some further guidance to risk managers is needed.

Gentian violet was previously used in poultry feeds to inhibit the growth of mould and fungus; however, several countries have withdrawn approval or registration of this use. It is currently prohibited from use in food producing animals in the Trinidad and Tobago. It is approved as a topical preparation for use in food producing animals. Current indications include topical therapy for ringworm, treatment of pink eye and topical treatment of skin wounds. However, the use of gentian violet in animal feeds to prevent mould growth is prohibited.

Studies have shown it to be a carcinogen in mice and it has been labelled as a mutagen, a mitotic poison and a clastogen with the pivotal study for the evaluation of gentian violet being the carcinogenicity study in mice. However, it should be noted that there were a number of uncertainties associated with the risk assessment, some of which were substantial. The uncertainties relate to two aspects of the data available for risk assessment. Firstly, there were insufficient residue data in food-producing animals or the environment from which to estimate dietary exposure to gentian violet, and hence assumptions had to be made. Secondly, there is very little information on the proportion of gentian violet and its metabolites in the total residue and on the carcinogenicity of the metabolites. For example, there is a published report that one of the possible metabolites of gentian violet, demethylated leucopararosaniline, is carcinogenic in rats, but no information is available on its potency. In addition, there is no information on the carcinogenicity of the major metabolite, leucogentian violet. The structure of gentian violet is similar to that of malachite green, and it is known that leucomalachite green is a more potent carcinogen than malachite green; therefore, it is possible that leucogentian violet is similarly a more potent carcinogen than gentian violet. Gentian violet and leucogentian violet are readily interconvertible in the body, and so it is likely that exposure to gentian violet will also result in exposure to leucogentian violet. Thus, there is inadequate information to determine the overall carcinogenicity of the metabolites of gentian violet (demethylated gentian violet, leucogentian violet and its demethylated metabolites).

#### **EAPA (European Animal Protein Association)**

EAPA, the European Association of blood products producers calls on CODEX to ban entirely the use of gentian violet and other triphenylmethane dyes whether it is directly or indirectly used in livestock and fish production.

Gentian violet and other triphenylmethane dyes are compounds for which the MRL's are set at the LDL, which means a zero tolerance and stringent control measurements should be taken for all dyes of this chemical group.

EAPA takes the view that it is important to underline that the proposed prohibition shall include, among other applications, the use of coloured sprays or solutions in water to mark animals or treat wounds containing such substances in order to avoid residues in the food chain.