

CropLife Latin America statement on the water situation in Cipreses in Costa Rica

April 27, 2023

CropLife Latin America regrets the alarm situation in some areas of Costa Rica due to official statements and measures regarding an apparent "contamination of drinking water" by pesticide residues.

A plausible explanation for this situation is the fact that the Costa Rican Ministry of Health issued Decree 38924-S in 2015 establishing, without any technical or scientific foundation, that the maximum acceptable value (MAV) of all pesticides in drinking water was 0.1 µg/L (one tenth of a microgram per liter of water), an amount equivalent to one drop of water in an Olympic-sized swimming pool. This provision was made without any risk study and ignoring all the experience that organizations such as CODEX Alimentarius, the World Health Organization (WHO), or the Environmental Protection Agency (EPA) of the United States have in this matter.

An MAV of 0.1 µg/L not only wrongly assumes that all chemicals have the same toxicity, but was also established without any scientific study having been done to determine, through a risk analysis, which ones should be the applicable MAVs. The provision of the Ministry of Health in this matter lacks technical foundation to the point that the Center for Research in Environmental Contamination (CICA), one of the most reputable centers of its kind in Latin America, which is part of the University of Costa Rica, the main state university of this country, questioned the MAV established in decree 38924-S, stating that: *"First of all, it must be clarified where these MAV values come from! What technical, scientific and applied foundation do they have? These MAV values that are implemented are extremely low values, but this must be based on a risk analysis (...)"*, a question that has never been answered by the authorities that issued the standard.

It is clear that the MAV are established after a scientific evaluation of dietary risk, which guarantees that below said levels there is no risk to the health of consumers. Therefore, from a technical and scientific point of view, in order to protect human health, what is relevant is not detecting whether or not pesticide residues appear in food products or water, but rather the level at which they are appearing, since, as long as the MAV is not exceeded, there is no risk to the consumer; as long as the MAV have been established

following internationally accepted scientific norms and standards, which is not the case in Costa Rica.

As a result of the above, in Costa Rica people mistakenly speak of "water pollution" because the reference MAV established by the Ministry of Health lack technical foundation. For example, for a pesticide such as Hexazinone in Costa Rica the MAV is 0.1 µg/L, but the MAV of the EPA in the United States, and the one recommended by the WHO is 2000 µg/L, that is, the EPA and the WHO, through scientific studies, recommend a MAV for this pesticide that is 20,000 times higher than the one established by Costa Rica, without Costa Rica having explained why it ordered this measure that today generates confusion and the perception that the waters have stopped being drinkable.

More examples such as the one cited can be seen in the following table, which shows that the MAVs of the WHO and the EPA are significantly higher than those of Costa Rica:

Active ingredient	Admissible value for WHO / EPA µg/L (micrograms per liter)	Admissible value Costa Rica Regulation µg/L (micrograms per liter)
Atrazine	2	0,1
2,4-D	30	0,1
Dichlorprop	10	0,1
Propanil	20	0,1

Source: Decree number 38924 of 2015 ¹

CropLife Latin America supports all individual and coordinated efforts to guarantee the quality of water for human consumption, as well as to preserve the life of aquatic flora and fauna. We call on the Ministries of Health, Environment and Agriculture, as well as the interested sectors to analyze the situation, and design a regulation that establishes parameters consistent with technique and science, and that are useful and realistic. It is important to understand that standards for contaminant levels in drinking water should not be applied to other types of water, such as surface water or groundwater, etc.. The guidance values of contaminants in drinking water can be obtained from independent risk analysis studies or using international references regarding the admissible values of the World

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http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&nValor1=1&nValor2=80047&nValor3=101480&strTipM=TC

Health Organization, WHO, the US Environmental Protection Agency, EPA and OECD countries applying scientific criteria.

Finally, it is important to clarify that the presence of pesticides, like any other chemical substance, per se, should not constitute a reason for alarm, neither for authorities nor for the general public. The likelihood of any chemical presenting a health risk depends on its level of toxicity, the amount present in the water, and how much we are exposed to on a daily basis.

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*CropLife Latin America is the international trade organization that represents the **Crop Science Industry**. An industry that researches and develops **agrotechnologies** (crop protection products, biotechnology and seeds) that help farmers improve efficiency in **crop production** for food security.*

Our affiliates are six Research and Development companies and a network of associations in 18 Latin American countries. The guild represents Syngenta, FMC, Bayer, BASF, Sumitomo Chemical and Corteva Agriscience.

The Industry represented in CropLife Latin America complies with the guidelines of the International Code of Conduct for Pesticide Management, in addition to strict ethical and social responsibility parameters, in aspects such as quality, respect for public health and the environment.

***CropLife Latin America** and its network of 26 associations work for a sustainable and productive agriculture within the framework of Good Agricultural Practices (GPA).*