

## Agrotoxic: the correct expression in risk assessment

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In its previous issue, *Visa em Debate* (vol. 6, n. 4) published an outstanding article on its “Debate” section. It was a perfect fit for that section’s perspective. However, pursuant to the logic of the “Debate”, we could not fail to express a completely opposite position to that defended by the authors. Agrotoxic is the correct expression from a legal and technical point of view.

Agrotoxic is the term used to designate a group of products, whether chemical or not, marketed for the killing of microorganisms, plants and other living beings. These substances are, in essence, hazardous, due to the functions they must actually perform. They present a high potential of risk. They present toxicological properties that, among others, must be carefully considered so that individual users and the society as a whole can protect themselves from the risks inherent in this type of product. We must not, therefore, confuse hazard and risk. These are hazardous products and their risks must be managed in the best possible way. Government agencies cannot renounce their public purpose oriented to the promotion of the population’s welfare.

Law n. 7.802 of July 11, 1989 correctly defined “agrotoxics” as several products for use in different stages of the production process of food and other materials, mainly for human consumption. From the field to the consumer table. With quality, safety and harmlessness.

We emphasize that the term was approved in the Brazilian Constitution of 1988, in its article 220, paragraph 4, as the authors of the research paper under debate also acknowledge. These products are considered hazardous, potentially toxic and risk-bearing. Their advertising must be controlled as stated by the Federal Constitution, which, in the same way, rules in Article 225: “All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations.” The Constitution makes it clear that it is up to everyone to control the risks of agrotoxics.

The attempt of several players related to the productive sector to minimize the public acknowledgement of the risks of these products is not new. Modifying its name, removing the “toxic” suffix and replacing it with another of smaller emphasis on its hazardous nature can lead users, consumers and the society as a whole to the false perception that the products in question are not hazardous anymore. That they would be innocuous for the human being and for the environment. If we modify the timely denomination of “agrotoxic” we will violate articles 220 and 225 of the Federal Constitution of Brazil.

After the development of the infamous dichlorodiphenyltrichloroethane (DDT), Synthetic Organic Chemistry has worked intensely over the last 80 years to invent new molecules, previously not found in nature, with the claim that they would be better than those that nature itself produces. This has increased our ability to kill a particular target (these bacteria, fungi, plant species or even animal species). However, this highly toxic property for these target species is not selective enough not to affect other species in general, cash crops, and, ultimately, humankind and the environment - soil, water and air.

Interestingly, in Figure 2 of the published article the authors show the increase in sales of agrotoxics in Brazil and, also, in a similar curve, the increase in the number of poisoning episodes and deaths. However, a closer look shows that the slope of the curves is different in many of their points, indicating that, in general, there is an increase in reported

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poisoning episodes, even higher than the increase in sales. This indicator shows that consumer protection measures should be expanded and not minimized, as suggested by the article. There are more deaths and poisoning episodes than there were before and, therefore, public protection policies must be reinforced. This includes using the correct expression and strict control of the marketing and advertising of these products.

In some situations, we can - and the law allows us to - use generic expressions like insecticides to indicate that they kill insects; molluscicides to indicate that they kill mollusks; pesticides to indicate that they kill pests; bactericides to indicate that they kill bacteria. The ending “cide” means death. These substances are part of what we call and - I emphasize, should continue to

call - agrotoxics, because we know they can kill. They may be mutagenic, genotoxic and have other deleterious effects. They persist in water and in the environment in general. They are not simple chemicals, they are agrotoxics.

All of us activists (as the authors call us) in the area of promotion and protection of health and protection of the environment (water, soil and air) should encourage the use of the terminology established in current legislation and in the Federal Constitution, i.e. agrotoxic (*agrotóxico*, in Portuguese). Leaving it to the activists of the poison industry to try to change this name by eliminating the perception of hazard and hindering the enforcement of public policies to protect the planet and its inhabitants.