## PESTICIDES AND BILL 6,299/2002: AGRO-ENVIRONMENTAL REGRESSION

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#### **ABSTRACT**

This article analyzes the proposed changes to the legal regime for pesticides contained in Bill no. 6,299/2002, commonly referred to as the "Poison Bill". The goal is to make a comparison between the Bill's approach and the current regulation of pesticides in Brazil, including the respective predictions of liability of the subjects involved with pesticide production and use. This study used theoretical and qualitative research based on a survey of pesticide-related bibliography and legislation, with a deductive reasoning legal method. The result is the demonstration that Bill No. 6,299/2002 intends to facilitate all stages – from registration for manufacturing pesticides to their end use –, which shall culminate in an excessive use of pesticides in crops and potential increase of agro-environmental damage. The conclusion is the need to reject Bill no. 6,299/2002, as it represents a setback to agri-environmental protection by removing strict restrictions and thus promote the indiscriminate use of pesticides.

**Keywords:** Agro-environmental; pesticides; damage; bill of law; protection

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# AGROTÓXICOS E PROJETO DE LEI N. 6.299/2002: RETROCESSO AGROAMBIENTAL

#### **RESUMO**

Este artigo analisa as propostas de mudanças ao regime jurídico dos agrotóxicos contidas no Projeto de Lei n. 6.299/2002, mais conhecido como "Projeto do Veneno". O objetivo é fazer um cotejo entre a abordagem do Projeto de Lei e a regulação vigente dos agrotóxicos no Brasil, incluindo as respectivas previsões de responsabilidades dos sujeitos envolvidos com a produção e uso de agrotóxicos. Para elaborar a análise da situação, este trabalho empregou pesquisa teórica e qualitativa a partir de levantamento bibliográfico e da legislação referente a agrotóxicos, com método jurídico de raciocínio dedutivo. O resultado é a demonstração de que o Projeto de Lei número 6.299/2002 pretende facilitar todas as etapas – desde o registro para fabricação até o uso – a culminar numa aplicação excessiva de agrotóxicos nas lavouras, o que possibilita a ampliação de danos agroambientais. A conclusão é a necessidade de rejeição do Projeto de Lei n. 6.299/2002, por representar um retrocesso à proteção agroambiental, já que retira rigorosas restrições e, portanto, fomenta o uso indiscriminado de agrotóxicos.

**Palavras chave:** agroambiental; agrotóxicos; danos; projeto de lei; proteção.

#### INTRODUCTION

The relevance of the theme lies in evaluating the increase in pesticide use in Brazil, provided by Bill No. 6,299/2002, better known as "Poison Project" or "Poison Bill".

There is no denying the economic importance of agribusiness, which currently accounts for 48% (forty-eight percent) of Brazilian exports, notably soybean and corn. However, even if necessary and lawful, activities involving the manufacture, distribution, transportation, use and disposal of pesticide packaging – must contain legal restrictions and the respective liability, given the risk inherent in any and all pesticide-related activities (manufacture, transportation, distribution, marketing, application, storage, etc.).

Now, the right to use the land must be conditioned to the dictates of collective protection, of human rights focused on agri-environmental issues, under the concept of socio-environmentalism and sustainable development.

Therefore, the study presents the following problem: Does the Bill on pesticides currently being processed in the National Congress represent an advance or a setback to agri-environmental protection?

The basic hypothesis is that the referred project represents a setback to agri-environmental protection.

Here are some guiding questions that revolve around the central problem: What is the general trend of Bill no. 6,299/2002 and in what context is it being discussed? What are the main proposals for changes in the legal regime for pesticides that Bill no. 6,299/2002 presents and that are manifested as setbacks to agri-environmental protection? And to what extent does the current trend of increasing the application of pesticides imply the need to disseminate agri-environmental protection? Each guiding question will be addressed individually.

The general goal is to list and reflect on the reasons for the tendency to expand pesticide use in agri-environmental activities and the main legal consequences – more precisely, a general movement of taking accountability away from the actors involved in this process.

The article was methodologically developed under theoretical and qualitative research on the subject, based on a bibliographic survey, through consultation with the existing doctrine in books and the relevant legislation as a formal legal source. The prevailing method of analysis is

the deductive one, since it is based on the general understanding of Bill no. 6,299/2002 in order to investigate it legally based on the awareness of its clearly harmful consequences to the environment, drawing a comparison with the current legislation and this future announcement. To this end, the work is structured according to three categories of analysis: first, the legal regulation of pesticides; second, Bill no. 6,299/2002 in comparison with the current legislation (Law No. 7,802/89); and third, agri-environmental protection as a reference for the arguments presented.

# 1 PESTICIDES: CONTEXTUALIZATION 1.1 A look into the past

The Agricultural Revolution or "Green Revolution," as it became known, began in the late 19th century, with the Industrial Revolution as a landmark, bringing mechanization of farming (use of tractors, plows, harrows, sprayers, etc.) and the use chemical inputs (seeds, fertilizers and pesticides), which enabled large-scale agricultural production. It was an agricultural policy idealized by the United States and spread mainly in underdeveloped and developing countries, nowadays euphemistically called "emerging".

In view of these changes, agribusiness began to be marked by five support pillars, according to Folgado (2017): (a) production in monocultures; (b) use of heavy machinery; (c) *latifundia* as a prominent place of production; (d) export-oriented production; and (e) indiscriminate use of pesticides<sup>3</sup>.

Vaz (2006) lists the main consequences of the Green Revolution: significant environmental damage (true ecological disasters: contamination of water sources, forest devastation and soil depletion), decreased food production, abandonment of polyculture, extinction of cereals, oilseeds and legumes, decreased genetic diversity, poor income distribution, migration to urban areas (rural exodus), unemployment, malnutrition, subordination of farmers to international agribusiness, growth in the 'external debt' of countries that received World Bank financing for implementing this policy and, as far as this work is concerned, the nefarious multiplication of the use of chemical fertilizers and pesticides<sup>4</sup>.

<sup>3 &</sup>quot;A fundamental difference between agribusiness and agriculture is present in the names: in agribusiness there is no culture, as there are no people, the man-nature relationship is mediated by the market, business values. The cultural sociodiversity present in the countryside and in the Brazilian forest is expressed in the peoples that produce food, live in the land and from the land, waters and forest" (CARNEIRO *et al.*, 2015, p. 123).

<sup>4 &</sup>quot;By cutting down forests to implement agriculture, man removes complex, multi-structured,

Rachel Carson's book Silent Spring<sup>5</sup> represents a revealing landmark to society about the harm caused by pesticides.

According to Souza (2018), before there was a specific law, pesticides were regulated by Decree 24,114 of 1934, which provides for plant health protection. This law even predates the discovery of organosynthetics. This Decree is still in force. In 1965, Law no. 4,785 that provides for the inspection of trade and use of phytosanitary products and other measures was sanctioned. Decree no. 67,112/70 defined pesticides as a "Sanitary Phytosanitary Product".

Antenor Ferrari (1985) was the pioneer in the fight against pesticide abuse in Brazil, being the main responsible for the preparation of the first State Law on pesticides in 1982 in Rio Grande do Sul: Law no. 7.747/1982 and Decrees nos. 30,787 and 30,811, embryos of the federal law. This state law made the concept of pesticides official.

Currently, the legislation that regulates the production and use of pesticides is Law no. 7,802/89, the first and, until then, the only law to deal specifically with the matter.

With Bill no. 6,299/2002, called by its critics the "Poison Bill," aims to expand the possibility of using pesticides, further reducing the few restrictions currently imposed on their use in Brazil.

See, below, the definition of the term "pesticide" to be considered in the present work and its main typologies.

## 1.2 The current discipline of pesticides

Brazil is currently the largest user of pesticides. The regions in which the application of pesticides is greater are the Midwest, South and Southeast of Brazil, and the state of Mato Grosso is the largest consumer with 18.9% of national consumption in its soybean, corn, sugarcane, citrus, cotton and rice crops<sup>6</sup>.

extremely diverse and stable ecological systems, taking the process of ecological succession to the first stages of maturity, simplicity and instability. By reducing diversity and placing plants of the same species together, in a short distance, in large areas, man favors the reproduction and survival of certain herbivores, which, in the presence of few competitors, will constitute large populations, transforming themselves into pests" (FERRARI, 1985, p. 22).

<sup>5</sup> In September 1962, American biologist Rachel Carson published the book Silent Spring, which revealed to the world the harmful power of pesticides to humans and nature, beginning with the use of DDT poison. There was a huge controversy about the use of pesticides in agriculture, and this work influenced the environmental movement worldwide.

<sup>6</sup> The main types of pesticides used in Brazil are: glyphosate, thiram, paraquat, carbofuran, endosulfan, methamidophos, abamectin, methyl parathion, acephate, lactofen, phorate, trichlorfon, cyhexatin, and phosmet (CARNEIRO *et al.*, 2015).

The legal discipline of pesticides is found in Law no. 7,802/89, regulated by Decree no. 4,074/2002 (which revoked Decree No. 98,816/1990). In the Federal Constitution, on pesticides, there is a normative clause regarding advertising (art. 220, §47), regulated by Law no. 9,294/1996, which provides for restrictions on the use and advertising of tobacco products, alcoholic beverages, medicines, therapies and pesticides.

Law no. 7,802/89 provides for mandatory prior registration with the Ministry of Agriculture, Livestock and Supply (MAPA) – in the form of Decree no. 4,074/2002 – for the production and commercialization of pesticides in the national territory (art. 3) (BRASIL, 1989). Note that, in the current legislation, three ministries participate in the registration process: (1) MAPA, through the Agricultural Defense Secretariat (SDA); (2) the Ministry of Health, through the National Health Surveillance Agency (Anvisa); and (3) the Ministry of the Environment (MMA) through the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama), and these meet in the Technical Advisory Committee for Pesticides (CTA) (LONDRES, 2011).

It is also worth mentioning that the advertising of pesticides has specific regulations in art. 8 of law no. 7,802/89, as well as in Law no. 9.294/1996 in its art.  $8^8$ .

Art. 14 of Law no. 7,802/89 defines responsibility for the use of pesticides<sup>9</sup>, expressly indicating those responsible (professional, user, service provider, trader, registrant, producer and employer), as well as specifying

<sup>7</sup> Art. 220. The manifestation of thought, the creation, the expression and the information, in any form, process or medium shall not be subject to any restriction, with due regard to the provisions of this Constitution. [...]

<sup>§ 4</sup> Commercial advertising of tobacco, alcoholic beverages, pesticides, medicines and therapies shall be subject to legal restrictions, in accordance with item II of the preceding paragraph and shall contain, whenever necessary, a warning concerning the damages which may be caused by their use (BRASIL, 2016).

<sup>8 &</sup>quot;Art. 8 – Commercial advertising of pesticides containing products with mediate or immediate toxic effect for humans should be restricted to programs and publications aimed at farmers and cattle breeders, containing a complete explanation of their application, precautions in employment, consumption or utilization, according to the competent agency of the Ministry of Agriculture and Supply, without prejudice to the norms established by the Ministry of Health or another organ of the Unified Health System" (BRASIL, 1996).

<sup>9</sup> Art. 14. The administrative, civil and penal responsibilities for damages caused to people's health and the environment, when the production, commercialization, use, transport and disposal of empty pesticide packaging, its components and the like, do not fulfill the provisions of the relevant legislation, are up: (Wording given by Law No. 9,974, of 2000) [...]b) to the user or service provider, when proceeding in disagreement with the prescription or recommendations of the manufacturer and registration and sanitary-environmental agencies; (Wording given by Law No. 9,974, of 2000) [...] (BRASIL, 1989).

the hypotheses in which these agents will be held responsible. It is intuitive that the indication of those responsible is not exhaustive (BRASIL, 1989).

Law no. 6.938/81, which deals with the National Environment Policy, defines the figure of the polluter, in its art. 3, IV, as a natural or legal person, of public or private law, responsible, directly or indirectly, for an activity that causes environmental degradation. And in its art. 14, §1, there is the imposition of liability to the polluter, regardless of the existence of guilt, to indemnify or repair the damages caused to the environment and to third parties, affected by their activity. Thus, both the direct and the indirect polluter must be held responsible (BRASIL, 1981).

See the definition and main classifications of pesticides.

#### 1.2.1 Definition and main classifications of pesticides

Law no. 7,802/1989 defines pesticides in its art. 2, I, item "a" as being the products and agents of physical, chemical or biological processes, intended for use in the production sectors, in the storage and processing of agricultural products, in pastures, in the protection of native or implanted forests and other ecosystems, and also of urban, water and industrial environments, whose purpose is to change the flora or fauna composition, in order to preserve them from the harmful action of living beings considered harmful (BRASIL, 1989).

Decree no. 4,074/2002 defines pesticides in its art. 1, IV, as being the products and agents of physical, chemical or biological processes, intended for use in the sectors of production, in the storage and processing of agricultural products, in pastures, in the protection of native or implanted forests and other ecosystems and also of urban, water and industrial environments, whose purpose is to change the flora and fauna composition, in order to preserve them from the harmful action of living beings considered harmful, as well as substances and products employed as defoliants, stimulators and inhibitors of growth (BRASIL, 2002).

Vaz (2006, p. 22) defines pesticides as toxins used to kill, control or remove unwanted organisms from crops.

As for the main classifications, pesticides are classified by Anvisa according to the toxicity to human health (Table 1) and the degree of environmental impact (Table 2), in the following terms:

**Table 1** Classification regarding the risk to human health

Class	Flag	Product classification	
I	Red	Extremely toxic	
II	Yellow	Highly toxic	
III	Blue	Moderately toxic	
IV	Green	Slightly toxic	

Source: Brasil (1992).

The respective colors are highlighted on the labels of the packaging of pesticides, according to this classification. Thus, if the products are teratogenic, carcinogenic or mutagenic, they are prohibited from being registered in Brazil and, therefore, do not receive toxicological classification.

According to the environmental risk posed, Ibama classifies them as follows:

Table 2 Classification regarding the environmental risk, according to Ibama

Class	Flag	Product classification
I	Red	Highly dangerous
II	Yellow	Very dangerous
III	Blue	Dangerous
IV	Green	Slightly dangerous

Source: Brasil (1996a).

As for the purpose, there are fungicides (which kill fungi); herbicides (which kill invasive plants, such as weeds); insecticides (which kill insects); acaricides (which kill acari); bactericides (which kill bacteria); algaecides (which kill algae); formicides (or ant killers); molluscicides (which kill molluscs) and rodenticides (which kill rodents), among others (CARNEIRO *et al.*, 2015, p. 164, 58-69).

Once the concept and main species of pesticides are known, it is important to know the main aspects of the Bill in question.

# **2** BILL No. 6,299/2002: "THE POISON BILL"

#### 2.1 The Bill scenario

Bill no. 6,299/2002, of the Federal Senate, aims to change articles

3 and 9 of Law no. 7,802, of July 11, 1989. Twenty-nine bills of law are attached to it<sup>10</sup>.

Without the intention of studying all the Bill of Laws attached to the Bill known as "the poison Bill," Bill no. 3,200/2015, of the Chamber of Deputies, and Bill no. 6,299/2002 itself will be highlighted.

Bill no. 3,200/2015 was attached to Bill no. 1,687/2015, which, in 2016, was attached to Bill no. 6,299/2002, which heads the block of the twenty-nine bills mentioned.

This bill is emphasized because it indicates more profound changes, in intending to repeal Law no. 7,802/1989 and Law no. 9,974/2000<sup>11</sup>. Here are listed the two main justifications presented by its advocates: (1) the current law is out of date and in dissonance with the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS agreement of the World Trade Organization – WTO), ratified by Brazil through Decree no. 1,355/1994; in addition to the Globally Harmonized Classification and Labeling of Chemicals (GHS<sup>12</sup>) and Codex Alimentarius (a program of the United Nations Food and Agriculture Organization – FAO<sup>13</sup> – and the World Health Organization – WHO), followed by the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989, adhered to by Brazil in 1993<sup>14</sup>), the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (1998, adhered to by Brazil in the same year<sup>15</sup>) and the Stockholm Convention on Persistent Organic Pollutants (2001, adhered to by Brazil in 2004); and (2) as a development of the first justification, the current Law disregards the classification proposed by the Global Harmonized System of Classification and Labeling

 $<sup>\</sup>begin{array}{l} 10 \text{ Bills nos. } 713/1999, \ 1.388/1999, \ 2.495/2000, \ 3.125/2000, \ 5.852/2001, \ 5.884/2505, \ 6.189/2005, \ 7.564/2006, \ 1.567/2011, \ 1.779/2011, \ 3.063/2011, \ 4.166/2012, \ 4.412/2012, \ 2129/15, \ 49/2015, \ 371/2015, \ 461/2015, \ 958/2015, \ 1.687/2015, \ 3.200/2015, \ 3.649/2015, \ 4.933/2016, \ 5.218/2016, \ 5.131/2016, \ 6.042/2016, \ 7.710/2017, \ 8.026/2017, \ 8.892/2017, \ 9271/2017. \end{array}$ 

<sup>11</sup> Amends Law no. 7,802, of July 11, 1989, which provides for research, experimentation, production, packaging and labeling, transport, storage, marketing, commercial advertising, use, import, export, destination end of waste and packaging, registration, classification, control, inspection and surveillance of pesticides, their components and the like, and other measures (BRASIL, 2018a).

<sup>12</sup> Globally Harmonized System.

<sup>13</sup> FAO also contains, on the subject, an International Code of Conduct for the Management of Pesticides.

<sup>14</sup> This Convention was internalized by Decree no. 875/1993 and regulated by CONAMA Resolution n. 452/2012. Subsequently, another Decree was approved, that of no. 4,581/2003. The National Solid Waste Policy (PNRS) was created by Law no. 12,305/2010.

<sup>15</sup> Internalized in Brazil through Decree no. 5,360/2005.

of Chemical Products (GHS)<sup>16</sup>, which was adopted by the United Nations (UN) (BRASIL, 2018a).

It was highlighted in the Report of the Opinion of the Special Committee of the Chamber of Deputies that Brazil still evaluates the danger in its procedure, instead of carrying out a risk study, which makes the registration and re-analysis process in Brazil obsolete, as compared to those of other countries like, e.g., the United States, whose studies are carried out by the Environmental Protection Agency (USEPA), and the European Union, by the European Food Safety Authority (EFSA) (BRASIL, 2018a).

The report mentions that risk, exposure and absorption must be differentiated: to be risky, there must be exposure first. Now, if there is no exposure, there is no risk. If there is low exposure, there is low absorption, and the effects are minimized; warns of the need to know the so-called toxicological threshold, which consists of the dose below or before which no adverse effects are expected, which thus would represent a safe exposure, the risk being considered acceptable<sup>17</sup> (BRASIL, 2018a).

The Special Committee of the Chamber of Federal Deputies appointed to deliver an opinion on BILL 6,299/02 held nine public hearings aimed at clarifying the subject under discussion. The rapporteur, deputy Luiz Nishimori, spoke for the constitutionality, legality and good legislative technique, financial and budgetary adequacy of the Bill<sup>18</sup>, highlighting, in addition to the above-mentioned reasons<sup>19</sup>, that agrochemical registration

<sup>16</sup> The GHS is expressly provided for in art. 2, XLVII of BILL no. 6,299/89: XLVII – Globally Harmonized System for Classification and Labeling of Chemicals (GHS) – Classification and labeling system for chemicals, phytosanitary products and environmental control products, which ensures that the hazards associated with these products are easily and clearly communicated. And in §1 of art. 4, the bill provides: §1 The requirements for the registration of phytosanitary products, environmental control products, technical and related products, as referred to in the *caput* of this article, must follow the Globally Harmonized System of Classification and Labeling of Chemical Substances (GHS), the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and the Codex Alimentarius.

<sup>17</sup> Paracelsus (or Aureolus Philippus Theophrastus Bombastus Von Hohenheim – who lived between 1493 and 1541), regarded by many as the father of toxicology, created the concept that "All substances are poisons; there is none which is not a poison. The right dose differentiates a poison and a remedy". According to this view, any product used in excess becomes toxic, in a pattern of linearity between dose and effect (PARACELSUS, 2015).

<sup>18</sup> And on the merit, for the approval of bills no. 6,299, of 2002, no. 2,495, of 2000, no. 3,125, of 2000, no. 5,852, 2001, no. 5,884, 2005 and no. 6,189, of 2005, no. 1,567, of 2011, no. 1,779, 2011, no. 4,166, of 2012, no. 3,200, 2015, no. 3,649, 2015, 6,042, 2016, and no. 8,892, of 2017, in the form of the attached substitute. Therefore, I vote for the rejection of bills no. 713, 1999, no. 1,388, 1999, no. 7,564, of 2006, no. 3,063, de 2011, no. 4,412, of 2012, no. 49, 2015, no. 371, 2015, no. 461, 2015, no. 958, 2015, no. 1,687, 2015, no. 2,129, 2015, no. 4,933, 2016, no. 5,218, 2016, no. 5,131, 2016, no. 7,710, of 2017, no. 8,026, of 2017 and no. 9,217, 2017.

<sup>19</sup> The Rapporteur listed fourteen arguments, from which we decided to cite the most relevant to the present research.

and reanalysis procedures (the rapporteur calls them "pesticides") are too expensive and time-consuming, due to bureaucracy and lack of investment in research, emphasizing that the evaluation period of 120 (percent and twenty days) established by Decree no. 4,074/2002 is never obeyed, with an average of six years to register a generic product and eight years to register a new product. The Rapporteur also mentions the difficulties of producing in a tropical region, as it is a very favorable climate for the emergence of pests. The delay ends up "compelling" farmers to use old molecules, many of which pests are already resistant to, generating the need for higher dose applications (BRASIL 2018a).

It is clearly observed that this Bill aims at greater availability of products to farmers and competitive control of the companies involved, providing benefits to sectors linked to the pesticide industry or to producers of pesticide commodities. This is partly due to the strength of the current Rural Caucus active in the National Congress, which, in the 2016 elections, for example, comprised 18 (22%) of the 81 senators and 175(34%) of the 513 federal deputies, according to Melgarejo, Barcelos and Nodari (2017, p. 56).

In the sequence, we will see the main proposals of the Bill.

# 2.2 Main proposals for changes to bill no. 6,299/2002, the "poison bill": setbacks to agri-environmental protection

The following subtopics list the main changes (and setbacks) to the current law proposed by Bill no. 6,299/2002.

## 2.2.1 Seeking euphemization: the change in nomenclature

The most notorious change is the replacement of the word *agrotóxico* (agrotoxic) with the term *pesticida* (pesticide), on the grounds that the term *agrotóxico* has a derogatory connotation, since it comes from the Greek *agros*, which means "field," and *toxikon*, which stands for "poison," besides the fact that this word is used only in Brazil<sup>20</sup>. The word "pesticide" comes from the Greek *pestis* (epidemic or pandemic disease) and *cida* (that

<sup>20</sup> According to the Report of the Special Committee, "In the main languages of the world, variations with the same etymology are adopted: *pesticidas* (Spanish), *pesticide* (English), *Pestizide* (German), *pesticides* (French), *pesticidi* (Italian), *pesticider* (Danish and Swedish), *pesticiden* (Dutch), пестициды (*pestitisidy* – Russian)" (BRASIL, 2018a).

kills), representing poison for pests or diseases that affect plantations<sup>21</sup>. In this perspective, it would be the crop's remedy, affirming its positive character and its indispensability.

Its synonyms are: fungicide; germicide; herbicide; and insecticide," according to the report.

On September 20, 2018, the Public Ministry of the State of Pará promoted a Forum on Pesticides, in which the director of the Brazilian Association of Agroecology, Rogério Dias, recorded, in the lecture entitled "Seven reasons to say No," that the vote (approval) of Bill no. 6,299/2002 in the Special Committee of the Chamber of Federal Deputies, by 18 (eighteen) votes against 9 (nine), representing 2/3 of the Committee, demonstrates to be the result of the effort and bargaining of the rural caucus in Congress. The first reason listed by the speaker, at the time, was precisely this name change that can serve to cloud the knowledge by the population about the human risk for pesticide use in food production (FÓRUM SOBRE AGROTÓXICOS, 2018).

Another term used as a substitute is "defensive," a word associated with something beneficial. Indeed, these are euphemistic terms that conceal the harmful, and even lethal, effects on human health and nature.

### 2.2.2 Registration: Concentration in MAPA for facilitation

Bill 6,299/2002 proposes the creation of the National Technical Committee on Phytosanitary Measures (CTNFito), as a collegiate body of a consultative and deliberative character to present a conclusive technical opinion to requests for evaluation of Phytosanitary agricultural defensive and environmental control products (BRASIL, 2018a). This Committee would be part of MAPA, and it is proposed that it should be multidisciplinary because it operates with the work of specialists from four ministries: (a) Ministry of Agriculture, Livestock and Supply (MAPA); (b) Ministry of Health (MS); (c) Ministry of the Environment (MMA); (d) Ministry of Science, Technology and Innovation (MCT); and (e) Ministry of Development, Industry and Foreign Trade (MDIC) (BRASIL, 2018a).

Note that, in the current legislation, three ministries participate in the

<sup>21 &</sup>quot;The most radical people call it poison. Neutrals refer to them as agrochemicals or pesticides. For the industry they are agricultural defensives. In the scientific community, they are treated as plaguicides" (VITAL, 2017, p. 41). For this author, the term *agrotóxico*, used in Brazil in Law no. 7,802/1989, is pejorative.

registration process: (1) MAPA, through DAS; (2) the Ministry of Health, through Anvisa; and (3) MMA, through Ibama, which are members of CTA (LONDRES, 2011).

According to Decree no. 4,074/2002, art. 5, II, it is incumbent upon the Ministry of Agriculture, Livestock and Supply to grant registration of pesticides, technical products, premixtures and the like for use in the sectors of production, storage and processing of agricultural products, in planted forests and pastures, given the guidelines and requirements of the Ministries of Health and Environment (BRASIL, 2002). It is the responsibility of the Ministry of Health (art. 6, V, of Decree No. 4,074/1989) to grant registration, including RET, of pesticides, technical products, premixtures and the like intended for use in urban, industrial, household environments, public or collective, water treatment and use in public health campaigns complying with the guidelines and requirements of the Ministries of Agriculture and Environment; and, according to art. 7, IV, Decree no. 4,074/1989, the Ministry of the Environment is responsible for granting the registration of pesticides, technical products and premixtures and the like intended for use in water environments, in the protection of native forests and other ecosystems, in compliance with the guidelines and requirements of the Ministries of Agriculture, Livestock and Supply and Health (BRASIL, 2002).

The exclusion of Anvisa, linked to the Ministry of Health, and of Ibama and Renewable Natural Resources, linked to the Ministry of the Environment (MMA), from the approval process for the registration of pesticides by the Bill is clear. Currently, the Ministry of Agriculture issues the registration, preceded by approval by Anvisa, Ibama and the Agricultural Defense Secretariat – the latter linked to MAPA.

With the concentration of the process within the scope of the Ministry of Agriculture, Livestock and Supply, the interests of pesticide producers and ruralists will be prioritized over agri-environmental protection. The toxicological assessment report will lose its importance in registration requests.

There are even deadlines for completing registration requests in §1 of art. 3 of the Bill, which, as a rule, will be 12 months, except for the case of registration of an identical formulated product, which will be 60 days, of Temporary Special Registration, which will be 30 days, of the risk re-analysis described in art. 28 of the Bill, that is, when the international organizations of which Brazil is a member alert to risks or advise against the use of a certain product (called "phytosanitary" in the Bill), which will

be 30 days, and 180 days for other changes<sup>22</sup> (BRASIL, 2018a).

An encumbrance on these deadlines concerns the provision of compulsory dispatch (although the Bill text does not contain this term) of Temporary Registration (TR) when the plaintiff has met the legal criteria and there is no conclusive statement from the bodies responsible for Agriculture, Environment and Health. This is described in § 9 of art. 3 of Bill no. 6,299/2002 (BRASIL, 2018a). It is clear the relevance given to business interest to the detriment of the social and collective interest of protecting health and the environment.

One factor that is already worrying about registration is the fact that there is no term of validity, as there is no process for updating/revising the registration of pesticides, which exists for medicines. In addition, the cost paid for pesticide registration in Brazil is very low: an amount of R\$1,800.00 is paid to Anvisa, whereas in the United States, for example, US\$600,000 is paid. In Brazil, there are 21 technicians to carry out the toxicological evaluation, and in the United States, there are 854 technicians to carry out the same function, according to the Dossier Abrasco (CARNEIRO *et al.*, 2015)<sup>23</sup>.

Pesticides already registered for a certain crop become allowed to be used in other crops, called "crops with insufficient phytosanitary support," smaller scale crops, or minorcrops.

# 2.2.3 Competence concentrated in the Union

Another change is to restrict to the Union the exclusive competence to legislate on restrictions on the distribution, commercialization and use of these products, according to the *sole paragraph* of art. 9<sup>24</sup> (BRASIL, 2018a). The aim is, therefore, to allow an increased use of pesticides since

<sup>22</sup> Paragraph 1 of art. 3 of Bill no. 6,299/2002 establishes the deadlines for completion of registration requests, which varies between 30 days and 12 months.

<sup>23</sup> Souza (2018) compares registration in the United States and Brazil: the cost for registration in the United States ranges from 1,100 to 630,000, whereas in Brazil, this variation is from 50 to 1,000. Another issue is that the validity of registration in the United States is fifteen years and a maintenance fee ranging from 100 to 425 and a renewal fee of 150 thousand must be paid, and upon renewal, manufacturers have the burden of proof that the product meets the technical requirements and toxicity parameters. In Brazil, registration is granted indefinitely and there is no provision for additional fees to be paid by the manufacturer for reevaluation. And the burden of proof of compliance with the requirements lies with those who claim that the product is not in conformity, which generally falls on the regulatory bodies.

<sup>24</sup> Art. 9 [...] Sole paragraph. States and the Federal District may not establish restrictions on the distribution, commercialization and use of duly registered or authorized products, except when local conditions determine, provided they are scientifically proven (BRASIL, 2018a).

the current discipline allows States and Municipalities to concurrently legislate on restrictions on the use of pesticides in their respective territories.

Currently, inspection of the use of pesticides is the responsibility of the state and municipal departments. According to Londres (2011, p. 111), federal agencies are dedicated to inspection in the formulation and manufacturing phase, state agencies in the transport, commercialization, use, storage and disposal of packaging, and municipal agencies supervise use and storage.

#### 2.2.4 Offenses and responsibilities

Another factor is the prediction of penal type in art. 56, I in the Bill as a crime liable to imprisonment of three to nine years for the production and use, by farmers, of homemade products intended for pest control. In practice, this characterizes almost an imposition of using pesticides produced by the industry, thus giving rise to a crime by the farmer who uses home remedies to control pests in the crop (BRASIL, 2018a).

Under the civilist bias, there is an express provision of joint liability between those who cause damage to the environment, as well as referring to the idea of comprehensive repair, which, in practice, will continue to maintain the infeasibility of the claim for damages when it comes to pesticide use, given the characters of intense diffusion of the damage and of the active and passive subjects in agro-environmental matters. Furthermore, the responsibility of the user or service provider is maintained only when they proceed in disagreement with the agronomic prescription or the recommendations of the manufacturer and environmental/sanitary and registration agencies (art. 50, item "b" of the Bill). Likewise, it occurs with the farmer, when using agricultural products in disagreement with the manufacturer's recommendations or at odds with the agronomic prescription, or when he does not dispose of empty packaging in accordance with the relevant legislation (art. 50, item "e" of Bill) (BRASIL, 2018a).

Despite being objective, this format of legislative provision rules out the practical possibility of receiving compensation by victims of pesticide application.

# 3. INCREASED USE OF AGRICULTURAL USE: INVERSELY PROPORTIONAL RELATIONSHIP TO AGRO-ENVIRONMENTAL PROTECTION

# 3.1. The Agro-Environmental Law emerges: a new look at the responsibilities

An important category of analysis is the definition of agri-environmental Law. Agri-environmental Law is considered, doctrinally, second-generation or second-dimension right, since it is linked to economic and social rights according to the exploitation of agrarian property/possession. Contemporarily, this statement cannot be verified in isolation, given the environmental view of this branch of Law. Now, Agri-Environmental Law is linked to human rights and environmental law, considered third-generation or third-dimension rights, in addition to the necessary protection for first-generation/dimension human rights<sup>25</sup>.

For Mattos Neto (2018, p. 24), Agri-environmental Law is

A set of legal rules, under the constitutional view of human rights, in order to regulate land use, agrarian activity and their relations, based on the principle of the social function of property, in the context of the Democratic State of Law. Agri-environmental, therefore, qualifies a category of this article, manifested by the defined symbiosis between agrarian law and environmental law.

Agrarian activity is essential, as the production of food, fuel and raw material for numerous products available on the market depends on it. Agribusiness represents an important factor of added value to agrarian goods. Note, however, that even though it is lawful, agribusiness contains damage and harm and must therefore give rise to the respective responsibilities.

The expansion of Brazilian agrarian capitalism tends to rely on agri-strategies of land concentration, in the name of economic and technological growth. On the other hand, agri-environmental law is committed to preserving the environment and the dignified existence of farmers and consumers.

Here is a brief parenthesis about the difference between damage and harm. According to Antunes (2002), pollution is a fact caused by human action, which negatively alters a given reality.

<sup>25 &</sup>quot;Agrarian Law takes on a life of its own only when economic and social human rights also appear. When the evolution of the constitutional legal scheme operates, moving from a liberal State of Law to a Social State of Law, when along with the individual, civil or political rights of liberty, the economic and social rights of liberty will also come to life, modernly referred to as second-generation human rights" (ZELEDÓN, 2002, p. 25).

Damage is, therefore, concrete; harm is a more abstract concept. Both concepts (damage and harm), however, are included in the concept of pollution. If pollution has serious consequences, there is damage, and because it brings risk, it contains harm. Thus, the risk of damage represents environmental harm to which the whole of society is equally exposed, and the respective responsibility must be considered and applied.

Milaré (2015) differentiates the notions of "impact" in the strict sense, and of "environmental damage," properly speaking: the former stems from the effects that any human activity has on the environment, the latter stems from the greater degree, that is, from more sensitive injuries that the same activity entails. It is worth mentioning that the environmental impact will be dealt with in its own section. Thus, harm can be understood with a conceptual approach to impact.

Another fundamental aspect in terms of responsibility is the causal link. Sanchez (1996) discusses in detail the many difficulties in explaining the causal relationship in agri-environmental damages. The reasons are as follows: technicality is insufficient, given its diffuse characteristic; some damages do not manifest immediately, but after a certain time; authorship is diffuse and anonymous; and the spatial difficulty, since environmental damage can cover long distances, without respecting borders.

About the damage, harm, from this recognition comes the need for a new perspective of responsibility. Vianna (2005) highlights that, due to the multiplicity of environmental damages (climate change, desertification, erosion, salinization and impoverishment of the soils, contamination and drying of rivers and groundwater, dissemination of agricultural pests, proliferation of diseases and significant loss of quality of life), orthodox standards of civil liability have become precarious.

Thus, Leite (2003) describes the transition from a responsibility based on a curative-retroactive notion to a more proactive view, able to deal with damages marked by diffusiveness, trans-temporality, and cross-border effects. And such responsibility is contained in the new agri-environmental law.

Having explained the definition of agri-environmental law and justified the use of the term to qualify the category worked on this opportunity, the social function of Land and its relationship with this research will be elucidated.

#### 3.2 Social function of the land

In view of the role of Agri-Environmental Law, the social function of land is more comprehensive, as it contains several social functions: land ownership, agrarian enterprise, agrarian contracts, and, in addition, agrarian property. If the land fulfills its social function, it means that there is a correct economic use of that land, its fair distribution, promoting the well being of the community by increasing productivity and social justice, in accordance with the relevant legislation.

Morais and Melo (2017, p. 183) understand that the most correct expression would be "social function of the land," being a technical impropriety to speak of the social function of property. For the authors, the social function would not be in the subject (owner) or in the right (property), but in the object (the land). In this line, the activity contains the socio-environmental function.

Agri-environmentalism is governed by the principle of the social function of property, with its environmental bias. Subject contained in the Constitutional Text, notably in its art. 186, whose scope reveals its humanistic content: rational and adequate use; proper use of available natural resources and preservation of the environment; observance of the provisions that regulate labor relations; and exploitation that favors the well-being of owners and workers<sup>26</sup>.

Law no. 4.504/1964 (Land Statute), in its art. 2, § 1, defines that the fulfillment of the social function of the land depends on: (a) promoting the well-being of the owners and workers who work there, as well as their families; (b) maintaining satisfactory levels of productivity; (c) ensuring the conservation of natural resources; and (d) observing the legal provisions that regulate the fair working relationships between those who own it and those that cultivate it (BRASIL, 1964).

Rational and adequate exploitation is a socioeconomic subfunction that is related to adequate productivity, using the objective data of the Land Utilization Degree (GUT) and Exploitation Efficiency Degree (GEE), de-

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26 Other articles of the Federal Constitution related to the matter:
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Art. 5. [...]

XXII – the right of property is guaranteed;

XXIII – property shall observe its social function;

Art. 170. The economic order, founded on the appreciation of the value of human work and on free enterprise, is intended to ensure everyone a life with dignity, in accordance with the dictates of social justice, with due regard for the following principles:

<sup>[....]</sup> 

II - private property;

III – the social function of property; [...] (BRASIL, 2016).

scribed in Law no. 8.629/1993, art. 6. This adequacy must contain the environmental, work and welfare aspects.

The Brazilian Civil Code, in its art. 1,228, paragraph 1, establishes the socio-environmental function of property, by providing that the property right must be exercised in line with its economic and social purposes and in such a way that they are preserved, in accordance with the provisions of special law, flora, fauna, natural beauty, ecological balance and historical and artistic heritage, as well as avoiding air and water pollution (BRASIL, 2018b).

In the same sense, the II Conference on Environment and Development (ECO-92), held by the UN in Rio de Janeiro, brought as a third generation right the healthy and ecologically balanced environment.

At the Conference on Environment and Sustainable Development, held in Brazil in 1992, three conventions were approved: the Convention on Biological Diversity (CBD); the Convention to Combat Desertification and the Framework Convention on Climate Change, in addition to a declaration of principles, and an agenda for global actions, Agenda 21. Agenda 21 is divided into six thematic axes, including sustainable agriculture, containing several actions aimed at reducing the use of pesticides.

The International Plant Protection Convention (IPPC) was internalized by Decree no. 5,759/2006.

Proper utilization of available natural resources and preservation of the environment has to do with the environmental subfunction, in addition to the labor and welfare sub-functions<sup>27</sup>.

The surveillance of such criteria is the responsibility of the National Institute of Colonization and Agrarian Reform (INCRA) and, in the case of pesticide abuse, of Anvisa and agricultural control, with the expropriation described in art. 184 of the Federal Constitution, given the following reasons listed by Morais and Melo (2017, p. 198-199): the use of pesticides does not respect the natural vocation of the land, generating an impact on the environment and the health and well-being of the worker, in addition to concentration of land ownership – violating the principle of the socio-environmental function of the land.

In order to achieve these goals, it would be necessary to transform the archaic *latifundia* into a modern rural enterprise, also allowing small farmers greater access to rural credit. Gomes, Carvalho and Araújo (2017,

<sup>27</sup> On the labor issue, there is also Convention no. 170 of the ILO (International Labor Organization) on safety in the use of chemical products at work, approved in Brazil by Decree no. 67/1995 and internalized through Decree no. 2,657/1998.

p. 166) point to the need to support, in a generalized way (including small rural farmers), mechanization, purchase of inputs and scientific research.

However, the same authors report that the agrarian reform outlined in the Land Statute does not happen globally, but rather individually, property by property, with payment of compensation by the State to ex-owners who do not fulfill a social function. In addition to being individualized, agrarian reform is gradual or in installments (occurs in two phases, an administrative and a judicial one), besides being extremely costly to public coffers, due to the payment of indemnities in cash for necessary and useful improvements, and in bonds of agrarian debt for the value of bare land. Which ends up emptying instead of implementing the social function of land ownership.

Mattos Neto (2010) structures the concept of social function in three aspects, namely: (a) economic or productive, through the economic exploitation of property through agrarian activity; (b) social, for the well-being of those working on land and society in general; and (c) environmental, as the agrarian property must be used also aiming to preserve the environment

The author points out that agriculture sustainability assessment is made by analyzing criteria and objectives, namely: meeting the basic nutritional needs of present and future generations; offering labor and quality of life to all those involved in the agricultural production process; fostering the productive and regenerative capacities of natural resources, without damaging the environment and without denaturing the socio-cultural characteristics of local communities; and promoting the reduction of the agricultural sector's vulnerability to environmental, socioeconomic, or other risks of any kind (MATTOS NETO, 2010, p. 30).

To promote such arguments, the last sub-item will define and explain the fundamentals of the rural production model inaugurated with the Green Revolution.

## 3.3 The model of rural production arising from the Green Revolution

There is, as can be seen, a model of rural production imposed in Brazil since the 1960s and increased by the National Rural Credit System and the National Plan for Agricultural Defensives, which linked obtaining rural credit to the purchase of "chemical inputs" (pesticides and fertilizers). And more: when the National Agricultural Defensives Program was created in

1975, pesticide factories that were already obsolete in their countries of origin were transferred to Brazil, according to Morais and Melo (2017).

The changes brought about by the Green Revolution promised an end to hunger in the world. The Keynesian Fordist model was extended to the countryside, establishing real agro-industrial complexes there. However, given the lack of economic investments in this sector, food insecurity is a reality for 22.3% of the Brazilian population, according to a survey released by IBGE in 2013 (FOLGADO, 2017). Oliveira (2001, p. 85) asserts: "the cause of hunger does not lie in the scarcity of food, but in the private appropriation of food by a few," that is, the unequal distribution of income is the villain and not food production or alleged scarcity. The lack of food security stems from the productive system itself, which includes land concentration, inequality in the field, and pesticide abuse, among other factors.

Thus, it is worth saying that the massive use of agrochemicals did not come from the Brazilian farmer, but from industries and governments, as concluded by Souza (2018).

According to Petersen, when prefacing the Abrasco Dossier (CARNEIRO *et al*, 2015), this model focuses on three efforts, namely: rhetoric of concealment, rhetoric of justification and rhetoric of disqualification.

The rhetoric of concealment is concerned with concealing the harmful effects of pesticides, ensuring that they serve to protect the plantation and that their harmful effects are minimal, with benefits outweighing losses. This repertoire integrates the notions of Maximum Residue Limit (MRL)<sup>28</sup> or Acceptable Daily Intake (ADI)<sup>29</sup>. Both are based on Cartesian studies improperly applied to an object of study as complex and non-linear as toxicology.

Now, the risk assessment models analyze in isolation an active ingredient of the product, whereas, in real life, the toxicological exposure to several products occurs simultaneously, in addition to several ways of penetrating the human body (oral, dermal, inhalation), making the isolated study inappropriate. There is also the toxicokinetics of the product, which can make it even more toxic, taking into account the other biological

<sup>28 &</sup>quot;The Maximum Residue Limit (MRL) is the maximum amount of pesticide or similar residues – officially allowed in food – as a result of application in an agricultural crop, expressed in milligrams of the pesticide per kilo of food (mg/kg)" (BRASIL, 2019).

<sup>29 &</sup>quot;The Acceptable Daily Intake (ADI) is a safety parameter defined as the maximum amount of pesticides that we can ingest per day, throughout our lives, so as not to cause health damage" (BRASIL, 2019).

phenomena involved<sup>30</sup> and the social and cultural contexts related to agricultural work and food. Thus, there is no accuracy in demonstrating cause and effect. Only the grossest effects can be demonstrated, as in the case of environmental accidents<sup>31</sup>. In practice, the risk is cumulative and accumulative, since pesticides act in a synergistic manner. Knowledge about the matter is still out of date. Even if the exposure limits are obeyed, there is an inherent risk and possibility of damage.

There has been an inversion of values: thinking under the bias of illness and death<sup>32</sup>, instead of life and health, as prohibition only occurs after proof of illness and death, instead of seeking prevention. Why not shifting the burden of proof to companies that produce pesticides, in order to prove that the product they manufacture is not dangerous?

Every pesticide product is inherently dangerous, a fact verified by science and recognized in our jurisprudence. As a matter of fact, this is how the national courts understand, like the Superior Court of Justice in HC no. 115,650/SP, by establishing:

[...] In the present case, the Respondent, company representative, exposed for sale 08 liters of the product called "Score" (01 liter package), and 04 gallons of the product called "Contain" (05 liters package), all with overdue expiration dates. The case hypothesis, therefore, is different from the one that required expertise to measure the product's harm. In the species, it is the commercialization of pesticides, which by itself, without further discussion, is a dangerous product to human handling. Not only that, we repeat, the products had expired (REsp 1060917/RS, Rel. Min. ARNALDO ESTEVES LIMA, 5.ª Turma, DJe 13/04/2009). 7. Habeas corpus denied (HC 115.650/SP, Rel. Minister LAURITA VAZ, QUINTA TURMA, tried on 10/26/2010, DJe 26/10/201) (BRASIL, 2010).

Agroecology is related to territoriality, a special notion that defines peasant activity according to the territory, social relations and the peculiar way of using natural resources. Agroecology seeks to overcome fragmented, Cartesian knowledge and sets out towards an integrated approach,

<sup>30</sup> Transformations in its molecular structure caused by light, temperature, chemical reactions and biological agents. Thus, according to Embrapa data, the greater the amount of pesticides, the lower the amount of microorganisms and the lower the biodegradation power, increasing the pesticide's persistence time in the environment (CARNEIRO *et al.*, 2015).

<sup>31 &</sup>quot;It is not up to regulatory agencies to prove that a pesticide is toxic; it should be up to companies to demonstrate with the same rigor that they are not harmful to human health or the environment. When there is doubt or insufficient studies, the precautionary principle should be considered, which guides action when an activity, situation or product represents threats of damage to human health or the environment. Precautionary measures must be taken even when it is not possible to fully establish scientific evidence for the cause-effect relationship" (CARNEIRO et al., 2015, p. 79).

<sup>32 &</sup>quot;Morbidity/mortality is a medical concept that refers to the rate of people killed as a result of a specific disease within a given population group". Morbidity refers to the distribution of types of disease and mortality refers to the distribution of the causes of death (SIGNIFICADO..., 2019).

through social practice and the experience of people from a certain place about nature, and is based on gnosiology, that is, it centralizes the knowing subject in the knowledge search process. Currently, agroecological practices are adopted exclusively by minority groups, whose lifestyle and land cultivation occur in respect for the environment and interaction with nature<sup>33</sup>.

In addition to the technical aspect, agroecology is a social movement whose demand is focused on rural development in several aspects raised by the Abrasco Dossier: production of healthy foods, overcoming rural poverty, the emancipation of women, encouraging the participation of young people, generation of decent work in rural areas, and valorization of cultures and local knowledge (CARNEIRO *et al.*, 2015). The construction of ecological agriculture must be, above all, a social process, as stated by Ferrari (1985)<sup>34</sup>.

The rhetoric of justification defends the inevitability of pesticides as a "necessary evil," or as the only means of feeding the world population (in the format of large-scale production). This rhetoric leads a small niche of consumers to opt for organic products, whose prices are inaccessible to the majority of the population, in an "every man for himself" policy. An example of this rhetorical strategy is in the video documentary *O veneno está na mesa*, by Silvio Tendler<sup>35</sup> (O VENENO..., 2011).

The rhetoric of disqualification is aimed at delegitimizing any discourse that is contrary to pesticides use, considering studies and movements in favor of human health and defense of the environment as "purely ideological" or "averse to technical, economic and social progress".

Every agro-environmental property has an ecological function, which means that it must have the purpose of agrarian activity, or the conservation of natural resources, or the preservation of cultural and ethnic identity.

Thinking the social function of the land is a topic that should reach rural properties whose agrarian activity depends on pesticides.

<sup>33</sup> The minorities involved are: *babassu* coconut breakers, grassland communities, *caiçaras*, extractivists, family farmers, agrarian reform settlers, peasants, settlers, riverside dwellers, *quilombolas*, indigenous peoples, shellfish gatherers, artisanal fishermen, *faxinalenses*, urban farmers, etc. They present innovations in the rural environment, such as: selection and storage of Creole seeds, reduced use of fire, better use and cycling of nutrients on the property, forage storage, greater attention to the support capacity of pasture areas, agroforestry systems and use of natural preparations to control insects and diseases (CARNEIRO *et al.*, 2015, p. 512).

<sup>34</sup> Unfortunately, conventional farming interferes with organic farming due to the proximity, according to the video documentary by Sílvio Tendler *O veneno está na mesa, parte II* (O VENENO ESTÁ..., 2014).

<sup>35</sup> This video documentary is divided into two parts and contains serious complaints about the massive use of pesticides.

#### FINAL REMARKS

The increasingly intense debate about the (lack of) need to use pesticides to satisfy the nutritional needs of the Brazilian population, combined with reflecting on their consequences, is the first concern of this article. Therefore, as noted, in order to guarantee and expand agri-environmental protection, it must be assumed that, undoubtedly, pesticides are substances that are harmful to the life and health of living beings and the environment, as worked out in its definition and classifications (item 1.2.1. of this article), and thus their use should be limited. The fact that there is a legal permit and regulation for its use cannot exempt users from their respective responsibilities, because in addition to the prediction of risk taking in agri-environmental matters, there is social awareness about their harmful effects. The idea is to discourage the excessive use of such substances.

In this article, the current legislation (more beneficial to the health of living beings and the environment, as it presents several points of restriction to pesticide use) was compared with Bill no. 6,299/2002 – the "Poison Bill" – which is laden with proposals that translate into a regression of agri-environmental protection: (a) change of nomenclature – from agrotoxics to pesticides, aiming at euphemizing and, consequently, spreading acceptance; (b) concentration of registration in the hands of the Ministry of Agriculture, Livestock and Supply; (c) simplification of the registration process, with provision for specific procedures, including deadlines for completion that will run against the State granting the registration; (d) concentration of competence to legislate on pesticides in favor of the Union; (e) the legal definition of acceptable risk; (f) prohibition on the sale of artisanal remedies for pest control; and (e) the possibility of prescribing agronomic prescriptions before the occurrence of the pest, that is, preventive prescriptions.

Currently, pesticide use is considered quite permissive in Brazil, including the approval of more registrations since last year. Just imagine if this Bill is approved! Thus, it is clear that Bill no. 6,299/2002 represents a setback to the agri-environmental protection system, confirming the basic hypothesis.

Therefore, by drawing on the socio-environmental vision of agro-environmental activity, it will be possible to establish limits and responsibilities for rural producers who use pesticides.

#### REFERENCES

ANTUNES, P. B. *Dano ambiental:* uma abordagem conceitual. Rio de Janeiro: Lumen Iuris, 2002.

BRASIL. *Lei n. 4.504 de 30 de novembro de 1964*. Dispõe sobre o Estatuto da Terra, e dá outras providências. Brasília, DF: Presidência da República, [1964]. Available from: http://www.planalto.gov.br/ccivil\_03/leis/l4504. htm. Access on: Nov. 26, 2019.

BRASIL. *Lei n. 6.938 de 31 de agosto de 1981*. Dispõe sobre a Política Nacional do Meio Ambiente, seus fins e mecanismos de formulação e aplicação, e dá outras providências. Brasília, DF: Presidência da República, [1981]. BRASIL. [Constituição (1988)]. *Constituição da República Federativa do Brasil de 1988*. Brasília, DF: Presidência da República, [2016]. Available from: http://www.planalto.gov.br/ccivil\_03/constituicao/constituicao.htm. Access on: Nov. 26, 2019.

BRASIL. *Lei n. 7.802 de 11 de julho de 1989*. Dispõe sobre a Pesquisa, a Experimentação, a Produção, a Embalagem e Rotulagem, o Transporte, o Armazenamento, a Comercialização, a Propaganda Comercial, a Utilização, a Importação, a Exportação, o Destino Final dos Resíduos e Embalagens, o Registro, a Classificação, o Controle, a Inspeção e a Fiscalização de Agrotóxicos, seus Componentes e Afins, e dá outras Providências. Brasília, DF: Presidência da República, [1989]. Available from: http://www.planalto.gov.br/ccivil 03/LEIS/L7802.htm. Access on: Nov. 26, 2019.

BRASIL. Ministério da Saúde. Secretaria Nacional de Vigilância Sanitária. *Portaria n. 03, de 16 de janeiro de 1992*. Brasília, DF: Ministério da Saúde, 16 jan. 1992. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/svs1/1992/prt0003 16 01 1992.html. Access on: Oct. 23, 2019.

BRASIL. *Lei n. 8.629 de 25 de fevereiro de 1993*. Dispõe sobre a regulamentação dos dispositivos constitucionais relativos à reforma agrária, previstos no Capítulo III, Título VII, da Constituição Federal. Brasília, DF: Presidência da República, [1993]. Available from: http://www.planalto.gov.br/ccivil 03/leis/L8629.htm. Access on: Nov. 26, 2019.

BRASIL. *Lei n. 9.294 de 15 de julho de 1996*. Dispõe sobre as restrições ao uso e à propaganda de produtos fumígeros, bebidas alcoólicas, medicamentos, terapias e defensivos agrícolas, nos termos do § 4° do art. 220 da Constituição Federal. Brasília, DF, [1996a]. Available from: http://www.

planalto.gov.br/ccivil 03/leis/19294.htm. Access on: Nov. 26, 2019.

BRASIL, Ministério do Meio Ambiente. Instituto Brasileiro do Meio Ambiente e dos Recursos Renováveis. *Portaria n. 84, de 15 de outubro de 1996*. Brasília, DF: Ministério do Meio Ambiente, 15 out. 1996b. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/mma\_ibama/1996/prt0084 15 10 1996.html. Access on: Oct. 23, 2019.

BRASIL. *Decreto n. 4.074 de 4 de janeiro de 2002*. Regulamenta a Lei n. 7.802, de 11 de julho de 1989, que dispõe sobre a pesquisa, a experimentação, a produção, a embalagem e rotulagem, o transporte, o armazenamento, a comercialização, a propaganda comercial, a utilização, a importação, a exportação, o destino final dos resíduos e embalagens, o registro, a classificação, o controle, a inspeção e a fiscalização de agrotóxicos, seus componentes e afins, e dá outras providências. Brasília, DF: Presidência da República, [2002]. Available from: http://www.planalto.gov.br/ccivil\_03/decreto/2002/d4074.htm. Access on: Nov. 26, 2019.

BRASIL, Superior Tribunal de Justiça (5. Turma). *Habeas Corpus 115.650/SP*. Ação penal. Crime contra as relações de consumo. Art. 7.°, inciso IX, da Lei n.° 8.137/90. Bem exposto ao comércio impróprio para consumo. Produto agrotóxico vencido. Laudo pericial dispensável, no caso. Ordem denegada. Impetrante: Marcelo Tadeu Neto. Impetrado: Tribunal de Justiça do Estado de São Paulo. Paciente: Altair Eduardo Cezine. Relatora: Ministra Laurita Vaz, 26 de outubro de 2010. Available from: https://ww2.stj.jus.br/processo/revista/documento/mediado/?componente=ITA&sequencial=1016433&num\_registro=200802036130&data=20101122&formato=PDF. Access on: Nov. 26, 2019.

BRASIL. *Projeto de Lei n. 6.299 de 2002*. Altera os arts 3º e 9º da Lei n. 7.802, de 11 de julho de 1989, que dispõe sobre a pesquisa, a experimentação, a produção, a embalagem e rotulagem, o transporte, o armazenamento, a comercialização, a propaganda comercial, a utilização, a importação, a exportação, o destino final dos resíduos e embalagens, o registro, a classificação, o controle, a inspeção e a fiscalização de agrotóxicos, seus componentes e afins, e dá outras providências. Brasília, DF: Câmara dos Deputados, [2018a]. Available from: https://www.camara.leg.br/proposicoesWeb/prop\_mostrarintegra?codteor=1654426. Access on: Nov. 26, 2019.

BRASIL. *Lei n. 10.406, de 10 de janeiro de 2002*. Institui o Código Civil. Brasília, DF: Presidência da República, [2018b]. Available from: http://www.planalto.gov.br/ccivil\_03/leis/2002/110406.htm. Access on: Nov. 26, 2019.

BRASIL. Ministério da Saúde. Agência Nacional de Vigilância Sanitária. *Agrotóxicos em alimentos*. Brasília, DF: Anvisa. Available from: http://portal.anvisa.gov.br/duvidas-sobre-agrotoxicos-em-alimentos. Access on: Nov. 10, 2019.

CARLSON, R. Primavera silenciosa. São Paulo: Global, 2010.

CARNEIRO, F. F. *et al.* (orgs.) *Dossiê Abrasco:* um alerta sobre os impactos dos agrotóxicos na saúde. *E-book* (628 p.) Rio de Janeiro/São Paulo: EPSJV/Expressão Popular, 2015.

FERRARI, A. A praga da dominação. Porto Alegre: Mercado Aberto, 1985.

FOLGADO, C. A. R. Sistema normativo de agrotóxicos: elementos de contextualização histórica e reflexão crítica. *In:* FOLGADO, C. A. R. (org.). *Direito e agrotóxico*: reflexões críticas sobre o sistema normativo. Rio de Janeiro: Lúmen Juris, 2017. p. 5-53.

FÓRUM SOBRE AGROTÓXICOS, 2018, Belém. Belém: Ministério Público do Estado do Pará, 2018.

GOMES, T. R. D.; CARVALHO, C. O. D. ARAÚJO, A. G. Função social da propriedade e uso de agrotóxicos: caminhos inconciliáveis. *In:* FOLGADO, C. A. R. (org.). *Direito e agrotóxico*: reflexões críticas sobre o sistema normativo. Rio de Janeiro: Lúmen Juris, 2017. cap. 6, p. 157-175.

LEITE, J. R. M. *Dano ambiental:* do individual ao coletivo extrapatrimonial. 2. ed. rev. atual. ampl. São Paulo: Revista dos Tribunais, 2003.

LONDRES, F. *Agrotóxicos no Brasil*: um guia em defesa da vida. Rio de Janeiro: Rede Brasileira de Justiça Ambiental — Articulação Nacional de Agroecologia, 2011. *E-book*. Available from: http://contraosagrotoxicos.org/sdm\_downloads/agrotoxicos-no-brasil-um-guia-em-defesa-da-vida/. Access on: Dec. 18, 2019.

MATTOS NETO, A. J. D. *Curso de direito agroambiental brasileiro*. São Paulo: Saraiva Educação, 2018.

MATTOS NETO, A. J. D. *Estado de direito agroambiental brasileiro*. São Paulo: Saraiva, 2010.

MELGAREJO, L.; BARCELOS, J. R. O.; NODARI, R. O. Agrotóxicos e transgênicos: um olhar crítico-normativo sobre a CTNBio. *In:* FOLGADO, C. A. R. (org.). *Direito e agrotóxico*: reflexões críticas sobre o sistema normativo. Rio de Janeiro: Lúmen Juris, 2017. p. 55-86.

MILARÉ, É. *Direito do ambiente*. 10. ed. rev., atual., ampl. São Paulo: Revista dos Tribunais, 2015.

MORAIS, H. B. D; MELO, W. B. D. O princípio da função social da terra em matéria de agrotóxicos e suas consequências jurídicas. *In:* FOLGADO, C. A. R. (org.). *Direito e agrotóxico*: reflexões críticas sobre o sistema normativo. Rio de Janeiro: Lúmen Juris, 2017. p. 177-202.

OLIVEIRA, F. *Engenharia genética:* o sétimo dia da criação. 6. ed. São Paulo: Moderna, 2001.

O VENENO está na mesa. Fotografia e entrevistas: Aline Sasahara. Pesquisa e produção: Hélè Pailhous. Edição: Paulinho Sacramento e Kaio Almeida. Roteiro: Silvio Tendler. Narração: Caco Ciocler, Dira Paes, Amir Haddad e Julia Lemmertz. Trilha sonora: Lucas Marcier/Arpx. Produção executiva: Ana Rosa Tendler. Publicado pelo canal cine amazonia. 1 video (49min22seg). Available from: https://www.youtube.com/watch?v=8R-VAgD44AGg. Publicado em: 2 ago. 2011. Access on: Apr. 14, 2019.

O VENENO ESTÁ na mesa 2: agroecologia para alimentar o mundo com sobrerania para alimentar os povos. Diretor: Silvio Tendler. Realização: Campanha Permanente contra os Agrotôxicos e pela Vida, Fiocruz, Escola Politécnica de Saúde Joaquim Venância, Bem Te Vi, Cineclube Crisantempo. 2014. 1 video (01h10min01seg). Publicado no canal Caliban Cinema e Conteúdo. Available from: https://www.youtube.com/watch?v=fyvoKljtvG4&feature=youtu.be. Published on: Apr. 24, 2014. Access on: Apr. 14, 2019.

PARACELSUS e os venenos. *Agrolink Com Inf. De Assessoria*, 27 ago. 2015. Available from: https://www.agrolink.com.br/noticias/paracelsus-e-os-venenos 222572.html. Access on: Dec. 25, 2018.

SANCHEZ, A. C. La reparación de los daños al medio ambiente. Pamplona: Aranzadi, 1996.

SIGNIFICADO de morbimortalidade. *Significados*, 27 jun. 2017. Available from: https://www.significados.com.br/morbimortalidade/. Access on: Feb. 24, 2019.

SOUZA, L. C. *Responsabilidade civil e agrotóxicos*: análise dos danos à saúde no ambiente rural. Rio de Janeiro: Lumen Juris, 2018.

VAZ, P. A. B. *O direito ambiental e os agrotóxicos:* responsabilidade civil, penal e administrativa. Porto Alegre: Livraria do Advogado, 2006.

VIANNA, J. R. A. Responsabilidade civil por danos ao meio ambiente à luz do novo Código Civil. Curitiba: Juruá, 2005.

VITAL, N. *Agradeça aos agrotóxicos por estar vivo*. 2. ed. Rio de Janeiro: Record, 2017.

ZELEDÓN, R. Z. Derecho agrario y derechos humanos. Curitiba: Juruá, 2002.

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