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Pesticides Residue on Brazilian Tomatoes, Food Safety and President Bolsonaro

Rebeca Barbosa Moura^a, Luciana Ramos Jordão^a, Barbara Luiza Rodrigues^a, Thays Dias Silva^a,
Victória Cardoso Carrijo^a, Letícia Versiane Arantes Dantas^a, Igor Gomes De Araújo^a and Niury
Ohan Pereira Magno^a.

^aState University of Goiás, Law College (Southeast Campus: Morrinhos), Brazil.

Abstract

Brazilian economy is especially focused on agriculture. Even though the Constitution establishes individual rights and human dignity as a priority, economic forces generally surpasses individual wellness on day to day issues. The current development on policies concerning pesticides exemplify this. In order to analyse changes on allowed pesticide residues and food regulations, this research evaluates one of the most consumed vegetable in Brazil, the tomatoes. Brazilians eat 21 tomatoes per capita early. The item is consumed by 205 million people, since tomatoes are one of the most important vegetable on everyday meals. However, it also has one of the highest scores on pesticide residue levels according to ANVISA, the Brazilian health surveillance agency. From 2013 to 2015, ANVISA analysed 730 tomato samples. Unauthorised pesticides were identified in 200 of them. Even knowing each Brazilian consumes 7 to 9 liters of pesticides, the government discusses new regulations to make new products approval faster by lowering criteria and creating a committee linked to Agriculture Ministry which would have no direct interference of environmental public agencies. During the first year and half of President Bolsonaro, more than 600 pesticides were authorised, 150 of them up to May 2020 and 474 in 2019. There is a clear incentive on pesticide usage whereas residue control is put aside just as discussions about healthier nutrition, working conditions and environmental impacts. By analyzing one of the most important vegetables in everyday consumption in Brazil, especially the regulations on pesticide residue and statistic data on its impacts on health, nutrition and environmental preservation, one is led to the conclusion that residue control can cause not even health damage to people, but will also reduce soil quality and bring negative economic consequences in the long run. Thus, this research, based on deductive method, follows the premise in which expanding pesticides usage needs stronger regulations on residue control as it is determined by the Constitution.

Keywords: Food security, Human Rights, Rural Development, Sustainable development.

*Corresponding author Email: rebecabbmoura@gmail.com

Introduction

The present research project Pesticide Residues in Brazilian Tomato, Food Security and President Bolsonaro, deals with the exacerbated release of pesticides in Brazil. Its objective is an analysis of tomatoes, one of the most important vegetables in Brazilian daily consumption, an identification of legislative changes with greater repercussion in the rural bench, it also sought to detect the amount of pesticides activated during the term of current President Bolsonaro and to analyze the diseases caused by the consumption of pesticides.

Brazil has a very fertile soil for planting tomatoes. However, farmers use pesticides in excess to guarantee an abundant harvest and put aside the generated. Harms the government demonstrates support for launching flexibilization laws for pesticide approval.

Therefore, this research analyzes the high level of pesticide releases in the current Bolsonaro government and its perniciousness to human life.

Material and Methods

- a) Tomatoes planted in Brazil;
- b) Pesticides released in Brazil;
- c) Data collected by ANVISA, and the role this regulatory agency fulfills on inspecting medicines, pesticides, cosmetics, other related to health products in Brazil;
- d) Scientific articles with the study of pesticides in food, focusing on tomatoes;
- e) Brazilian pesticide legislation;
- f) Laws analyzed by of the Chamber of Deputies.

Results and Discussion

- Approval of law No. 6299/2002, changing the pesticide inspection agency to CNTFito;
- Release of 624 pesticides since Jair Bolsonaro took office;
- Tomatoes are among the leaders of overuse of pesticides in Brazil;
- About 30% of the ingredients of the formation of pesticides released this year (2020) in Brazil are prohibited in Europe;
- According to the World Health Organization (WHO), 20 thousand deaths are registered per year due to the consumption of pesticides, and Brazil has been the country with the highest consumption of these products since 2008.

Main origins and destinations of fresh tomato exports to Brazil in 2017:			
Countries	UF Product	2017- FOB Value (US\$)	2017- Liquid Kilogram
Argentina	Minas Gerais	1.498.719	3.776.100
Argentina	São Paulo	425.688	1.415.850
Paraguay	Santa Catarina	123.104	763.765
Paraguay	Goiás	29.327	180.985
Uruguay	São Paulo	22.800	24.000
Paraguay	São Paulo	19.119	111.607
Paraguay	Paraná	14.997	79.943
Paraguay	Bahia	9.176	58.750
Germany	Espírito Santo	440	450
Turkey	Pará	171	205
Greece	Espírito Santo	47	30
Hong Kong	Rio Grande do Sul	28	25
Totals		2.143.616	6.411.710

Fig. 1: Main origins and destinations of fresh tomato exports to Brazil in 2017.

Conclusions and Outlook

The discoveries evidenced that the tomato is among the leaders of overuse of pesticides in Brazil, having the second largest world position in cultivated area and the first in volume of industrialization, and in a sample were found residues of HCH, an organochlorine of unauthorized use in Brazil.

I also came across law project No. 6299/2002, which seeks to change the pesticide inspection body, currently composed of Anvisa, Ibama and the Ministry of Agriculture, but with the approved law it would become inspected only by the National Technical Committee on Phytosanitary (CNTFito), the law project also proposes changes at several spots, such as production, import and labeling.

It was found that there was a release of 624 pesticides since Jair Bolsonaro took office, with around 30% of the ingredients of pesticide formation released in 2020 in Brazil being banned in Europe, generating an impact on exports.

In a study carried out by Instituto Butantã, at the request of the Ministry of Health, where Mônica Lopes Ferreira was coordinator, it was proven that there is no safe dose of pesticides, therefore, even if proven, the studies do not generate impacts of changes in position in the Legislative.

The World Health Organization (WHO), registered 20 thousand deaths per year, due to the consumption of pesticides and Brazil is the country with the highest consumption of pesticides since 2008. The Acephate used in table tomatoes has already been proven in relation to diseases, such as leukemias, non-hodking lymphomas and pancreas.

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