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## The Use of Agrochemicals and Mortality by Stomach Cancer in Brazil Between 1979 and 2015

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### Abstract

The intensive use of agrochemicals in Brazilian agriculture, typical of productivist production model and based on commodities for export, has been correlated to several environmental problems and to human health, among them stomach cancer. This study seeks to analyse the correlation between the use of pesticides per area harvested from the three main crops of the country (soybean, corn and sugarcane), which together correspond to more than 70 % of the planted area of the Brazil, and the annual mortality of stomach cancer. Through statistical analyses in an ecological study, with a qualitative and quantitative approach, from the data from 1979 to 2015, the correlation of the variables is inferred and the need for public policies that allow to make food sovereignty feasible, in order to allow the production of food that takes into account the respect for nature and for human life. The Brazilian dependence on pesticide use itself as an obstacle to the exercise of food security and sovereignty, curbing industrialisation, and imposing the subordination of the State to the power of multinationals. The use of pesticides in sugarcane, soybeans, and corn increased from 100,476,688 liters per harvested area in 1979 to 535,177,688 in 2015, while mortality from stomach cancer in Brazil increased from 8,602 cases to 14,265 in the same period. By correlating these data, this study concluded that the variables have a strong positive correlation. Consequently, the use of pesticides can be considered a risk factor for stomach cancer, setting up further evidence that the super dependent chemical production model needs to be rethought. For this reason, the pesticide needs to stop being just part of an (Agri)business to be analysed under the focus that led to its use: healthily maintaining life. Therefore, the government needs to develop public policies that guarantee constitutional rights to an ecologically balanced environment and the health and life of society. However, what has been verified in recent years, mainly in the Jair Bolsonaro government, is an increase in the use of pesticides in the country and in the quantity of authorised substances, totaling 475 in 2019 and 150 until May 2020.

**Keywords:** Agrochemicals, commoditisation, food sovereignty, stomach neoplasms