Use of pesticides in Brazil continues to grow; cases of contamination start to become evident and civil society launches national campaign

Update from the GM-Free Brazil Campaign

Brazil | Rio de Janeiro | April 18 2011

Another year passes and still Brazil maintains its ranking as the world’s largest consumer of pesticides, first attained in 2008. An unenviable record, the consequences of which are now starting to become clearer to the wider public.

According to data from the Union of Agrochemical Industries (Sindag), 986,500 tons of pesticides were consumed in 2008 and more than a million tons in 2009 (equivalent to 5.2 kg of agrochemical products per Brazilian per year). Although Sindag itself and other agribusiness sources issued statements commemorating these figures, exalting the use of agrochemicals as ‘the application of technology,’ little by little the national press began to publish news stories connecting the abuse of pesticides to food contamination, environmental damage and health issues. Undoubtedly because of the negative impact of these media reports, this year Sindag published no data on the volume of pesticides sold in 2010: it merely reported that the value of the sales achieved over the period was US$ 7.2 billions. It did, though, emphasize that this value represented an 9% increase over the previous year.

New research show the true scale of contamination now taking place

Research undertaken at the Federal University of Mato Grosso and published in March 2011 revealed that in Lucas do Rio Verde (Mato Grosso) even breast milk is contaminated by agrochemicals [1]. Lucas is the second largest grain producer in the state, which for its part is the second largest grain producer in the country. Milk samples were collected from 62 women between the 3rd and 8th week after delivery.

At least one type of agrochemical was found in 100% of samples. In 85% of cases between 2 and 6 types were encountered. One of the variables studied, miscarriage, was associated with the presence of three different pesticides.

The substance most frequently identified is DDE, a derivative of DDT, banned in Brazil in 1998 for provoking infertility in men and miscarriages in pregnant women.

In September 2010, a study undertaken by the same university in partnership with the Oswaldo Cruz Foundation found pesticide residues in the blood and urine of residents, artesian wells, and samples of air and rainwater taken from public schools in the municipalities of Lucas do Rio Verde and Campo Verde (another of the state’s large grain producers) [2].

Monitoring pools of water revealed that 32% contained pesticides. More than 40% of the rainwater samples analyzed were contaminated by pesticides. According to the researchers, much of this contamination comes from the heavy crop spraying carried out in the region.

Researchers have also investigated the presence of agrochemicals in water elsewhere in the country, including an important fruit-growing region that makes widespread use of irrigation [3]. This study was undertaken in the municipality of Limoeiro do Norte, in Ceará (northeast region), by the Federal University of Ceará. Twenty-four samples were collected from public and domestic taps and cisterns. Pesticides were detected in all the samples. At least five different ingredients were found in public cisterns alone, where water is stored to be distributed to homes. In one of these cisterns, eight types of pesticides were identified. At some collection points more than 12 different ingredients were detected in the same water sample.

Transgenics and pesticides – a vicious circle
The enormous quantity of herbicides applied to Brazil’s crops means that weeds are becoming ever more resistant to the technology, augmenting problems for farmers.

According to Embrapa, there are today 18 herbicide-resistant weed species found in the country. Five of these species are resistant to glyphosate (Coniza spp, Lolium multiflorum, Digitaria insularis and Euphorbia heterophylla) [4].

Development of glyphosate resistance among weeds is mainly caused by the widespread use of transgenic crops tolerant to the product. But, unsurprisingly, the same industry that created the RR technology and pushed for its dissemination is now hurrying to provide a solution to the anticipated problem: crops tolerant to new (and more toxic) products.

In June 2009 the US company Dow Agrochemical obtained permission from CTNBio (National Technical Commission on Biosafety, responsible for assessing and authorizing the release of GMOs in Brazil) to undertake field tests in the country for a new soy variety tolerant to application of the 2,4-D herbicide. The latter product, marketed in Brazil under the name ‘Tordon,’ is one of the two components of the herbicide known as ‘agent orange,’ manufactured by Dow and Monsanto.

In December 2009 CTNBio authorized the sale of GM soya tolerant to herbicides based on imidazolinone compounds, developed through a partnership involving BASF and Embrapa. These new seeds were also advocated as an alternative for controlling weeds no longer kept in check in the RR soya system due to the development of glyphosate resistance.

Following the same course, Coodetec, a cooperative based in Paraná, recently reported the development of a new variety of soya tolerant to herbicides based on sulphonylurea compounds [5].

In March 2011 it was reported that a partnership between the US firms Dow and Monsanto had produced a GM maize variety resistant to two herbicides, glyphosate and glufosinate. Called Powercore, the produce has already been approved by CTNBio [6].

Now Monsanto has signed a partnership agreement with BASF to develop crops tolerant to the herbicide dicamba produced by the latter (for which there are no products registered yet in Brazil). According to Monsanto, dicamba tolerance should be associated with glyphosate tolerance – in other words, farmers would be able to use both agrochemicals on the same crop. [7]

Clearly if his path is pursued, use of pesticides will only increase, as will the problems related to contamination of the environment, food and people.

Campaign against pesticides

Faced by this alarming reality, more than 30 entities from Brazil’s civil society, social movements, environmental organizations, students, organizations linked to health issues and groups of researchers launched the Permanent Campaign Against Agrochemicals and For Life. The campaign aims to stimulate a wide-ranging debate with the public on the lack of monitoring of the use, consumption and sale of agrochemicals and on the contamination of soils and water, as well as exposing the impacts of agrochemicals on the health of workers, rural communities and urban consumers.

Along with denouncing the harm caused by the companies and by the use of agrochemicals, we need to construct forms of curbing the use of agrochemicals and preventing their expansion.

In a context of climate change, energy crises and the depletion of natural resources, producing healthy food based on agroecological principles, on small farm properties, respecting nature and workers, is the only viable way of ensuring a better quality of life for current and future generations.
References (in Portuguese)


GM-FREE BRAZIL - Published by AS-PTA Agricultura Familiar e Agroecologia. The GM-Free Brazil Campaign is a collective of Brazilian NGOs, social movements and individuals.

AS-PTA an independent, not-for-profit Brazilian organisation dedicated to promoting the sustainable rural development. Head office: Rua da Candelária, 9/6º andar | CEP: 20.091-020, Centro, Rio de Janeiro, Brasil.

Phone: 0055-21-2253-8317 Fax: 0055-21-2233-363

This article can be found on the AS-PTA website at http://www.aspta.org.br/por-um-brasil-livre-de-transgenicos/updates

Should you have any comments, suggestions or questions, feel free to contact us at boletim@aspta.org.br

Do participate! Indicate this bulletin to a friend.

To subscribe email: boletim@aspta.org.br

====================================================================================================