Latinamerican, Mercosur and Imported Countries Regulations. Jacqueline M. CEA. Technological Laboratory of Uruguay, Montevideo, Uruguay , jcea@latu.org.uy

Mycotoxins attract worldwide attention because of the significant economic losses associated with their impact on human health, animal production and both domestic and international trade. Those mycotoxins that are currently considered to be worldwide importance are aflatoxins, trichothecenes, zearalenone, fumonisins, ochratoxin A, patulin (Coker, 2000). The knowledge that mycotoxins can have serious effects on humans and animals has led many countries to establish regulations on mycotoxins in food and feed in the last decades to safeguard the health of humans, as well as the economical interests of producers and traders. Setting mycotoxin regulations is a complex activity which involves many factors and interested parties. In 1995, 23 percent of the world's inhabitants were living in a region where no known mycotoxin regulations were in force. This percentage had decreased to 13 percent in 2003, due to a slight increase in coverage in Latin America and Europe, and more significant increases in Africa and Asia/Oceania.

The major Latin American agricultural crops (maize, wheat, coffee, cotton, soybeans, barley, sunflower, groundnuts and tree nuts, cocoa and dairy products) are highly susceptible to fungal contamination and mycotoxin production (Pineiro, 2004). Nineteen countries, accounting for 91 percent of the population of the region, were known to have specific mycotoxin regulations. Uruguay has the most detailed regulations, including limits for ergot alkaloids in feeds, which is rather unique in the mycotoxin regulatory world. The same for deoxynivalenol in wheat products and barley products.

MERCOSUR consists of Argentina, Brazil, Paraguay and Uruguay. These countries apply common limits for total aflatoxins in peanuts, maize and products thereof, and for aflatoxin M_1 in fluid and powdered milk. The MERCOSUR regulations for mycotoxins also include official methods of sampling and analysis.

In Europe, approximately 99 percent of the continent's population, were known to have specific mycotoxin regulations in 2003.Compared to other regions of the world, Europe has the most extensive and detailed regulations for mycotoxins in food. It is of interest to note that many of the EU candidate member countries have mycotoxin regulations, which are often more detailed than those currently in force in the EU.

Comparing the situation in 1995 and 2003, it appears that in 2003 more mycotoxins are regulated in more commodities and products, whereas tolerance limits generally remain the same or tend to decrease.

Whereas harmonized tolerance limits would be beneficial from the point of view of trade, this would not necessarily be the case from the point of view of (equal) human health protection around the world. Risks associated with mycotoxins depend on both hazard and exposure. The hazard of mycotoxins to individuals is probably more or less the same all over the world .Exposure is not the same because of differences in levels of contamination and dietary habits in various parts of the world. National governments or regional communities should encourage and fund activities that contribute to reliable exposure assessment of mycotoxins in their regions.(FAO Food and Nutrition paper 81)