BIOTECHNOLOGY, BIOSAFETY AND ENVIRONMENTAL PROTECTION

Patricia Machado Bueno Fernandes

Núcleo de Biotecnologia, Universidade Federal do Espírito Santo, Vitória, ES, Brazil

The regulation of the new Law of Biosafety (Law 11,105/2005) configured the regulatory landmark in the Brazilian scientific and technological development, establishing narrow bond between scientific and productive sector and the public administration. Safety rules and monitoring arrangements for construction, cultivation, production, manipulation, transport, transfer, import, export, storage, research, marketing, consumption, disposal to the environment and discarding of genetically modified organisms (GMO) and GMO derivatives were created, stimulating the scientific advance in biotechnology, life and the health protection of human being, animal and plant under the observance of the precaution principle for environment protection; aspects managed by the National Biosafety Council (CNBS), by the National Biosafety Technical Commission (CTNBio) and by the Biosafety Internal Commissions (CIBio). It is a common sense that extensive studies of the environmental benefits and risks associated with GMO are needed and that GMO should be designed and used in a way to reduce environmental risks. Nevertheless, it is undoubtable that GMO could play a positive role in sustainable agriculture, forest, aquaculture, bioremediation and environmental management, both in developed and developing countries. Moreover, the use of GMO within the context of scientific research is fully recognized and brings an enormous advantage on the understanding of cell function.

Keywords: genetically modified organism, sustainable agriculture, scientific research