

Plant Biotechnology in Slovakia and the legislation framework

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In the last three decades genetically modified organisms got to the centre of attention of scientists as well as producers, businessmen, politicians and non-governmental organizations. Divergent opinions and standpoints are confronted during this time, but research is going on and also the practical use of new findings. In Slovakia the biotechnology is being developed with different intensity for more than 20 years sporadically supported by the government via concentrated effort and financing. The attention is given to pharmaceutical use of biotechnology, plant biotechnology, biotechnology in animal production, then to the ethical and sociological aspects of biotechnology as well as to legislations and risk assessments and to the public perception.

The main clusters dealing with biotechnology mainly directed towards protection and improvement of human healths is concentrated in Bratislava. The main scientific potential for investigations in field of plant biotechnology is concentrated in Nitra, particularly at the Institute of Plant Genetics and Biotechnology of the Slovak Academy of Sciences. The projects going on at the IPGB SAS are aiming predominantly on improvement of resistance of some crop plants (potato, flax, fruit trees) against fungi and virus diseases. Experiments dealing with alteration of some quality traits in plants (lignin deposition in flax fibers) are also in progress, as well as development of reliable protocols for somatic and gametic embryogenesis in some crop plants /maize, wheat, barley, potato, flax/ and some woody plants /oak, fir, pinus/.

Biotechnology research is going on also at two universities located in Nitra - the Slovak Agricultural University and the University of the Constantine the Philosopher.

The next centre where the field of plant biotechnology is developed is in Piestany - the Institute of Plant Production. The third centre is located in east Slovakia in Kosice at the Pavol Jozef Safarik University. The main topic is focused on physiological, genetical, molecular biological and cryobiological study of selected medicinal plant species /*Hypericum perforatum* and *Taxus baccata*/ and is aimed at increasing productivity of secondary metabolites with pharmaceutical activities by cell and tissue culture.

For realization of the biotechnological research and to deal with GMOs in Slovakia there was a regulatory framework introduced. Act No 151/2002 on use of genetic technologies and genetically modified organisms known as "Act on GMOs" that came into force as of 1st April 2002 and the Implementing regulation No 252/2002 Coll. of the Act on GMOs as of June 1st, 2002 has to be followed. Both documents were prepared by the Ministry of the Environment of the Slovak Republic as competent authority on biosafety. Slovak Biosafety Committee has been established in accordance with the Act on GMOs. Members of the Slovak Biosafety Committee are representatives from Ministries of Agriculture, Health and Education, from the Slovak Academy of Sciences and from business sector as well.