

Science in the risk assessment¹

Jaroslav Drobník

Abstract

Risk is attached to any human activity. There is no zero risk in biotechnology neither of any new crop. As zero risk does not exist only relative risk can be estimated. This is possible only by comparing data of at least two comparable situations with and without the object under study. The risk of GM crop can be assessed by comparing study of agriculture employing GM crop with the study of agriculture without GM crop at the same situation and performed using the same method. The bans of Bt maize are classical examples of violating this rule. Risk is defined by the probability of harm. Thus by definition includes the probability term reflecting uncertainty resulting, e.g. from the limits of scientific knowledge. Therefore the introduction of sc. “precautionary principle” defined by COM(2000) 1 is superfluous and very vaguely defined in the document. It is misused by politicians for overriding scientific arguments. The lack of zero risk asks for setting the level of acceptable risk. This is generally derived by consensus from the ratio benefit/risk. As the EU legislation does not ask for benefit evaluation the acceptable risk is voluntary defined by politicians. Detail discussion is presented in the White Book issued by Czech scientists in June.

¹ Referát na 8th International Symposium in the Series RECENT ADVANCES IN PLANT BIOTECHNOLOGY: NEW DEVELOPMENTS IN GREEN GENE TECHNOLOGY 1-4 September, 2009 - Szeged, Hungary