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GMP-RAM v1.1: A PROPOSED SOFTWARE TOOL TO SUPPORT THE METHOD FOR RISK ASSESSMENT OF GENETICALLY MODIFIED PLANTS



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Short Abstract: GMP-RAM v1.1: A PROPOSED SOFTWARE TOOL TO SUPPORT THE METHOD FOR RISK ASSESSMENT OF GENETICALLY MODIFIED PLANTS KATIA REGINA EVARISTO DE JESUS¹; FÁBIO VIEIRA²; DENIS LIMA³ - 1 - Embrapa Environment, Jaguariúna – SP, Brazil; 2 - Embrapa Agriculture Informatics, Brazil; 3- Bayer Cropscience Ltda / Bioscience, Brazil.

Long Abstract:

GMP-RAM v1.1: A PROPOSED SOFTWARE TOOL TO SUPPORT THE METHOD FOR RISK ASSESSMENT OF GENETICALLY MODIFIED PLANTS

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An essential step in the development of products based upon genetically modified plants (GMP) is an assessment of safety, including an evaluation of potential impact of the crop and the practices related to its cultivation on the environment, human or animal health, in a comparative way with its parental or reference crop. Despite of the importance of the evaluation being currently done by risk assessment, the “GMP-RAM” (1) is the first electronic tool to evaluate risk assessment method for the evaluation of potential risks related to the use of genetically modified plants. The Software GMP-RAM is proposed to support the risk assessment method that aid to evaluate the safety of the genetically modified plants, representing (GMP). The proposed software like a support for the present method could represent a less subjective and more transparent process for risk assessment.

The Software GMP-RAM v. 1.1 is an electronic format of the worksheets that was created in Delphi 2006 Professional and could be accessed at: http://www.cnpma.embrapa.br/forms/gmp_ram.php3. This program presents two tools: i) worksheets for the compilation of Evidence of Risks and ii) Matrix of Assessment and Management. The first tool is used to identify and characterize potential hazards related to the use of a certain GMP. The preformatted worksheets allow attribution of values reflecting the level of risk and its significance in the context of the activity to be developed. Secondly, the Matrix provides a structure to observe the potential hazards in a visual format that can illustrate which management could be utilized to support the use of GMPs in a manner as safe as any other traditional technology. The software GMP-RAM provides an easy way to use this method. Using this electronic format is possible to attribute the values for the factors of moderation and the results of the indexes (Risk and Significance) will be calculated and

plotted in the Matrix automatically.

(1) JESUS, K. R. E.; LANNA, A. C.; VIEIRA, F. D.; ABREU, A. L.; LIMA, D. U. A proposed Risk Assessment Method for Genetically Modified Plants. Applied Biosafety, Vol. 11, issue no 2 or no 3, in press.