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GENETIC ANALYSIS RELATED TO ORGANIZED GENETIC CHANGES IN POTATO AND PROCESSED POTATOES

Beyhan Demirhan¹, Yunus Emre Arvas², Yilmaz Kaya^{1*} Fahrul Zaman Huyop¹⁻³

¹Ondokuz Mayıs University, Faculty of Agriculture, Department of Agricultural Biotechnology,
Samsun, Turkey

²Yildiz Technical University, Graduate School of Sciences, Department of Molecular Biology and
Genetics, Samsun, Turkey

³Department of Biosciences, Faculty of Science, Universiti Teknologi Malaysia, Johor Bahru,
Malaysia

ABSTRACT

Despite the controversy about the plants with genetically modified plants today, the planting areas of these plants are increasing every year. In recent years, products produced with genetic engineering technology and food products obtained from these products are located in the markets. Since the use of genetically modified products in the long run cannot be known about the environmental and human health effects, it is a legal requirement to produce them in a controlled manner. In this study, 16 Turkey purchased from edible potatoes and store in different genotypes obtained from potato institute 5 pieces treated potato product for the detection of genetic changes in genetic analysis was performed on the basis of foreign genes. The 35S promoter and NOS terminator, the patatin gene, the hygromycin resistance gene (hptII), and the cry3A gene were used as foreign genes, approved in the European Union and used as regulatory sequences in many transgenic strains. These sequences and genetic primers were subjected to qualitative PCR. According to the results of gel electrophoresis, in some samples bands were detected in the size of hptII resistance gene and synthetic cry3A gene.

Keywords: GMO; PCR; 35S; NOS