Membrane based detection of genetically modified organisms in some representatives food

Abstract

Recently, DNA-based techniques became very common for the detection of genetically modified organisms (GMOs) in food products. For rapid and easy detection of GMOs, polymerase chain reaction (PCR) screening methods.. which amplify common transgenic elements, are applied in routine analysis. Incorporation of PCR and membrane method introduced in this study offer an alternative detection of GMOs. I it this study, a total of 32 samples and three certified reference materials were tested for the existence of the 35S promoter of cauliflower mosaic virus (CaMV) and 5-enol-pyruvyl-shikimate-3-phosphate synthase (EPSPS) gene residues. Dot blot screening system introduced in this study can be routinely used as a semi-quantitative screening of GMOs. (c) 2005 Elsevier Ltd. All rights reserved.