04-1-43

Pepper Transformation by Disease Defense Related Genes

Yun Hee Lee, Ju Yeon Kim, Min Jung, Hyo Soon Kim, Yoon Sik Park, Soon Ho Choi, Seung Gyun Yang and Chee Hark Harn

Biotechnology Center, Nong Woo Bio Co., Ltd., Yeoju, Gyeonggi-do, 469-885, Korea

Objectives

To develop disease resistant peppers against pathogens

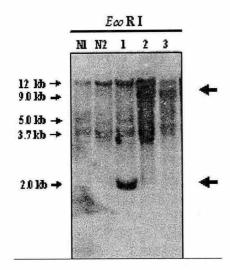
Materials and Methods

Materials: - commercially important inbred lines

Methods: - Agrobacterium-mediated transformation by CIT & CMSF

Results and Discussion

We transformedpeppers with several genes related to pathogen resistance. Those genes are *CMV-CP*, *CaWRKY*, *CaSAR8.2*, *CaPF1*, *GalUR*, and *PPI1*. The transformation has been successfully worked out with the highly efficient transformation rate. Some of them have already gone to T1 generation to test the resistance.



Genomic Southern of To plants (CaWRKY)