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Poster Abstract – G.01

EXPRESSION OF TWO MAL D 3 (NON-SPECIFIC LIPID TRANSFER PROTEINS) GENES IN FRUIT OF 'GALA' AND 'FLORINA'

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A non specific lipid transfer protein (nsLTP), called Mal d 3, is one of the major allergene in apple, which causes a class I food allergy. Two distinct genes, named *Mal d 3.01* and *Mal d 3.02*, were previously identified and mapped in homeologous segments of linkage groups 12 and 4.

Genomic sequences and cDNAs of both *Mal d 3* genes were cloned from two apple cultivars, 'Gala' and 'Florina'. Specific primers were disegned for the two genes, in order to study their expression in apple fruit by PCR analyses, in three different ways: end point, semi-quantitative and quantitative (Real Time). Levels of *Mal d 3.01* and *Mal 3.02* were determined in peel and flesh of apple as a function of apple growth and cultivar.