IDENTIFICATION AND CHARACTERIZATION OF A SEQUENCE FROM C. SINENSIS RELATED TO GENES OF THE MYC TRANSCRIPTION FACTOR FAMILY

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Anthocyanins are a class of pigments widespread in the various organs of most plants. The anthocyanin’s regulatory genes are responsible for regulating transcription of genes in the anthocyanin biosynthetic pathway. Moreover they play an important role in plant evolution. We have identified a sequence, csMyc2, from Moro [Citrus sinensis (L.) Osbeck], a blood orange, showing high homology with genes of the Myc transcription factor family. We have analysed the cDNAs, from both the blood and blond orange flesh, by SemiQ RT-PCR. Preliminary results seem to indicate a major expression of csMyc2, in the flesh of blood orange.

We are also tempting to construct a binary vector containing the Myb-like gene Rosea and the Myc-like gene Delila (both from Anthirrinum majus, kindly provided from K. Martin), in order to transform either fruits and young plantlets of lemon and orange.