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Relationship of Carotene and Xanthophyll Productive Strains and Their Progenies

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Gene *B* and gene *Del* involved in the biosynthesis of carotenoids, such as tunaxanthin, lutein and zeaxanthin, which are contained in the tomato strains and their hybrids were studied. It is known that gene *B* is involved in the biosynthesis of lycopene and transforms lycopene to β -carotene via β -carotene. This study revealed that gene *B* is also involved in the biosynthesis of a xanthophyll of the β -ionone end group, and increases the product. It is also known to block the biosynthesis of lycopene and produce δ and ϵ -carotene. It was revealed by the present study that gene *Del* is involved in the biosynthesis of lutein, a xanthophyll of the ϵ -ionone end group.

which was previously undetected in tomatoes was observed for the has thus confirmed that gene *Del* induces its production.

Keywords: [tomato](#), [xanthophylls](#), [tunaxanthin](#), [lutein](#), [lutein](#), [zeaxan](#)

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