

Mutation Associated with Orange Fruit Colour Increases Concentrations of β -carotene in a Sweet Pepper Variety (*Capsicum annuum* L.)

Sub-title: Biochemical and Molecular Characterization of Bulgarian Mutant Pepper Variety with a High-Added Value

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Combined sequence of the *CrtZ_{chr06}* gene (beta-carotene hydroxylase gene located on chromosome 6) in pepper - Oranzheva kapia, Pazardzhishka kapia 794 and Kurtovska kapia 1 (combined sequence of multiple sequenced clones in the 3 genotypes studied).

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GTCCACCTCCCGTACAAGTTATTACCGCCATAGCCCATTTCTCGGCCAAAACCCACTCC
AACAAACCCCATCAGTGTACCCATAACTCCGTTTCTCCTAATCTCGGCTCAATTCTGAG
GTGTAGAAGGAGACCCAGCTTCACTGTTTGCTTTGTTCTTGAGGATGACAAGTTCAAAC
CCAATTTGAGGCTGGGGAAGAAGATATTGAAATGAAGATTGAAGAGCAGATCTCAGCGAC
GCGTTTGGCGGAGAAATTGGCTAGGAAGAAATCGGAGAGGTTTACTTATCTTGTTGCTGC
GGTTATGTCTAGTTTTGGGATTACTTCCATGGCTGTTATGGCGGTTTATTACAGATTTTA
CTGGCAAATGGAGGTACTGGAACATTCCATAATCCCCAACTCTTCTTTTGGGACTT
AAATTTTATTGTAATTTTATTCTGTTTCGAGTGTAGGGTGGAGAAGTTCCTTTTCCGA
AATGTTTGGCACATTTGCTCTCTCTGTTGGTGCTGCTGTAAGTICCATTTCTGTCTTATT
ATGAGCTAGTAATTGTAAGATTAGATACTGGCCTAATTCATACCCCCAAAAGAGCTAGCC
GATGAGGAGAATATTGTTCAAGTCCGACCCATATCATTAAACCATCAATATGGACTTTTTC
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AAAATATTTTGAATCATTCTAGAATAGTTAACAAGAGAGTAAGTAAATAGCAGAGTT
GGTCTTCGGTGATCGATTTTAAATGTCTGATGAAAATTGAATTGGAATTCAGGTAGG
AATGGAGTTTGGGCTAGGTGGGCACATAAAGCGCTATGGCACGCCTCTTTATGGCACAT
GCACGAGGTTTGTGTGCTACTTATATGGATAGTAATTAAATGCCTTATTTATTCTTGAT
GAGAAAAGAATTACTTAAGATAATTTAGTACGTACTTTATATTAAGATTACTGTGCTTAC
ATTAAATTGTTGCAGTCACACCACAAACCAAGAGAAGGACCTTTCGAGCTGAACGATGTT
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TTTGCCATAATCAATGCTGTTCCAGCTATAGCCCTCCTTGACTATGGTTTCTTCCATAAA
GGCCTCATTCCCGGCCTCTGCTTCGGCGCTGTATGTCATCATTGGCTTGCACTTTTTT
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AATCCATAATGGACGTAATCTATATTTATAAACTTCAAAATTCCTTTTTTCATATAATGTA
AATGAATTGAAAGCAGTTAGATAGCTAAACATGTTGATCTTGCTCTAAGTCCCCCTCTAA
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GATGGCATAACATGTTTCGTTTCATGATGGTTTGGTTCACAAGAGATTCCCTGTTGGACCTGT
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GAATGCGATTTTTATGAAGTACTATTAATTGAAATTTGTTCATAAGATTTTCTAATGTAT
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