

Biosafety Clearing-House (BCH)

LIVING MODIFIED ORGANISM (LMO)


BCH-LMO-SCBD-15406-6

[? Decisions on the LMO ? Risk Assessments](#)

LAST UPDATED: 15 MAY 2013

Living Modified Organism identity


The image below identifies the LMO through its unique identifier, trade name and a link to this page of the BCH. Click on it to download a larger image on your computer. For help on how to use it go to the LMO quick-links page.



SYN-ØØØDA-9
Tomato Modified for delayed softening

CBD

<https://bch.cbd.int/database/record?documentID=15406>



Read barcode or type above URL into internet browser to access information on this LMO in the Biosafety Clearing-House © SCBD 2012

Name

Tomato Modified for delayed softening

EN

Transformation event

87-22/08 (Da)

Unique identifier

SYN-ØØØDA-9

Developer(s)

- **ORGANIZATION:** SYNGENTA | [BCH-CON-SCBD-14926-2](#)

ORGANIZATION

Syngenta

Website: <http://www.syngentaseeds.com>

Description

Tomato with delayed softening through sense suppression of polygalacturonase (PG) enzyme activity from insertion of the a partial polygalacturonase (pg) gene, a pectin degrading enzyme derived from tomato.

EN

Recipient Organism or Parental Organisms

The term "Recipient organism" refers to an organism (either already modified or non-modified) that was subjected to genetic modification, whereas "Parental organisms" refers to those that were involved in cross breeding or cell fusion.

[BCH-ORGA-SCBD-12079-5](#) ORGANISM | SOLANUM LYCOPERSICUM (TOMATO, SOLLC)

Crops

Point of collection or acquisition of the recipient organism or parental organisms

T7 line

EN

Related LMO(s)

[BCH-LMO-SCBD-15407-6](#) | SYN-0000F-1 - Tomato Modified for delayed softening | Changes in physiology and/or production - Ripening Resistance to antibiotics - Kanamycin
[BCH-LMO-SCBD-15405-5](#) | SYN-0000B-6 - Tomato Modified for delayed softening | Changes in physiology and/or production - Ripening Resistance to antibiotics - Kanamycin

Characteristics of the modification process

Vector

pJR16S

EN

Techniques used for the modification

Agrobacterium-mediated DNA transfer

Genetic elements construct

P-35S-CaMV 0.530 kb	CS-pg-SOLLC 0.730 kb	T-nos-RHIRD 0.250 kb
P-nos-RHIRD 0.210 kb	CS-nptII-ECOLX 0.800 kb	T-nos-RHIRD 0.260 kb

Introduced or modified genetic element(s)

Some of these genetic elements may be present as fragments or truncated forms. Please see notes below, where applicable.

[BCH-GENE-SCBD-15001-5](#) NEOMYCIN PHOSPHOTRANSFERASE II | (BACTERIA) |

Protein coding sequence | Resistance to antibiotics (Kanamycin)

[BCH-GENE-SCBD-15015-6](#) POLYGALACTURONASE GENE | (TOMATO) |

Protein coding sequence | Changes in physiology and/or production (Ripening)

[BCH-GENE-SCBD-100287-7](#) CAMV 35S PROMOTER |

Promoter

[BCH-GENE-SCBD-100269-8](#) NOPALINE SYNTHASE GENE TERMINATOR |

Terminator

[BCH-GENE-SCBD-100270-6](#) NOPALINE SYNTHASE GENE PROMOTER |

Promoter

Notes regarding the genetic elements present in this LMO

Southern blot and PCR analysis indicated that a single intact copy of the T-DNA was inserted into eh host genome

EN

LMO characteristics

Modified traits

Resistance to antibiotics

Kanamycin

Changes in physiology and/or production

Ripening

Additional Information

Additional Information

Reduced PG expression decreases the breakdown of pectin and leads to fruit with slowed cell wall breakdown, better viscosity characteristics and delayed softening. Tomato lines B, Da and F have improved harvest and processing properties that allow the transgenic tomatoes to remain longer on the vine to develop their natural flavour, maintain their firmness for shipping and produce a thicker consistency in processing.

Other relevant website addresses and/or attached documents

? [87-22/08 \(Da\) - CERA](#) (*English*)

? [PG Tomato - Syngenta.pdf](#) (*English*)

BCH-LMO-SCBD-15406-6

Further Information

Questions about the Cartagena Protocol on Biosafety or the operation of the Biosafety Clearing-House may be directed to the Secretariat of the Convention on Biological Diversity.

Secretariat of the Convention on Biological Diversity

413 rue Saint-Jacques, suite 800

Montreal, Québec, H2Y 1N9

Canada

Fax: +1 514 288-6588

Email: secretariat@cbd.int