LIVING MODIFIED ORGANISM (LMO)

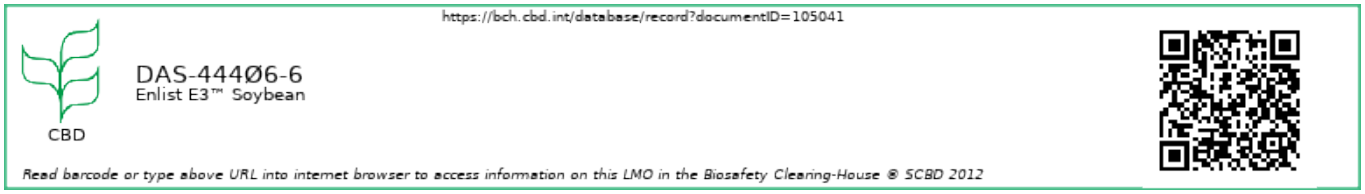
BCH-LMO-SCBD-105041-3

? Decisions on the LMO ? Risk Assessments

LAST UPDATED: 17 AUG 2017

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.



Name

Enlist E3™ Soybean | EN

Transformation event

DAS-44406-6

Unique identifier

DAS-444Ø6-6

Developer(s)

- ORGANIZATION: DOW AGROSCIENCES | BCH-CON-SCBD-14939-1

ORGANIZATION

Dow AgroSciences
Website: http://www.dowagro.com/homepage/index.htm

Description

DAS-44406-6 soybean was modified with the insertion of a gene encoding aryloxyalkanoate dioxygenase and phosphinothricin N-acetyltransferase to confer tolerance to the herbicides 2,4-dichlorophenoxyacetic acid (2,4-D) and glufosinate respectively. Further more a gene encoding a modified version of the EPSPS gene was inserted to confer tolerance to glyphosate. | 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-10453-6 ORGANISM | GLYCINE MAX (SOYBEAN, SOYA BEAN, SOYA, SOYBN)

Crops

Characteristics of the modification process

Vector

pDAB8264 EN

Techniques used for the modification

Agrobacterium-mediated DNA transfer

Genetic elements construct

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-104802-5 POLYUBIQUITIN10 GENE PROMOTER | (THALE CRESS)

Promoter

BCH-GENE-SCBD-104805-2 ARYLOXYALKANOATE DIOXYGENASE GENE

Protein coding sequence | Resistance to herbicides

BCH-GENE-SCBD-104806-3 ORF23 3' UNTRANSLATED REGION

Terminator

BCH-GENE-SCBD-101900-5 CSVMV PROMOTER

Promoter

BCH-GENE-SCBD-15002-4 PHOSPHINOTHRICIN N-ACETYLTRANSFERASE GENE

Protein coding sequence | Resistance to herbicides (Glufosinate)

BCH-GENE-SCBD-104807-2 ORF1 3' UNTRANSLATED REGION

Terminator

BCH-GENE-SCBD-104795-4 RB7 MATRIX ATTACHMENT REGION | (TOBACCO PLANT)

Enhancer

BCH-GENE-SCBD-104646-4 HISTONE H4 GENE 3' UTR | (THALE CRESS)

Terminator

BCH-GENE-SCBD-46333-8 5-ENOLPYRUVYLSHIKIMATE-3-PHOSPHATE SYNTHASE | (MAIZE, CORN)

Protein coding sequence | Resistance to herbicides (Glyphosate)

BCH-GENE-SCBD-101419-4 OPTIMIZED TRANSIT PEPTIDE

Transit signal

BCH-GENE-SCBD-104647-3 HISTONE H4 GENE PROMOTER | (THALE CRESS)

Promoter

BCH-GENE-SCBD-104648-2 HISTONE H3 GENE II INTRON 1 | (THALE CRESS)

Intron

Notes regarding the genetic elements present in this LMO

Molecular characterization by Southern blot analyses of DAS-444Ø6-6 soybean confirmed that a single, intact DNA insert containing the aad-12, 2mepsps and pat gene expression cassettes was stably integrated into the soybean genome. Southern blot analyses also confirmed the absence of the plasmid backbone DNA in DAS-444Ø6-6 soybean. The integrity of the inserted DNA was demonstrated in five different breeding generations. Data from segregating generations confirmed the predicted Mendelian inheritance pattern. These data confirmed the stability of DAS-444Ø6-6 soybean during traditional breeding procedures. The H4A748 promoter also includes an intron from the Histone 3 gene from Arabidopsis thaliana.	EN

LMO characteristics

Modified traits

Resistance to herbicides
- Glufosinate
- Glyphosate

Other
- Tolerance to 2,4-Dichlorophenoxyacetic acid

Common use(s) of the LMO

Food
Feed

Additional Information

Other relevant website addresses and/or attached documents

? DAS-444Ø6-6 - APHIS *(English)*

? DAS-444Ø6-6 - OECD *(English)*

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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.

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