

Biosafety Clearing-House (BCH)

RISK ASSESSMENT GENERATED BY A REGULATORY PROCESS (RA)

BCH-RA-EUR-110990-3

LAST UPDATED: 21 JAN 2021

General information

Country

[European Union](#)

PARTY TO THE CARTAGENA PROTOCOL ON BIOSAFETY

ENTRY INTO FORCE: 11 SEP 2003

Title of the risk assessment

Scientific Opinion on an application by Syngenta (EFSA-GMO-DE-2009-66) for placing on the market of herbicide tolerant and insect resistant maize Bt11 × MIR162 × MIR604 × GA21 and subcombinations independently of their origin for food and feed uses, import and processing under Regulation (EC) No 1829/20031

EN

Date of the risk assessment

29 Oct 2015

Competent National Authority(ies) responsible for the risk assessment

- [COMPETENT NATIONAL AUTHORITY: BCH-CNA-EUR-100918-4](#) | [BCH-CNA-EUR-100918-4](#)

COMPETENT NATIONAL AUTHORITY

European Food Safety Authority (EFSA) GMO Panel
Via Carlo Magno 1A
Parma
43126, Italy
Phone: +39 0521 036 666
Email: GMO_secretariat_applications@efsa.europa.eu,
international.cooperation@efsa.europa.eu
Website: <http://www.efsa.europa.eu/>

Contact details of the main responsible risk assessor

- [PERSON: DR. ANA AFONSO](#) | [BCH-CON-EU-107908-6](#)

PERSON

Dr. Ana Afonso
Head of Unit, GMO Unit
Via Carlo Magno 1A
Parma, PR

43126, Italy

Phone: +39 0521 036 666

Email: GMO_secretariat_applications@efsa.europa.eu,
international.cooperation@efsa.europa.eu

Website: <https://www.efsa.europa.eu/>

RELATED ORGANIZATION

Risk assessment details

Living modified organism(s)

[BCH-LMO-SCBD-101252-11](#) | SYN-BT011-1 x SYN-IR162-4 x SYN-IR604-5 x MON-00021-9 - Agrisure Viptera® 4 Maize | Mannose tolerance Resistance to diseases and pests - Insects - Coleoptera (beetles) - Western corn rootworm (*Diabrotica virgifera*), Lepidoptera (butterflies and moths) Resistance to herbicides - Glufosinate, Glyphosate Selectable marker genes and reporter genes
[Show detection method\(s\)](#)

[BCH-LMO-SCBD-101251-11](#) | SYN-BT011-1 x SYN-IR162-4 x MON-00021-9 - Agrisure® Viptera™ 3110 Maize | Mannose tolerance Resistance to diseases and pests - Insects - Lepidoptera (butterflies and moths) Resistance to herbicides - Glufosinate, Glyphosate Selectable marker genes and reporter genes
[Show detection method\(s\)](#)

[BCH-LMO-SCBD-43635-9](#) | SYN-BT011-1 x SYN-IR604-5 x MON-00021-9 - Agrisure™ 3000GT Maize | Syngenta Crop Protection AG | Mannose tolerance, Resistance to diseases and pests (Insects, Coleoptera (beetles), Lepidoptera (butterflies and moths), European corn borer (*Ostrinia nubilalis*)), Resistance to herbicides (Glufosinate, Glyphosate), Selectable marker genes and reporter genes
[Show detection method\(s\)](#)

[BCH-LMO-SCBD-104749-3](#) | SYN-BT011-1 x SYN-IR162-4 - Insect Resistant Maize | Syngenta Crop Protection AG | Resistance to diseases and pests (Insects, Lepidoptera (butterflies and moths)), Resistance to herbicides (Glufosinate), Selectable marker genes and reporter genes
[Show detection method\(s\)](#)

[BCH-LMO-SCBD-43624-10](#) | SYN-BT011-1 x SYN-IR604-5 - Agrisure™ CB/LL/RW maize | Resistance to diseases and pests (Insects, Coleoptera (beetles), Western corn rootworm (*Diabrotica virgifera*), Lepidoptera (butterflies and moths), European corn borer (*Ostrinia nubilalis*)), Resistance to herbicides (Glufosinate), Selectable marker genes and reporter genes
[Show detection method\(s\)](#)

[BCH-LMO-SCBD-16121-8](#) | SYN-BT011-1 x MON-00021-9 - YieldGard™ Roundup Ready™ maize | Resistance to diseases and pests - Insects - Lepidoptera (butterflies and moths) Resistance to herbicides - Glufosinate, Glyphosate
[Show detection method\(s\)](#)

[BCH-LMO-SCBD-43630-9](#) | SYN-IR604-5 x MON-00021-9 - Agrisure™ RW Rootworm-Protected Roundup Ready™ maize | Syngenta Crop Protection AG | Mannose tolerance, Resistance to diseases and pests (Insects, Coleoptera (beetles)), Resistance to herbicides (Glyphosate), Selectable marker genes and reporter genes
[Show detection method\(s\)](#)

[BCH-LMO-SCBD-110983-1](#) | SYN-BT011-1 x SYN-IR162-4 x SYN-IR604-5 - Insect resistant, herbicide

tolerant maize | Syngenta France SAS | Resistance to diseases and pests (Insects, Coleoptera (beetles), Lepidoptera (butterflies and moths)), Resistance to herbicides (Glufosinate), Selectable marker genes and reporter genes

[Show detection method\(s\)](#)

BCH-LMO-SCBD-110984-2 | SYN-IR162-4 x SYN-IR604-5 x MON-00021-9 - Insect resistant, herbicide tolerant maize | Syngenta France SAS | Resistance to diseases and pests (Insects, Coleoptera (beetles), Lepidoptera (butterflies and moths)), Resistance to herbicides (Glyphosate), Selectable marker genes and reporter genes

[Show detection method\(s\)](#)

BCH-LMO-SCBD-110985-1 | SYN-IR162-4 x SYN-IR604-5 - Insect resistant maize | Syngenta France SAS | Resistance to diseases and pests (Insects, Coleoptera (beetles), Lepidoptera (butterflies and moths)), Selectable marker genes and reporter genes

[Show detection method\(s\)](#)

BCH-LMO-SCBD-110986-3 | SYN-IR162-4 x MON-00021-9 - Insect resistant, herbicide tolerant maize | Syngenta France SAS | Resistance to diseases and pests (Insects, Lepidoptera (butterflies and moths)), Resistance to herbicides (Glyphosate), Selectable marker genes and reporter genes

[Show detection method\(s\)](#)

Scope of the risk assessment

LMOs for direct use as food

LMOs for direct use as feed

LMOs for processing

Risk assessment report / summary

? [European Food Safety Authority \(EFSA\) \(English \)](#)

? [EU Risk Assessment Maize Bt11xMIR162xMIR604xGA21 EFSA Opinion.pdf \(English \)](#)

Methodology and points to consider

LMO detection and identification methods proposed

Detection methods for the single events maize Bt11, MIR162, MIR604 and GA21 and methods for the stack (Bt11xMIR162xMIR604xGA21) respectively validated and verified by the European Union Reference Laboratory for GM Food and Feed (EURL GMFF) are available at <http://gmo-crl.jrc.ec.europa.eu/StatusOfDossiers.aspx>

EN

Information sharing with other databases

Is this risk assessment related to an LMO for commercial use?

No

Should this risk assessment be forwarded to the OECD Secretariat for possible inclusion in the [BioTrack Product Database](#)?

No

Is this risk assessment related to food safety?

No

Was it conducted in accordance with the Codex Alimentarius *Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants*?

No

Should this information be forwarded to the Secretariat of the [FAO GM Foods Platform](#)?

No

Additional Information

Other relevant website addresses and/or attached documents

- ? [EURL GMFF](#) (*English*)
- ? [EU Detection Method Maize \(Bt11xMIR162xMIR604xGA21\) Verified.pdf](#) (*English*)
- ? [EU Detection Method Maize Bt11.pdf](#) (*English*)
- ? [EU Detection Method Maize MIR162.pdf](#) (*English*)
- ? [EU Detection Method Maize MIR604.pdf](#) (*English*)
- ? [EU Detection Method Maize GA21.pdf](#) (*English*)
- ? [GMOMETHODS: European Union database of reference methods for GMO analysis](#) (*English*)

[BCH-RA-EUR-110990-3](#)

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