

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 44<sup>th</sup> meeting of the Food Enzymes WG 2014-2018

Held on 19/06/2018 – 21/06/2018, Parma

(Agreed on 27/06/2018)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), Andrew Chesson, Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, André Penninks, Andrew Smith, Henk van Loveren, Davor Želježić, Holger Zorn

#### b) European Commission representative:

**DG SANTE:** none

#### c) EFSA:

**FIP Unit:** Jaime Aguilera, Magdalena Andryszkiewicz, Giovanni Bernasconi, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Annamaria Rossi

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Francesca Marcon (all days), Jannavi Srinivasan (second day absent and 19/06 am via TC) and Christina Tlustos (second day absent and 19/06 am via TC).

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Scientific topics for discussion

### 4.1. Glucose oxidase from a genetically modified strain of *Aspergillus niger* (ZGL) ([EFSA-Q-2013-01005](#))

The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 4.2. Triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* (LFS) ([EFSA-Q-2014-00325](#))

The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 4.3. Endo-1,4-beta-xylanase from a genetically modified strain of *Trichoderma reesei* (DP-Nzd22) ([EFSA-Q-2014-00667](#))

The WG discussed the molecular parts of the opinion and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 4.4. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-OC) ([EFSA-Q-2014-00922](#))

The WG discussed the molecular parts of the opinion and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **4.5. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-SO) ([EFSA-Q-2015-00046](#))**

The WG discussed the molecular parts of the opinion and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.6. Xylanase from a genetically modified strain of *Bacillus subtilis* (LMG S-24584) ([EFSA-Q-2015-00065](#))**

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

#### **4.7. Maltogenic amylase from a genetically modified strain of *Escherichia coli* (BLASC) ([EFSA-Q-2015-00446](#))**

The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.8. Glucan 1,4-alpha-maltotetrahydrolase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzf24) ([EFSA-Q-2015-00448](#))**

The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.9. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzb54) ([EFSA-Q-2015-00666](#))**

The WG discussed the molecular parts of the opinion and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.10. Alpha-amylase from a genetically modified strain of *Trichoderma reesei* (DP-Nzb48) ([EFSA-Q-2015-00681](#))**

The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.11. Acetolactate decarboxylase from a genetically modified strain of *Bacillus licheniformis* (strain NZYM-JB) ([EFSA-Q-2016-00031](#))**

The draft opinion was not discussed due to the lack of time.

#### **4.12. Glucan 1,4-alpha-maltotetrahydrolase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzr46) ([EFSA-Q-2016-00095](#))**

The WG discussed the molecular parts of the opinion and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5. AOB**

None

**6. Next meeting**

For further agreement.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 43<sup>rd</sup> meeting of the Food Enzymes WG 2014-2018

Held on 04/06/2018, Parma

(Agreed on 05/06/2018)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (chair), Christina Tlustos

#### b) Hearing Expert<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

- FIP Unit: Yi Liu, Christine Horn

### 1. Welcome and apologies for absence

The unit staff welcomed all participants.

Apology for absence was received from Karl-Heinz Engel.

### 2. Adoption of agenda

The agenda items were adopted without change.

### 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:

<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **4. FEIM related documents ([EFSA-Q-2018-00087](#))**

##### **4.1. Input technical data for FEIM-baking and FEIM-brewing**

Technical factors that are used in the dietary exposure assessment to food enzymes were reviewed and aligned to those in the Raw Primary Commodity Model<sup>4</sup>. The outcome will be used to develop two process-specific intake models - FEIM-baking and FEIM-brewing.

##### **4.2 Call-for-data**

The review and processing of input data following the 2<sup>nd</sup> call-for-data (cereal-based processes and savoury snacks processing) has been completed.

The 3<sup>rd</sup> call-for-data is under preparation, it concerns food enzymes used in processing milk and dairy products.

#### **5. Next meetings**

The next meeting is scheduled for 19-21 June 2018. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

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<sup>4</sup> The model was under development and was not yet validated at the time of this publication. Therefore, it cannot be excluded that some factors may change in the final version of the EFSA Raw Primary Commodity Model.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 42<sup>nd</sup> meeting of the Food Enzymes WG 2014-2018

Held on 10/04/2018 – 11/04/2018, Parma

(Agreed on 20/04/2018)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), Andrew Chesson, Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andrew Smith, Christina Tlustos, Davor Želježić

#### b) European Commission representative:

**DG SANTE:** none

#### c) EFSA:

**FIP Unit:** Jaime Aguilera, Magdalena Andryszkiewicz, Giovanni Bernasconi, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Claudia Roncancio Peña, Annamaria Rossi

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Henk van Loveren (all days), Jannavi Srinivasan (second day) and Holger Zorn (all days).

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Scientific topics for discussion

### 4.1. Glucose oxidase from a genetically strain of *Apergillus oryzae* (strain NZYM-KP) ([EFSA-Q-2013-00687](https://www.efsa.europa.eu/en/keydocs/docs/2013-00687))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 4.2. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-SB) ([EFSA-Q-2014-00413](https://www.efsa.europa.eu/en/keydocs/docs/2014-00413))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 4.3. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (NZYM-AV) ([EFSA-Q-2014-00794](https://www.efsa.europa.eu/en/keydocs/docs/2014-00794))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 4.4. Xylanase from *Bacillus pumilus* (BLXSC) ([EFSA-Q-2014-00844](https://www.efsa.europa.eu/en/keydocs/docs/2014-00844))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### **4.5. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzb44)** ([EFSA-Q-2015-00836](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.6. Glucan 1,4-alpha-glucosidase from a genetically modified strain of *Trichoderma reesei* (DP-Nzh49)** ([EFSA-Q-2016-00094](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.7. Glucan 1,4-alpha-glucosidase from a genetically modified strain of *Trichoderma reesei* (DP-Nzh34)** ([EFSA-Q-2016-00097](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.8. Alpha-amylase from *Geobacillus stearothermophilus* (DP-Gzb47)** ([EFSA-Q-2016-00145](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

#### **4.9. Isoamylase from *Pseudomonas amyloclavata*** ([EFSA-Q-2016-00524](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### **5. AOB**

None

### **6. Next meeting**

It will be held on 19 – 20 June 2018 in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 41<sup>st</sup> meeting of the Food Enzymes WG 2014-2018

Held on 20/03/2018 – 21/03/2018, Parma

(Agreed on 10/04/2018)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), Andrew Chesson, Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Christina Tlustos, Henk van Loveren, Davor Želježić, Holger Zorn

#### b) European Commission representative:

**DG SANTE:** none

#### c) EFSA:

**FIP Unit:** Jaime Aguilera, Magdalena Andryszkiewicz, Giovanni Bernasconi, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Annamaria Rossi

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Andy Smith and Jannavi Srinivasan (all days).

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

It was reported that the opinion on endo-1,4-beta-xylanase from a genetically modified strain of *Aspergillus niger* (XEA) was adopted at the CEF Panel meeting in March.

## 5. Scientific topics for discussion

### 5.1. Glucose oxidase from a genetically strain of *Aspergillus oryzae* (strain NZYM-KP) ([EFSA-Q-2013-00687](#))

The opinion was not discussed due to the lack of time.

### 5.2. Alpha amylase from a genetically modified strain of *Aspergillus niger* (NZYM-MC) ([EFSA-Q-2014-00306](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 5.3. Glucoamylase from a genetically modified strain of *Aspergillus niger* (NZYM-BF) ([EFSA-Q-2014-00307](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 5.4. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-SB) ([EFSA-Q-2014-00413](#))

The opinion was not discussed due to the lack of time.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **5.5. Beta-amylase from Barley (*Hordeum vulgare*) ([EFSA-Q-2014-00731](#))**

The WG discussed the suggestions made by the CEF Panel concerning the allergenicity assessment, and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

#### **5.6. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (NZYM-AV) ([EFSA-Q-2014-00794](#))**

The opinion was not discussed due to the lack of time.

#### **5.7. Beta-glucanase, xylanase and cellulase from *Humicola insolens* (NZYM-ST) ([EFSA-Q-2014-00795-796-797](#))**

The opinion was not discussed due to the lack of time.

#### **5.8. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-OC) ([EFSA-Q-2014-00922](#))**

The opinion was not discussed due to the lack of time.

#### **5.9. Maltogenic amylase produced by a genetically modified strain of *Bacillus subtilis* (NZYM-SO) ([EFSA-Q-2015-00046](#))**

The opinion was not discussed due to the lack of time.

#### **5.10. Glucoamylase from a genetically modified strain of *Aspergillus niger* (NZYM-BW) ([EFSA-Q-2015-00128](#))**

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

#### **5.11. 4-Phytase from a genetically modified strain of *Trichoderma reesei* (DP-Nzt55) ([EFSA-Q-2015-00665](#))**

The opinion was not discussed due to the lack of time.

#### **5.12. Glucan 1,4-alpha-glucosidase from a genetically modified strain of *Trichoderma reesei* (DP-Nzh49) ([EFSA-Q-2016-00094](#))**

The opinion was not discussed due to the lack of time.

### **6. AOB**

The outcome of the 40<sup>th</sup> WG meeting regarding dietary exposure assessment was shared with all experts.

### **7. Next meeting**

It will be held on 10 – 11 April 2018 in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 40<sup>th</sup> meeting of the Food Enzymes WG 2014-2018

Held on 08/03/2017, Parma

(Agreed on 19/03/2018)

### Participants

**a) Working Group Experts:**

- Karl-Heinz Engel (Chair), Christina Tlustos

**b) Hearing Expert<sup>1</sup>:**

- None

**c) European Commission and/or Member States representatives:**

- None

**d) EFSA:**

- FIP Unit: Yi Liu, Christine Horn
- DATA Unit: Davide Arcella

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 1. Welcome and apologies for absence

The unit staff welcomed all participants.

Apology for absence was received from Karl-Heinz Engel.

## 2. Adoption of agenda

The agenda items were adopted without change.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. FEIM related documents ([EFSA-Q-2018-00087](#))

### 4.1. Documentations for the FEIM release

Draft documents were finalised. They will be presented to the Panel at the next meeting.

### 4.2 Call-for-data

A year after the closure of the 1<sup>st</sup> call-for-data, additional feedback was received for the baking processes. Further discussion on the use of this data is needed.

The deadline of the 2<sup>nd</sup> call-for-data was reached. EFSA will soon finalise.

## 5. Ascorbate oxidase from *Cucurbita pepo* and *Cucurbita moschata* ([EFSA-Q-2015-00825](#))

Additional information received in February was discussed. The opinion will be finalised in due course.

## 6. Next meetings

It will be held on 20-21 March 2018 in Parma. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 39<sup>th</sup> meeting of the Food Enzymes WG 2014-2018

Held on 13/02/2018 – 14/02/2018, tele-meeting

(Agreed on 23/02/2018)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), Andrew Chesson, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andy Smith, Jannavi Srinivasan, Christina Tlustos, Henk van Loveren, Davor Želježić, Holger Zorn

#### b) European Commission representative:

**DG SANTE:** none

#### c) EFSA:

**FIP Unit:** Margarita Aguilera-Gómez, Ana Gomes, Christine Horn, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Annamaria Rossi

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Boet Glandorf (all days).

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

It was reported that the following scientific opinions on the food enzymes: aqualysin 1 from a genetically modified strain of *Bacillus subtilis* (LMGS 25520) (2014-00920), maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-SM) (2015-00096), xylanase from a genetically modified *Bacillus subtilis* (strain LMG S-27588) (2015-00408) and glucan 1,4- $\alpha$ -maltohydrolase from a genetically modified *Bacillus subtilis* (strain MAM) (2013-00790) were adopted at the CEF Panel meeting in January.

## 5. Scientific topics for discussion

### 5.1. Glucose oxidase from a genetically modified strain of *Aspergillus niger* (ZGL) ([EFSA-Q-2013-01005](#))

The WG discussed the technical parts of the opinion and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 5.2. Triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* (LFS) ([EFSA-Q-2014-00325](#))

The WG discussed the technical parts of the opinion and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 5.3. Alpha-amylase from a genetically modified strain of *Bacillus subtilis* (NBA) ([EFSA-Q-2014-00912](#))

The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



**5.4. Endo-1,4-beta-xylanase from a genetically modified strain of *Aspergillus niger* (XEA) ([EFSA-Q-2015-00045](#))**

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

**5.5. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (NZYM-AN) ([EFSA-Q-2015-00084](#))**

The WG discussed the allergenicity part of the opinion and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

**5.6. Glucose isomerase from *Streptomyces murinus* (strain NZYM-GA) ([EFSA-Q-2016-00032](#))**

The WG discussed additional information received and identified further questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.7. Glucan 1,4-alpha-maltotetrahydrolase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzr46) ([EFSA-Q-2016-00095](#))**

The opinion was not discussed due to the lack of time.

**6. AOB**

None

**7. Next meeting**

It will be held on 8 March 2018.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 38<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 08/01/2018 – 11/01/2018, Parma

(Agreed on 25/01/2018)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), Andrew Chesson, Lieve Herman, Boet Glandorf, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andy Smith, Jannavi Srinivasan, Christina Tlustos, Henk van Loveren, Davor Želježić, Holger Zorn

#### b) European Commission representative:

**DG SANTE:** Jiri Sochor (via tele-conference)

#### c) EFSA:

**FIP Unit:** Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Joaquim Maia, Annamaria Rossi

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Jannavi Srinivasan (10/01), Henk van Loveren (9/01 whole day and 10/01 pm).

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

It was reported that the scientific opinion 2013-00897 on the food enzyme peroxidase obtained from soybean (*Glycine max*) hulls was published in December 2017.

## 5. Scientific topics for discussion

### 5.1. Glucose oxidase from a GM strain of *Aspergillus oryzae* (strain NZYM-KP) ([EFSA-Q-2013-00687](#))

The WG discussed molecular parts of the opinion. The discussion will be continued at a future WG meeting.

### 5.2. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-MC) ([EFSA-Q-2014-00306](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 5.3. Glucoamylase from a genetically modified strain of *Aspergillus niger* (NZYM-BF) ([EFSA-Q-2014-00307](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

**5.4. Alpha-amylase from a genetically modified strain of *Aspergillus niger*** (NZYM-SB) ([EFSA-Q-2014-00413](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.5. Endo-1,4-beta-xylanase from a genetically modified strain of *Trichoderma reesei*** (DP-Nzd22) ([EFSA-Q-2014-00667](#))

The WG discussed the toxicological parts of the opinion. The discussion will be continued at a future WG meeting.

**5.6. Beta-glucanase from *Humicola insolens*** (NZYM-ST) ([EFSA-Q-2014-00795-796-797](#))

The WG discussed the toxicological parts of the opinion. The discussion will be continued at a future WG meeting.

**5.7. Aqualysin 1 from a genetically modified strain of *Bacillus subtilis*** (LMGS 25520) ([EFSA-Q-2014-00920](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

**5.8. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis*** (NZYM-SM) ([EFSA-Q-2015-00096](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

**5.9. Triacylglycerol lipase from a GM strain of *Hansenula polymorpha*** (strain DP-Jzk33) ([EFSA-Q-2015-00374](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.10. Lysophospholipase from a genetically modified strain of *Trichoderma reesei*** (RF7206) ([EFSA-Q-2015-00410](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.11. Maltogenic amylase from a genetically modified strain of *Escherichia coli*** (BLASC) ([EFSA-Q-2015-00446](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.12. Alpha-amylase from a genetically modified strain of *Trichoderma reesei* (DP-Nzb48) ([EFSA-Q-2015-00681](#))**

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.13. Acetolactate decarboxylase from a genetically modified strain of *Bacillus licheniformis* (strain NZYM-JB) ([EFSA-Q-2016-00031](#))**

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.14. Glucan 1,4-alpha-glucosidase from a genetically modified strain of *Trichoderma reesei* (DP-Nzh49) ([EFSA-Q-2016-00094](#))**

The WG discussed toxicological part of the opinion. The discussion will be continued at a future WG meeting.

**6. AOB**

None

**7. Next meeting**

It will be held on 13 - 14 February 2018 (tele-meeting).

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

**Minutes of the 37<sup>th</sup> meeting of the Food Enzymes WG 2014-2017**

**Held on 05/12/2017 – 06/12/2017, Giessen (Germany)**

**(Agreed on 18/12/2017)**

## **Participants**

### **a) Working Group Experts:**

Karl-Heinz Engel (Chair), Andrew Chesson, Klaus-Dieter Jany, Francesca Marcon, André Penninks, Andy Smith, Holger Zorn, Davor Želježić

### **b) European Commission representative:**

None

### **c) EFSA:**

**FIP Unit:** Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Annamaria Rossi

### **d) Hearing Expert:**

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Karl-Heinz Engel (first day), Christina Tlustos and Andy Smith (all days).

## 2. Adoption of agenda

The agenda item 5.4 was added. Other items were adopted without change.

## 3. Declarations of Interest of Working Group Members

Specific Declarations of Interest for agenda item 5.4 were collected orally. No interest was declared.

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

It was reported that the scientific opinion on the food enzyme peroxidase obtained from soybean hulls (EFSA-Q-2013-00897) was adopted at the November meeting of the CEF Panel.

## 5. Scientific topics for discussion

### 5.1. Glucoamylase from a genetically modified strain of *Aspergillus niger* (NZYM-BW) ([EFSA-Q-2015-00128](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 5.2. Maltogenic amylase from a genetically modified strain of *Escherichia coli* (BLASC) ([EFSA-Q-2015-00446](#))

The WG discussed technical, toxicological and exposure-related parts of the opinion. The discussion will be continued at a future WG meeting.

### 5.3. Alpha-amylase from a genetically modified strain of *Trichoderma reesei* (DP-Nzb48) ([EFSA-Q-2015-00681](#))

The WG discussed technical, toxicological and exposure-related parts of the opinion. The discussion will be continued at a future WG meeting.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

**5.4 L-Ascorbate oxidase from *Cucurbita pepo* and *Cucurbita moschata* ([EFSA-Q-2015-00825](#))**

The WG discussed the additional information received and identified needs to request further clarification from the applicant.

**5.5. 4- alpha-glucanotransferase from *Geobacillus pallidus* (strain AE-SAS) ([EFSA-Q-2016-00033](#))**

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.6. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (NZYM-AV) ([EFSA-Q-2014-00794](#))**

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.7. Glucan 1,4-alpha-maltotetrahydrolase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzr46) ([EFSA-Q-2016-00095](#))**

The WG discussed technical, toxicological and exposure-related parts of the opinion. The discussion will be continued at a future WG meeting.

**5.8. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-SB) ([EFSA-Q-2014-00413](#))**

The WG discussed toxicological part of the opinion. The discussion will be continued at a future WG meeting.

**5.9. Glucose oxidase from a genetically modified strain of *Apergillus oryzae* (strain NZYM-KP) ([EFSA-Q-2013-00687](#))**

The WG discussed toxicological part of the opinion. The discussion will be continued at a future WG meeting.

**5.10. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-MC) ([EFSA-Q-2014-00306](#))**

The WG discussed toxicological part of the opinion. The discussion will be continued at a future WG meeting.

**5.11. Endo-1,4-beta-xylanase from a genetically modified strain of *Trichoderma reesei* (DP-Nzd22) ([EFSA-Q-2014-00667](#))**

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.



**5.12. Beta-glucanase, xylanase and cellulase from *Humicola insolens* (NZYM-ST)**  
([EFSA-Q-2014-00795](#) and [EFSA-Q-2014-00796](#) and [EFSA-Q-2014-00797](#))

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.

**5.13. Triacylglycerol lipase from a genetically modified strain of *Trichoderma reesei* (RF10625)** ([EFSA-Q-2016-00212](#))

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.

**6. AOB**

The WG was informed about launching of the call for data for the exposure assessment of food enzymes used in cereal-based processes and savoury snacks processing.

**7. Next meeting**

The next meeting will be held on 8-11 January 2018.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 36<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 28/11 2017, Parma

(Agreed on 28/11/2017)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (Chair), Christina Tlustos

#### b) Hearing Expert<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

- FIP Unit: Yi Liu

### 1. Welcome and apologies for absence

The unit staff welcomed all participants.

Apology for absence was received from Karl-Heinz Engel.

### 2. Adoption of agenda

The agenda items were adopted without change.

### 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:

<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **4. Scientific outputs for discussion**

##### **4.1. Evaluation of the food enzyme: xylanase from a genetically modified strain of *Bacillus licheniformis* (strain NZYM-CE) ([EFSA-Q-2015-00064](#))**

The intended use was discussed in light of the next call-for-data.

#### **5. Any Other Business**

##### **5.1. Call for data**

The call was checked and sent for launch.

##### **5.2 Enzyme intake estimation tool**

The WG plans to develop an open tool for estimating dietary exposure to food enzymes in foods. The proposal was checked in details and will be presented to the Panel members.

##### **5.3 Foods containing soybean hulls**

The choice of such foods was checked, reasons for inclusion and exclusion were elaborated in details.

#### **6. Next meetings**

The next meeting is scheduled on 5-6 December 2017. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

**Minutes of the 35<sup>th</sup> meeting of the Food Enzymes WG 2014-2017**

**Held on 24/10/2017 – 26/10/2017, Parma**

**(Agreed on 15/11/2017)**

## **Participants**

### **a) Working Group Experts:**

Karl-Heinz Engel (Chair), Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andy Smith, Christina Tlustos, Holger Zorn

### **b) European Commission representative:**

**DG SANTE:** Jiri Sochor (via tele-conference)

### **c) EFSA:**

**FIP Unit:** Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Annamaria Rossi

### **d) Hearing Expert:**

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Andrew Chesson and Davor Želježić (all days).

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

It was reported that the following opinions were adopted at the September meeting of the CEF Panel: EFSA-Q-2014-00733 and EFSA-Q-2015-00451.

## 5. Scientific topics for discussion

### 5.1. Glucan 1,4- $\alpha$ -maltohydrolase from a genetically modified strain of *Bacillus subtilis* (MAM) ([EFSA-Q-2013-00790](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 5.2. Xylanase from a genetically modified strain of *Bacillus subtilis* (LMG-S-27588) ([EFSA-Q-2015-00408](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 5.3. Pullulanase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzp39) ([EFSA-Q-2015-00667](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 5.4. Alpha-amylase from *Aspergillus niger* (DP-Azb60) ([EFSA-Q-2016-00273](#))

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

**5.5. Glucan 1,4-alpha-maltotetraohydrolase from a GM strain of *Bacillus licheniformis* (DP-Dzf24) ([EFSA-Q-2015-00448](#))**

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.6. Alpha-amylase and 1,4- $\alpha$ -glucan 6- $\alpha$ -glucosyltransferase from *Bacillus circulans*/*Paenibacillus alginolyticus* ([EFSA-Q-2016-00521](#) and [EFSA-Q-2016-00522](#))**

The WG discussed all parts of the opinion and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.7. Glucose oxidase from a GM strain of *Aspergillus oryzae* (NZYM-KP) ([EFSA-Q-2013-00687](#))**

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.

**5.8. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-MC) ([EFSA-Q-2014-00306](#))**

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.

**5.9. Glucoamylase from a genetically modified strain of *Aspergillus niger* (NZYM-BF) ([EFSA-Q-2014-00307](#))**

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.

**5.10. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-SB) ([EFSA-Q-2014-00413](#))**

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.

**5.11. Endo-1,4-beta-xylanase from a genetically modified strain of *Trichoderma reesei* (DP-Nzd22) ([EFSA-Q-2014-00667](#))**

The draft opinion has not been discussed due to the lack of time.

**5.12. Beta-glucanase, xylanase and cellulase from *Humicola insolens* (NZYM-ST) ([EFSA-Q-2014-00795](#) and [EFSA-Q-2014-00796](#) and [EFSA-Q-2014-00797](#))**

The draft opinion has not been discussed due to the lack of time.

**5.13. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-OC) ([EFSA-Q-2014-00922](#))**

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.

**5.14. Maltogenic amylase produced by a genetically modified strain of *Bacillus subtilis* (NZYM-SO) ([EFSA-Q-2015-00046](#))**

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a future WG meeting.

**5.15. Triacylglycerol lipase from a genetically modified strain of *Trichoderma reesei* (RF10625) ([EFSA-Q-2016-00212](#))**

The draft opinion has not been discussed due to the lack of time.

**6. AOB**

The WG evaluated additional information submitted by AMFEP concerning food enzyme transfer in the course of the production of refined sugar and in fat and oil processing. This information will be considered during the evaluation of relevant food enzyme applications.

**7. Next meeting**

The next meeting (Exposure-subgroup) will be held on 28 November 2017.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 34th meeting of the Food Enzymes WG 2014-2017

Held on 11/10/2017, Parma (tele-meeting)

(Agreed on 19/10/2017)

### Participants

**a) Working Group Experts:**

Francesca Marcon, André Penninks, Christina Tlustos, Holger Zorn, Davor Želježić, Andy Smith (Chair)

**b) European Commission representative:**

None

**c) EFSA:**

**FIP Unit:** Margarita Aguilera-Gómez (MAG), Magdalena Andryszkiewicz (MZA)

**d) Hearing Expert:**

None



## 1. Welcome and apologies for absence

The Chair welcomed the participants.

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Scientific topics for discussion

### 4.1. Endo-1,4-beta-xylanase from a genetically modified strain of *Aspergillus niger* (XEA) ([EFSA-Q-2015-00045](#))

The WG discussed the technical, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 4.2. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-SM) ([EFSA-Q-2015-00096](#))

The WG discussed the technical, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

### 4.3. Chitinase from a genetically modified strain of *Streptomyces violaceoruber* (pChi) ([EFSA-Q-2015-00621](#))

The WG discussed the technical, toxicological and exposure parts of the opinion, and updated the draft opinion accordingly. The draft opinion will be discussed at a WG meeting in the future.

## 5. Next meeting

It will be held on 24-26 October 2017.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

**Minutes of the 33<sup>rd</sup> meeting (TC) of the Food Enzymes WG 2014-2017**

**Held on 04/10/2017 (tele-meeting)**

**(Agreed on 09/10/2017)**

## **Participants**

### **a) Working Group Experts:**

Boet Glandorf, Lieve Herman, Sirpa Kärenlampi (Chair)

### **b) European Commission representative:**

None

### **c) EFSA:**

**FIP Unit:** Margarita Aguilera-Gómez (MAG), Ana Gomes (AG)

### **d) Hearing Expert:**

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

It was reported that the following opinions were adopted in September 2017: [EFSA-Q-2014-00733](#), [EFSA-Q-2015-00451](#).

## 5. Scientific topics for discussion

### 5.1. Glucan 1,4- $\alpha$ -maltohydrolase from a genetically modified strain of *Bacillus subtilis* MAM ([EFSA-Q-2013-00790](#))

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a WG meeting in the future.

### 5.2. Xylanase from a genetically modified strain of *Bacillus subtilis* LMG-S-27588 ([EFSA-Q-2015-00408](#))

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a WG meeting in the future.

### 5.3. Triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* LFS ([EFSA-Q-2014-00325](#))

The draft opinion was not discussed due to lack of time.

### 5.4. 4- $\alpha$ -glucanotransferase from a genetically modified strain of *Streptomyces violaceoruber* pChi ([EFSA-Q-2015-00621](#))

The WG discussed the molecular parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

**5.5. 4–alpha–glucanotransferase from *Geobacillus pallidus* AE-SAS ([EFSA-Q-2016-00033](#)) (Non GMM)**

The WG discussed the molecular parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.6. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* NZYM-SM ([EFSA-Q-2015-00096](#))**

The WG discussed the molecular parts of the opinion. The discussion will be continued at a future WG meeting.

**5.7. Glucan 1,4-alpha-maltotetrahydrolase from a genetically modified strain of *B. licheniformis* DP-Dzf24 ([EFSA-Q-2015-00448](#))**

The draft opinion was not discussed due to lack of time.

**6. Next meeting**

It will be held on 24-26/10/2017 in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 32nd meeting of the Food Enzymes WG 2014-2017

Held on 12/09/2017 – 13/09/2017, Parma

(Agreed on 22/09/2017)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), Andrew Chesson, Klaus-Dieter Jany, Francesca Marcon, André Penninks, Andy Smith, Holger Zorn, Davor Želježić,

#### b) European Commission representative:

**DG SANTE:** Jiri Sochor (via tele-conference)

#### c) EFSA:

**FIP Unit:** Margarita Aguilera-Gómez (MAG), Magdalena Andryszkiewicz (MZA), Natalia Kovalkovicova (NK), Yi Liu (YL), Joaquim Maia (JM), Annamaria Rossi (AR)

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Participants attending via tele-conference: Christina Tlustos (half a day on 12 September and half a day on 13 September).

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

It was reported that opinions of the following applications were published on 18<sup>th</sup> August 2017: [EFSA-Q-2015-00127](#), [EFSA-Q-2015-00275](#).

## 5. Scientific topics for discussion

### 5.1. Peroxidase obtained from soy bean hulls ([EFSA-Q-2013-00897](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 5.2. Aqualysin 1 from a genetically modified strain of *Bacillus subtilis* (LMGS 25520) ([EFSA-Q-2014-00920](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 5.3. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (NZYM-AN) ([EFSA-Q-2015-00084](#))

The WG discussed additional information received and finalised the opinion. The draft opinion will be presented at a future Panel meeting.

### 5.4. Endo 1,4-beta xylanase from a genetically modified strain of *Aspergillus niger* (CBS 612.94) ([EFSA-Q-2014-00202](#))

The WG partially discussed the technical, toxicological and exposure parts of the opinion, and will continue the discussion at a future WG meeting.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

**5.5. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (NZYM-AV) ([EFSA-Q-2014-00794](#))**

The draft opinion has not been discussed due to the lack of time.

**5.6. Endo-1,4-beta-xylanase from *Disporothriticum dimorphosporum* (DXL) ([EFSA-Q-2014-00355/356](#))**

The WG discussed the technical, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.7. Endo-1,4-beta-xylanase from a genetically modified strain of *Aspergillus niger* (XEA) ([EFSA-Q-2015-00045](#))**

The draft opinion has not been discussed due to the lack of time.

**5.8. Glucoamylase from a genetically modified strain of *Aspergillus niger* (NZYM-BW) ([EFSA-Q-2015-00128](#))**

The draft opinion has not been discussed due to the lack of time.

**5.9. L-Ascorbate oxidase from *Cucurbita pepo* and *Cucurbita moschata* ([EFSA-Q-2015-00825](#))**

The WG discussed all parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a future WG meeting.

**5.10. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-SM) ([EFSA-Q-2015-00096](#))**

The draft opinion has not been discussed due to the lack of time.

**5.11. Chitinase from a genetically modified strain of *Streptomyces violaceoruber* (pChi) ([EFSA-Q-2015-00621](#))**

The draft opinion has not been discussed due to the lack of time.

**5.12. 4- alpha-glucanotransferase from *Geobacillus pallidus* (strain AE-SAS) ([EFSA-Q-2016-00033](#))**

The draft opinion has not been discussed due to the lack of time.

## **6. AOB**

The WG was informed that new CEF Panel Member will join this WG.

The WG was also informed that due to the high workload, a need for additional expertise in allergenicity and general toxicology fields is envisaged.

The exposure group discussed the possibility of further specifying the 'grain treatment' (as defined in the EC working document) into sub-processes. Further discussion will continue.

## **7. Next meeting**

It will be held on 4 October 2017 (MOL group, tele-meeting).



# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 31<sup>st</sup> meeting (TC) of the Food Enzymes WG 2014-2017

Held on 30/08/2017 –31/08/2017 (tele-meeting)

(Agreed on 05/09/2017)

### Participants

**a) Working Group Experts:**

Boet Glandorf, Lieve Herman, Sirpa Kärenlampi (Chair)

**b) European Commission representative:**

None

**c) EFSA:**

**FIP Unit:** Margarita Aguilera-Gómez (MAG), Ana Gomes (AG)

**d) Hearing Expert:**

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

It was reported that the following opinions were published on 18<sup>th</sup> August 2017: [EFSA-Q-2015-00127](#), [EFSA-Q-2015-00275](#).

## 5. Scientific topics for discussion

### 5.1. Endo 1,4-beta xylanase from a genetically modified strain of *Aspergillus niger* 1A ([EFSA-Q-2014-00202](#))

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a WG meeting in the future.

### 5.2. Aqualysin 1 from a genetically modified strain of *Bacillus subtilis* 3Raa3114 ([EFSA-Q-2014-00920](#))

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a WG meeting in the future.

### 5.3. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* NZYM-AN ([EFSA-Q-2015-00084](#))

The WG discussed additional information received and updated the draft opinion accordingly. The draft opinion will be discussed at a WG meeting in the future.

### 5.4. Endo-1,4-β-xylanase and beta glucanase *Disporothriticum dimorphosporum* DXL ([EFSA-Q-2014-00355/2014-00356](#)) (Non GMM)

The WG discussed the molecular parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **5.5. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* NZYM-AV ([EFSA-Q-2014-00794](#))**

The WG discussed the molecular parts of the opinion. The discussion will be continued at a future WG meeting

#### **5.6. Endo-1,4- $\beta$ -xylanase from genetically modified *Aspergillus niger* XEA ([EFSA-Q-2015-00045](#))**

The WG discussed the molecular parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

#### **5.7. Glucoamylase from genetically modified *Aspergillus niger* NZYM-BV ([EFSA-Q-2015-00128](#))**

The WG discussed the molecular parts of the opinion. The discussion will be continued at a future WG meeting.

#### **5.8. 4- alpha-glucoamylase from genetically modified *Streptomyces violaceoruber* pChi ([EFSA-Q-2015-00621](#))**

The draft opinion has not been completely discussed due to the lack of time.

#### **5.9. 4- alpha-glucoamylase from *Geobacillus pallidus* AE-SAS ([EFSA-Q-2016-00033](#)) (Non GMM)**

The draft opinion has not been discussed due to the lack of time.

#### **5.10. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* NZYM-SM ([EFSA-Q-2015-00096](#))**

The draft opinion has not been discussed due to the lack of time.

### **6. AOB**

None.

### **7. Next meeting**

It will be held WG will be on 12-13/09/2017 in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 30th meeting of the Food Enzymes WG 2014-2017

Held on 27/06/2017 – 30/06/2017, Parma

(Agreed on 12/07/2017)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), Andrew Chesson, Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Francesca Marcon, Holger Zorn, Davor Želježić

#### b) European Commission representative:

None

#### c) EFSA:

**FIP Unit:** Margarita Aguilera-Gómez (MAG), Magdalena Andryszkiewicz (MZA), Ana Gomes (AG), Natalia Kovalkovicova (NK), Yi Liu (YL), Joaquim Maia (JM), Claudia Roncancio-Peña (CRP), Annamaria Rossi (AR)

**Unit:** Simone Gabbi, Lisa Hunston

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Christina Tlustos (all days) and Andy Smith (all days).

Participants attending via tele-conference: Sirpa Kärenlampi (whole day on the 28 and 29 June) and André Penninks (half a day on 28 June and half a day on 29 June).

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

### 4.1. 69<sup>th</sup> CEF Plenary meeting (held on 13 -15 June 2017)

It was reported that the following opinions: 2015-00127 and 2015-00275 were discussed and adopted by the CEF Panel.

## 5. Scientific topics for discussion

### 5.1. Xylanase from a genetically modified strain of *Aspergillus oryzae* (strain NZYM-FA) ([EFSA-Q-2013-00789](#))

The WG discussed additional information received and updated the draft opinion accordingly. The exposure part is pending call for data on cereal-based processes. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

### 5.2. Glucose oxidase from a genetically modified strain of *Aspergillus niger* (strain ZGL) ([EFSA-Q-2013-01005](#))

The WG discussed the technical, molecular, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

**5.3. Xylanase from a genetically modified strain of *Bacillus subtilis* (strain LMG5 28356)** ([EFSA-Q-2014-00733](#))

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

**5.4. Alpha-amylase from a genetically modified strain of *Bacillus subtilis* (NBA)** ([EFSA-Q-2014-00912](#))

The WG discussed the technical, molecular, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.5. Pullulanase from *Pullulanibacillus naganoensis*** ([EFSA-Q-2015-00451](#))

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

**5.6. Glucose oxidase from *Aspergillus niger* (strain NZYM-KA)** ([EFSA-Q-2016-00134](#))

The draft opinion has not been discussed due to the lack of time.

**5.7. Glucose oxidase from a GM strain of *Aspergillus oryzae* (strain NZYM-KP)** ([EFSA-Q-2013-00687](#))

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.8. Endo-1,4-beta xylanase from a genetically modified strain of *Trichoderma reesei* (RF5427)** ([EFSA-Q-2013-00876](#))

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.9. Endo-1,4-beta xylanase from a genetically modified strain of *Aspergillus acidus* (RF 7398)** ([EFSA-Q-2014-00165](#))

The draft opinion has not been discussed due to the lack of time.

**5.10. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-MC)** ([EFSA-Q-2014-00306](#))

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.11. Glucoamylase from a genetically modified strain of *Aspergillus niger* (NZYM-BF) ([EFSA-Q-2014-00307](#))**

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.12. Alpha-amylase from a genetically modified strain of *Aspergillus niger* (NZYM-SB) ([EFSA-Q-2014-00413](#))**

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.13. Endo-1,4-beta-xylanase from a genetically modified strain of *Trichoderma reesei* (DP-Nzd22) ([EFSA-Q-2014-00667](#))**

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.14. Beta-glucanase from *Humicola insolens* (NZYM-ST) ([EFSA-Q-2014-00795](#))**

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.15. Xylanase from *Humicola insolens* (NZYM-ST) ([EFSA-Q-2014-00796](#))**

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.16. Maltogenic amylase from a genetically modified strain of *Bacillus subtilis* (NZYM-OC) ([EFSA-Q-2014-00922](#))**

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.17. Maltogenic amylase produced by a genetically modified strain of *Bacillus subtilis* (NZYM-SO) ([EFSA-Q-2015-00046](#))**

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.18. L-Ascorbate oxidase from *Cucurbita pepo* and *Cucurbita moschata* ([EFSA-Q-2015-00825](#))**

The draft opinion has not been discussed due to the lack of time.

### **5.19. Triacylglycerol lipase from a genetically modified strain of *Trichoderma reesei* (RF10625) ([EFSA-Q-2016-00212](#))**

The WG discussed the technical and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

#### **6. AOB**

None

#### **7. Next meeting**

It will be held on 30–31/08/2017 in Parma.



# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 29th meeting of the Food Enzymes WG 2014-2017

Held on 15/05/2017 – 18/05/2017, Parma

(Agreed on 26/05/2017)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andy Smith, Christina Tlustos, Holger Zorn

#### b) European Commission representative:

None

#### c) EFSA:

**FIP Unit:** Margarita Aguilera-Gómez (MAG), Magdalena Andryszkiewicz (MZA), Ana Gomes (AG), Natalia Kovalkovicova (NK), Yi Liu (YL), Joaquim Maia (JM), Annamaria Rossi (AR)

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Andrew Chesson (all days), Davor Želježić (all days)

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA

### 4.1. Member States competent authorities' meeting

EFSA presented the recently adopted four opinions to the delegates at the 'Meeting of the working party of governmental experts on food enzymes' held in Brussels on 21 April 2017.

## 5. Scientific topics for discussion

### 5.1. Glucan 1,4- $\alpha$ -maltohydrolase from a genetically modified strain of *Bacillus subtilis* (strain MAM) ([EFSA-Q-2013-00790](#))

The WG discussed additional information received, the technical, molecular, toxicological and exposure parts of the opinion, and identified a question to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

### 5.2. Peroxidase obtained from soy bean hulls ([EFSA-Q-2013-00897](#))

The WG discussed the technical and exposure parts of the opinion, and identified a question to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

### 5.3. Triacylglycerol lipase from a genetically modified strain of *Aspergillus niger* (LFS) ([EFSA-Q-2014-00325](#))

The WG discussed the technical, molecular, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

**5.4. Alpha-amylase from a genetically modified strain of *Bacillus subtilis* (NBA)** ([EFSA-Q-2014-00912](#))

The draft opinion was not discussed due to the lack of time.

**5.5. Aqualysin 1 from a genetically modified strain of *Bacillus subtilis*** ([EFSA-Q-2014-00920](#))

The WG discussed the technical, molecular, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.6. Xylanase from a genetically modified strain of *Bacillus licheniformis* (NZYM-CE)** ([EFSA-Q-2015-00064](#))

The WG discussed the additional information received. The draft opinion will be discussed at a WG meeting in the future.

**5.7. Alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (NZYM-AN)** ([EFSA-Q-2015-00084](#))

The WG discussed the technical, molecular, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.8. Xylanase from a genetically modified strain of *Bacillus subtilis* (strain LMG-S-27588)** ([EFSA-Q-2015-00408](#))

The WG discussed the technical, molecular, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.9. Pullulanase from *Pullulanibacillus naganoensis*** ([EFSA-Q-2015-00451](#))

The draft opinion has not been discussed due to the lack of time.

**5.10. Xylose isomerase from genetically modified strain of *Streptomyces rubiginosus* (DP-Pzn37)** ([EFSA-Q-2016-00203](#))

The WG discussed the technical, molecular, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

**5.11. Alternansucrase from *Leuconostoc citreum* (strain NRRL B-30894)** ([EFSA-Q-2016-00209](#))

The draft opinion was not discussed due to the lack of time.

### **5.12. Beta-galactosidase from *Bacillus citrulans* (strain M3-1) ([EFSA-Q-2016-00210](#))**

The WG discussed the technical, molecular, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

## **6. AOB**

### **6.1. Feedback from BIOHAZ Panel meeting on antimicrobial resistance issues**

The WG was informed about the possibility to complement and address specific concerns on Antimicrobial Resistance (AMR) genes and self-replicative plasmids harbouring by the production strains with an Expert member on ad-hoc basis. An Expert's participation and contribution is envisaged for those opinions where the use of plasmids as food enzyme expression system applies.

## **7. Next meeting**

It will be held on 28–29/06 2017 in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 28th meeting of the Food Enzymes WG 2014-2017

Held on 04/04/2017 – 05/04/2017, Parma

(Agreed on 18/04/2017)

### Participants

#### a) Working Group Experts:

Sirpa Kärenlampi (Vice-Chair), André Penninks, Andy Smith, Andrew Chesson, Boet Glandorf, Christina Tlustos, Davor Želježić, Francesca Marcon, Holger Zorn, Klaus-Dieter Jany, Lieve Herman

#### b) European Commission representative:

Wim DEBEUCKELAERE

#### c) EFSA:

FIP Unit: Annamaria Rossi, Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Zoltán Divéki, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Joaquim Maia

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Vice-Chair welcomed the participants.

Apologies were received from: Karl-Heinz Engel (Chair; two days), Christina Tlustos (two days), Andy Smith (two days), Holger Zorn (via tele-meeting half a day on both days).

## 2. Adoption of agenda

The agenda was adopted without any changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA and Commission (COM)

### 4.1. 67<sup>th</sup> CEF Plenary meeting (held between 21 and 23 March 2017)

It was reported that the following opinions were adopted: EFSA-Q-2014-00731, EFSA-Q-2015-00083, EFSA-Q-2014-00305, EFSA-Q-2016-00085 and the following draft opinion was endorsed EFSA-Q-2014-00293 and will be discussed at a Panel meeting in the future.

### 4.2. Feedback from COM

The COM reported on the number of the dossiers still to be submitted to EFSA.

## 5. Scientific topics for discussion

### 5.1. Xylanase from a genetically modified strain of *Aspergillus oryzae* (strain NZYM-FA) ([EFSA-Q-2013-00789](#))

The WG discussed additional information received, the technical, molecular modification and toxicological parts of the opinion and identified question to the applicant. The draft opinion will be discussed at a WG meeting in the future.

### 5.2. Glucose oxidase from a genetically modified strain of *Aspergillus niger* (ZGL) ([EFSA-Q-2013-01005](#))

The WG discussed the technical, molecular modification, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

### **5.3. Alpha-amylase from a genetically modified strain of *Bacillus subtilis* (NBA)** ([EFSA-Q-2014-00912](#))

The WG discussed the technical, molecular modification and toxicological parts of the opinion and agreed on the common approach. The draft opinion will be discussed at a WG meeting in the future.

### **5.4. Xylanase from a genetically modified strain from *Bacillus subtilis* (LMG S-24584)** ([EFSA-Q-2015-00065](#))

The WG discussed the technical, molecular modification and toxicological parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

### **5.5. Pullulanase from a genetically modified strain *Bacillus subtilis* (strain NZYM-AK)** ([EFSA-Q-2015-00127](#))

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

### **5.6. Beta-amylase from a genetically modified strain of *Bacillus licheniformis* (strain NZYM-JA)** ([EFSA-Q-2015-00275](#))

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

### **5.7. Glucose isomerase from *Streptomyces murinus* (strain NZYM-GA)** ([EFSA-Q-2016-00032](#))

The WG discussed the technical, molecular modification and toxicological parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

## **6. AOB**

The WG discussed and agreed on the planning of the future meetings.

## **7. Next meeting**

It will be held on 15 –18/05 2017 in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 27<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 23/03/2017, Parma

(Agreed on 28/03/2017)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (chair), Christina Tlustos

#### b) Hearing Expert<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

- FIP Unit: Yi Liu

### 1. Welcome and apologies for absence

The unit staff welcomed all participants.

Apology for absence was received from Karl-Heinz Engel.

### 2. Adoption of agenda

The agenda items were adopted without change.

### 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:

<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### **4. Scientific outputs for discussion**

##### **4.1. Evaluation of the food enzyme: xylanase from *Bacillus subtilis* LMG S-27588 (strain Anu $\alpha$ 3101) ([EFSA-Q-2015-00408](#))**

The WG discussed the exposure assessment of Food Enzyme. The outcome will be presented to the next meeting.

#### **5. Any Other Business**

##### **5.1. Call for data – 2<sup>nd</sup> call**

The WG was in the phase of preparing the documentation.

#### **6. Next meetings**

The next meeting is scheduled for 4-5 April 2017. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 26<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 21/03/2017, Parma

(Agreed on 28/03/2017)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (chair), Christina Tlustos

#### b) Hearing Expert<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

- FIP Unit: Yi Liu

### 1. Welcome and apologies for absence

The unit staff welcomed all participants.

Apology for absence was received from Karl-Heinz Engel.

### 2. Adoption of agenda

The agenda items were adopted without change.

### 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:

<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **4. Scientific outputs for discussion**

##### **4.1. Draft opinion of the food enzyme: beta-amylase from Barley (*Hordeum vulgare*) ([EFSA-Q-2014-00731](#))**

The WG finalised the exposure assessment of Food Enzyme. The outcome will be presented to the plenary meeting.

#### **5. Any Other Business**

##### **5.1. Call for data – 2<sup>nd</sup> call**

The WG was in the phase of preparing the documentation.

#### **6. Next meetings**

The next meeting is scheduled for 4-5 April 2017. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 25th meeting of the Food Enzymes WG 2014-2017

Held on 27/02/2017 – 02/03/2017, Parma

(Agreed on 14 March 2017)

### Participants

#### a) Working Group Experts:

Sirpa Kärenlampi (Vice-Chair), André Penninks, Andy Smith, Andrew Chesson, Boet Glandorf, Christina Tlustos, Davor Želježić, Francesca Marcon, Holger Zorn, Klaus-Dieter Jany, Lieve Herman

#### b) European Commission and/or Member States representatives:

None

#### c) EFSA:

FIP Unit: Annamaria Rossi, Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Zoltán Divéki, Ana Gomes, Natalia Kovalkovicova, Yi Liu, Joaquim Maia

#### d) Hearing Expert:

None

## 1. Welcome and apologies for absence

The Vice-Chair welcomed the participants.

Apologies were received from: Karl-Heinz Engel (Chair; three days), Andrew Chesson (first day).

## 2. Adoption of agenda

The agenda was adopted without any changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Scientific topics for discussion

### 4.1. Glucan 1,4- $\alpha$ -maltohydrolase from a genetically modified strain of *Bacillus subtilis* (MAM) ([EFSA-Q-2013-00790](#))

The WG discussed the genetical modification and toxicological parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

### 4.2. Trypsine and chymotrypsine from pig pancreas ([EFSA-Q-2014-00163](#))

The WG discussed the genetical modification part of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

### 4.3. Endo-1,4-beta xylanase from a genetically modified strain of *Bacillus subtilis* (XAS) ([EFSA-Q-2014-00293](#))

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

### 4.4. Endo-1,4-beta xylanase from a genetically modified strain of *Aspergillus niger* (XYL) ([EFSA-Q-2014-00305](#))

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **4.5. Beta-amylase from barley (*Hordeum vulgare*)** ([EFSA-Q-2014-00731](#))

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

#### **4.6. Xylanase from a genetically modified strain of *Bacillus subtilis* (LMGS-28356)** ([EFSA-Q-2014-00733](#))

The WG discussed the molecular modification, toxicological and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

#### **4.7. Alpha-amylase from a genetically modified strain of *Bacillus subtilis* (NBA)** ([EFSA-Q-2014-00912](#))

The WG discussed the molecular part of the opinion. The discussion will be continued at a future WG meeting.

#### **4.8. Xylanase from a genetically modified strain of *Bacillus licheniformis* (NZYM-CE)** ([EFSA-Q-2015-00064](#))

The WG discussed the genetical modification, toxicology and exposure parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

#### **4.9. Xylanase from a genetically modified strain of *Bacillus subtilis* (LMGS-24584)** ([EFSA-Q-2015-00065](#))

The WG discussed the molecular and toxicological parts of the opinion. The discussion will be continued at a future WG meeting.

#### **4.10. Beta-amylase from wheat (*Triticum spp*)** ([EFSA-Q-2015-00083](#))

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

#### **4.11. Pullulanase from a genetically modified strain of *Bacillus subtilis* (NZYM-AK)** ([EFSA-Q-2015-00127](#))

The WG discussed the molecular and toxicological parts of the opinion. The discussion will be continued at a future WG meeting.

#### **4.12. Trypsin from porcine pancreatic glands** ([EFSA-Q-2015-00338](#))

The WG discussed the molecular part of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

#### **4.13. Pullulanase from *Klebsiella pneumoniae* (AE-PUL) ([EFSA-Q-2015-00450](#))**

The WG discussed the technical, molecular and toxicological parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

#### **4.14. Pullulanase from *Pullulaninbacillus naganensis* (AE-PL) ([EFSA-Q-2015-00451](#))**

The WG discussed the technical, molecular and toxicological parts of the opinion, and identified questions to the applicant. Once the additional information is received, the draft opinion will be discussed at a WG meeting in the future.

#### **4.15. Beta-amylase from soybean (*Glycine max*) ([EFSA-Q-2016-00085](#))**

The WG discussed and finalised the whole opinion. The draft opinion will be presented at a Panel meeting in the future.

### **5. AOB**

The WG discussed the planning of the future meetings.

The WG evaluated additional information submitted by AMFEP concerning food enzyme transfer in starch processing for glucose syrup production and distilled alcohol production. This information will be considered during the evaluation of relevant food enzyme applications.

### **7. Next meeting**

It will be held on 4 –5/04 2017 in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 24th meeting of the Food Enzymes WG 2014-2017

Held on 17 – 18/01/2017, Parma

(Agreed on 25 January 2017)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (Chair), André Penninks, Andy Smith, Christina Tlustos (via TC), Davor Želježić, Francesca Marcon, Holger Zorn (via TC), Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi

#### b) European Commission and/or Member States representatives:

None

#### c) EFSA:

FIP Unit: Claudia Roncancio Peña, Annamaria Rossi, Margarita Aguilera-Gómez (via TC), Magdalena Andryszkiewicz, Zoltán Divéki, Natalia Kovalkovicova, Yi Liu

APDESK: Simona Radulescu

#### d) Hearing Expert:

None



## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from: Andrew Chesson (both days), Boet Glandorf (both days) and Lieve Herman (2nd day).

## 2. Adoption of agenda

The agenda was adopted without any changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Feedback from EFSA and Commission

### 4.1. 65<sup>th</sup> CEF Plenary meeting (30 November - 1 December 2016, Brussels)

It was reported that the approach proposed for the exposure assessment of soybean hulls was accepted by the CEF Panel and will be applied.

### 4.2. First call for data for baking and brewing processes

It was reported that the first call for data on the baking and brewing processes ended on 10 January 2017. EFSA received data from the Association of Chocolate, Biscuit and Confectionary Industries of Europe (CAOBISCO), the Federation of European Union Manufacturers and Suppliers of Ingredients to the Bakery, Confectionary and Patisserie Industries (FEDIMA) and the Brewers of Europe. The WG discussed the received data, and will soon finalise the input sheets for these two food processes.

## 5. Scientific topics for discussion

### 5.1. Endo-1,4- $\beta$ -xylanase from a genetically modified strain of *Bacillus subtilis* (XAS) ([EFSA-Q-2014-00293](http://www.efsa.europa.eu/en/keydocs/docs/independencerule2014.pdf))

The WG discussed the technical, molecular and toxicological parts of the opinion. The part on the exposure assessment will be discussed at a future WG meeting.

### 5.2. Alpha-amylase from a genetically modified strain of *Bacillus subtilis* (NBA) ([EFSA-Q-2014-00912](http://www.efsa.europa.eu/en/keydocs/docs/independencerule2014.pdf))

The WG discussed the technical, molecular and toxicological parts of the opinion. The discussion will be continued at a future WG meeting.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerule2014.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerule2014.pdf>

### **5.3. Peroxidase from soy bean hulls ([EFSA-Q-2013-00897](#))**

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

### **5.4. Xylanase from a genetically modified strain of *Aspergillus oryzae* (strain NZYM-FA) ([EFSA-Q-2013-00789](#))**

The WG discussed the draft opinion and identified a need for request of additional information. EFSA will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

### **5.5. Glucose oxidase from *Aspergillus niger* (strain NZYM-KA) ([EFSA-Q-2016-00134](#))**

The WG discussed the draft opinion and identified a need for request of additional information. EFSA will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

## **6. AOB**

None

## **7. Next meeting**

It will be held on 27/02 – 02/03 2017 in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 23<sup>rd</sup> meeting of the Food Enzymes WG 2014-2017

Held on 08/12/2016, (tele-meeting)

(Agreed on 19 December 2016)

### Participants

**a) Working Group Experts:**

Andy Smith, Francesca Marcon, Holger Zorn, Lieve Herman

**b) European Commission and/or Member States representatives:**

None

**c) EFSA:**

FIP Unit: Annamaria Rossi, Margarita Aguilera-Gómez, Magdalena Andryszkiewicz,  
Zoltán Divéki, Natalia Kovalkovicova, Joaquim Maia

**d) Hearing Expert:**

None

## 1. Welcome and apologies for absence

The participants were welcomed.

## 2. Adoption of agenda

The agenda was adopted without any changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Scientific topics for discussion

### 4.1 Draft opinion on alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzb54) ([EFSA-Q-2015-00666](http://www.efsa.europa.eu/en/keydocs/docs/independencerule2014.pdf))

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

### 4.2. Draft opinion on beta-amylase from *Bacillus licheniformis* (strain NZYM-JA) ([EFSA-Q-2015-00275](http://www.efsa.europa.eu/en/keydocs/docs/independencerule2014.pdf))

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

## 5. Any Other Business

None

## 6. Next meetings

The next Standing Working Group meeting is scheduled for 17 - 18 January 2017.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerule2014.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerule2014.pdf>

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

**Minutes of the 22<sup>nd</sup> meeting of the Food Enzymes WG 2014-2017**

**Held on 9/11 – 10/11 2016, Parma (Italy)**

**(Agreed on 16 November 2016)**

## **Participants**

### **a) Working Group Experts:**

Karl-Heinz Engel (chair), André Penninks, Andrew Chesson, Andy Smith, Boet Glandorf, Christina Tlustos<sup>1</sup>, Davor Želježić, Francesca Marcon, Holger Zorn, Klaus-Dieter Jany, Lieve Herman, Sirpa Kärenlampi

### **b) European Commission and/or Member States representatives:**

Wim Debeuckelaere

### **c) EFSA:**

FIP Unit: Annamaria Rossi, Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Yi Liu, Zoltán Divéki, Natalia Kovalkovicova, Joaquim Maia

### **d) Hearing Expert:**

None

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<sup>1</sup> Participated via teleconference on 9 November 2016 (half day) and 10 November 2016 (half day)

## 1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Lieve Herman and Wim Debeuckelaere.

## 2. Adoption of agenda

The agenda was adopted without any changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 20<sup>th</sup> Working Group meeting held on 20-22 September in Granada (Spain) and 21<sup>th</sup> Working Group meeting held on 25 October in Bologna (Italy)

The minutes of WG20 and WG21 meetings were agreed<sup>4</sup>.

## 5. Scientific topics for discussion

### 5.1 Draft opinion on pullulanase from *Pullulanibacillus naganensis* ([EFSA-Q-2015-00451](#))

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

### 5.2. Draft opinion on pullulanase from a genetically modified strain of *Bacillus subtilis* (NZYM-AK) ([EFSA-Q-2015-00127](#))

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

### 5.3. Draft opinion on beta-amylase from soybean (*Glycine max*) ([EFSA-Q-2016-00085](#))

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>4</sup> <https://www.efsa.europa.eu/sites/default/files/assets/enzymesminuteswg.pdf>

**5.4. Draft opinion on beta-amylase from *Bacillus licheniformis* (strain NZYM-JA)**  
([EFSA-Q-2015-00275](#))

The draft opinion was not discussed due to the lack of time.

**5.5. Draft opinion on glucose oxidase from *Aspergillus niger* (strain NZYM-KA)**  
([EFSA-Q-2016-00134](#))

The draft opinion was not discussed due to the lack of time.

**5.6. Draft opinion on alpha-amylase from a genetically modified strain of *Bacillus licheniformis* (DP-Dzb54)** ([EFSA-Q-2015-00666](#))

The draft opinion was not discussed due to the lack of time.

**5.7. Draft opinion on xylanase from *Bacillus subtilis*** ([EFSA-Q-2014-00733](#))

The draft opinion was not discussed due to the lack of time.

**6. Any Other Business**

None

**7. Next meetings**

The next Standing Working Group meeting is scheduled for 17 - 18 January 2017.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 21<sup>st</sup> meeting of the Food Enzymes WG 2014-2017

Held on 25/10 2016, Bologna

(Agreed on 25 October 2016)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (chair), Christina Tlustos

#### b) Hearing Expert<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

- FIP Unit: Yi Liu

### 1. Welcome and apologies for absence

The unit staff welcomed all participants.

Apology for absence was received from Karl-Heinz Engel.

### 2. Adoption of agenda

The agenda items were adopted without change.

### 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:

<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### **4. Scientific outputs for discussion**

##### **4.1. Draft opinion of the food enzyme: beta-amylase from soybean (*Glycine max*) (EFSA-Q-2016-00085)**

The WG discussed the exposure assessment of Food Enzymes. The outcome will be presented to the next WG meeting.

##### **4.2. Draft opinion of the food enzyme: beta-amylase from *Bacillus licheniformis* (strain NZYM-JA) (EFSA-Q-2015-00275)**

The WG finalised the exposure assessment of Food Enzymes. The outcome will be presented to the next WG meeting.

#### **5. Any Other Business**

##### **5.1. Call for data**

Following the adoption of the Panel statement on 'Exposure assessment of food enzymes', EFSA prepared a 'call for data' to engage stakeholders during the development of input parameters. The WG checked the documentation. The 1<sup>st</sup> call will be launched soon on the EFSA website.

#### **6. Next meetings**

The next meeting is scheduled for 9-10 November 2016. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 20<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 20/09 – 22/09 2016, Granada (Spain)

(Agreed on 9 November 2016)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (chair), Andrew Chesson<sup>1</sup>, Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon<sup>2</sup>, André Penninks, Andy Smith<sup>3</sup>, Christina Tlustos, Davor Želježic, Holger Zorn

#### b) European Commission and/or Member States representatives:

- Rafael Pérez Berbejal

#### c) EFSA:

- Food Ingredients and Packaging (FIP) Unit: Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Zoltán Divéki, Natalia Kovalkovicova, Yi Liu, Joaquim Maia, Annamaria Rossi

#### d) Hearing Expert:

None

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<sup>1</sup> Participated on 21 and 22 September 2016

<sup>2</sup> Participated via teleconference on 21 and 22 September 2016

<sup>3</sup> Participated on 21 September 2016

## 1. Welcome and apologies for absence

The Chair welcomed all participants and explained the order of the agenda.

Apologies were received from Christina Tlustos and Davor Želježic.

## 2. Adoption of agenda

The agenda was adopted without any changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>4</sup> and the Decision of the Executive Director on Declarations of Interest<sup>5</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 17<sup>th</sup> Working Group meeting held from 28 to 29 June in Parma (Italy), 18<sup>th</sup> Working Group meeting held on 7 July in Parma (Italy) via teleconference, 19<sup>th</sup> Working Group meeting held on 18 August in Parma (Italy)

The minutes of WG17, WG18 and WG19 meetings were adopted with minor editorial changes.

## 5. Scientific topics for discussion

### 5.1 Draft opinion on endo-1,4-beta-xylanase from *A. niger* ([EFSA-Q-2014-00305](#))

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

### 5.2. Draft opinion on xylanase from *B. subtilis* ([EFSA-Q-2014-00733](#))

The discussion of the draft opinion was postponed.

### 5.3. Draft opinion on endo-1,4-beta xylanase from *B. subtilis* ([EFSA-Q-2014-00293](#))

The WG discussed the draft opinion and identified the issues for further clarification by the applicant. The draft opinion will be discussed at a WG meeting in the future.

### 5.4. Draft opinion on protease complex consisting of trypsin, chymotrypsin, elastase and carboxypeptidase from pig pancreas ([EFSA-Q-2015-00066](#))

The WG discussed the draft opinion and identified the need for further discussion on specific part of the opinion. The draft opinion will be discussed at a WG meeting in the future.

<sup>4</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>5</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **5.5. Draft opinion on trypsin and chymotrypsin from pig pancreas ([EFSA-Q-2014-00163](#))**

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

#### **5.6. Draft opinion on trypsin from porcine pancreatic glands ([EFSA-Q-2015-00338](#))**

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

#### **5.7. Draft opinion on alpha-amylase from *A. oryzae* ([EFSA-Q-2016-00205](#))**

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

#### **5.8. Draft opinion on pullulanase from *B. subtilis* ([EFSA-Q-2015-00127](#))**

The WG discussed the section on the genetic modifications, in particular the safe strain lineage, of the draft opinion. Further discussion will take place in the future.

### **6. Any Other Business**

The feedback from the CEF Panel regarding the phrasing of the exposure section in the draft barley opinion ([EFSA-Q-2014-00731](#)) was given.

### **7. Next meetings**

The next Standing Working Group meeting is scheduled for 9-10 November 2016.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 19<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 18/08 2016, Parma

(Agreed on 20/09/2016)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (chair), Christina Tlustos, Holger Zorn

#### b) Hearing Expert<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

- FIP Unit: Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Natalia Kovalkovicova, Yi Liu, Joaquim Manuel Maia, Claudia Roncancio Peña
- DATA Unit: Davide Arcella

### 1. Welcome and apologies for absence

The Chair welcomed all participants. No apology for absence was received.

### 2. Adoption of agenda

The agenda item 4.2 was added. Other items were adopted without change.

### 3. Declarations of Interest of Working Group Members

Specific Declaration of Interest was collected orally for agenda item 4.2. No interest was declared.

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:

<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

#### **4. Scientific topics for discussion**

##### **4.1. Panel statement on exposure assessment of food enzymes ([EFSA-Q-2015-00468](#))**

The WG finalised the CEF Panel's draft Statement on Exposure Assessment of Food Enzymes. It will be presented at the next plenary meeting.

##### **4.2. Draft opinion on endo-1,4-beta-xylanase obtained from a genetically modified strain of *Aspergillus niger* ([EFSA-Q-2014-00305](#))**

The WG discussed the draft opinion and identified a need for requesting additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

#### **5. Any Other Business**

The Technical Report, summarising the public consultation on the CEF Panel's draft Statement on Exposure Assessment of Food Enzymes will be aligned with modifications made in the agenda item 4.1.

The ad hoc meeting with the industry association AMFEP will be published on the EFSA website.

#### **6. Next meetings**

The next meeting is scheduled for 20-22 September 2016. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 18<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 06/07 2016, Parma by teleconference

(Agreed on 20/09/2016)

### Participants

#### a) Working Group Experts:

Boet Glandorf, Lieve Herman, Sirpa Kärenlampi (chair)

#### b) European Commission and/or Member States representatives:

– none

#### c) EFSA:

– FIP Unit: Margarita Aguilera-Gómez, Zoltán Divéki

#### d) Hearing Expert:

– none

### 1. Welcome and apologies for absence

The Chair welcomed all participants.

Apologies were received from: Andrew Chesson, Klaus-Dieter Jany and Andy Smith

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **4. Discussion of non-GM applications and identification of possible questions**

##### **4.1 Draft opinion on $\alpha$ -amylase from *Aspergillus oryzae* (strain L729-48) ([EFSA-Q-2016-00205](#))**

The WG discussed the application. The draft opinion will be discussed at a WG meeting in the future.

##### **4.2 Draft opinion on pullulanase from *Pullulanibacillus naganoensis* (strain AE-PL) ([EFSA-Q-2015-00451](#))**

The WG discussed the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

#### **5. Discussion of summaries of non-GM microorganism applications, identification and drafting questions**

##### **5.1 Draft opinion on phosphodiesterase I from *Leptographium procerum* (strain FDA) ([EFSA-Q-2013-01006](#))**

The WG discussed the summary of the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

##### **5.2 Draft opinion on triacylglycerol lipase from *Rhizopus oryzae* (strain AE-TL) ([EFSA-Q-2014-00112](#))**

The WG discussed the summary of the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

##### **5.3 Draft opinion on AMP deaminase from *Aspergillus melleus* (strain AE-DN) ([EFSA-Q-2014-00326](#))**

The WG discussed the summary of the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

##### **5.4 Draft opinion on endo-1,4- $\beta$ -xylanase and beta glucanase from *Disporotrichum dimorphosporum* (strain DXL) ([EFSA-Q-2014-00355-356](#))**

The WG discussed the summary of the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

##### **5.5 Draft opinion on cellulose from *Trichoderma viride* (AE-CT) ([EFSA-Q-2015-00067](#))**

The WG discussed the summary of the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

##### **5.6 Draft opinion on $\alpha$ -amylase from *Microbacterium imperiale* (strain AE-AMT) ([EFSA-Q-2014-00544](#))**

The WG discussed the summary of the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.



### **5.7 Draft opinion on $\beta$ -galactosidase from *Bacillus circulans* (strain AE-LT) ([EFSA-Q-2014-00670](#))**

The WG discussed the summary of the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

### **5.8 Draft opinion on $\beta$ -glucanase, xylanase and cellulose from *Hemicola insolens* (strain NZYM-ST) ([EFSA-Q-2014-00670](#))**

The WG discussed the summary of the application and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

### **5.9 Draft opinion on $\alpha$ -amylase from *Aspergillus oryzae* (strain AE-AA) ([EFSA-Q-2014-00913](#))**

The WG could not discuss this application due to lack of time. It will be discussed in one of the future meetings.

### **5.10 Draft opinion on glucoamylase from *Rhizopus oryzae* (strain AE-G) ([EFSA-Q-2015-00272](#))**

The WG could not discuss this application due to lack of time. It will be discussed in one of the future meetings.

### **5.11 Draft opinion on ribonuclease P from *Penicillium citrinum* (strain AE-RP) ([EFSA-Q-2015-00288](#))**

The WG could not discuss this application due to lack of time. It will be discussed in one of the future meetings.

### **5.12 Draft opinion on triacylglycerol lipase from *Candida cylindracea* ([EFSA-Q-2015-00339](#))**

The WG could not discuss this application due to lack of time. It will be discussed in one of the future meetings.

## **6. Discussion on safe strain lineage concept in context of e.g. application [EFSA-Q-2015-00127](#) (pullulanase from *B. subtilis*)**

The WG could not discuss this item due to lack of time. It will be discussed in one of the future meetings.

## **7. Any Other Business**

The WG discussed the organisation of future WG meetings and feedback from risk assessment progress in related scientific areas.

## **8. Next meetings**

The next meeting is scheduled for 20-22 September 2016. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 17<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 28/06 – 29/06 2016, Parma

(Agreed on 20/09/2016)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (chair), Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi (via TC), Francesca Marcon, André Penninks, Andy Smith, Davor Želježić, Christina Tlustos, Holger Zorn

#### b) European Commission and/or Member States representatives:

- Rafael Pérez Berbejal

#### c) EFSA:

- FIP Unit: Annamaria Rossi, Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Yi Liu, Kim Rygaard, Zoltán Divéki, Natalia Kovalkovicova, Joaquim Maia
- DATA Unit: Davide Arcella

#### d) Hearing Expert:

None

### 1. Welcome and apologies for absence

The Chair welcomed all participants.

Apologies were received from: Andrew Chesson (both days).

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

#### **4. Agreement of the minutes of the 16<sup>th</sup> Working Group meeting held from 18 to 19 May in Parma (Italy)**

The minutes of the 16th WG meeting were adopted without changes.

#### **5. Scientific topics for discussion**

##### **5.1 Draft opinion on beta-amylase preparation from soybean (*Glycine max*) ([EFSA-Q-2016-00085](#))**

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

##### **5.2. Draft opinion on peroxidase obtained from soy bean hulls ([EFSA-Q-2013-00897](#))**

The WG discussed the draft opinion and identified a need for request of additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a WG meeting in the future.

##### **5.3. Draft opinion on protease complex consisting of trypsin, chymotrypsin, elastase and carboxypeptidase from pig pancreas ([EFSA-Q-2015-00066](#))**

The WG discussed the draft opinion and identified the issues for further clarification. The draft opinion will be discussed at a WG meeting in the future.

##### **5.4. Draft opinion on trypsin and chymotrypsin from pig pancreas ([EFSA-Q-2014-00163](#))**

The draft opinion was not discussed due to the lack of time.

##### **5.5. Draft opinion on trypsin from porcine pancreatic glands ([EFSA-Q-2015-00338](#))**

The draft opinion was not discussed due to the lack of time.

#### **6. Any Other Business**

None

#### **7. Next meetings**

The next Standing Working Group meeting is scheduled for 20-22 September 2016. The outcome of this meeting will be shared with all members of the WG Enzymes at that meeting.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 16<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 18/05 – 19/05 2016, Parma

(Agreed on 28/06/2016)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (chair), Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andy Smith, Davor Želježić, Christina Tlustos, Holger Zorn, Andrew Chesson

#### b) Hearing Experts<sup>1</sup>:

- Julia Le Jeune (Food Safety Authority Ireland; participant to agenda item 6)

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

- FIP Unit: Claudia Roncancio Peña, Annamaria Rossi, Margarita Aguilera-Gómez, Zoltán Divéki, Yi Liu, Kim Rygaard, Magdalena Andryszkiewicz
- DATA Unit: Davide Arcella

### 1. Welcome and apologies for absence

The Chair welcomed all participants and introduced Julia Le Jeune, the hearing expert, who had been invited to give a presentation on the development of an Irish Food Conversion Model.

Apologies were received from: Boet Glandorf (both days) and Rafael Pérez Berbejal (both days).

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the

Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 14<sup>th</sup> and 15<sup>th</sup> Working Group meetings held from 12 to 14 January in Parma (Italy) and from 21 to 22 April in Dublin (Ireland)

The minutes of the 14th WG meeting were adopted with minor editorial changes and the minutes of the 15th WG meeting were agreed without changes.

## 5. Scientific topics for discussion

### 5.1 Draft opinion on beta-amylase from *Hordeum vulgare* ([EFSA-Q-2014-00731](#))

The WG discussed the draft opinion and updated it according to the additional information received from the applicant, as well as the suggestions made during the last Plenary meeting. The draft opinion will be discussed at the Plenary meeting.

### 5.2. Draft opinion on beta-amylase from *Triticum* spp. ([EFSA-Q-2015-00083](#))

The WG discussed the draft opinion for the first time and identified no need for request of additional information. The draft opinion will be discussed at the Plenary meeting.

### 5.3. Draft opinion on beta-amylase from *Glycine max* ([EFSA-Q-2015-00085](#))

The draft opinion was not discussed due to the lack of time.

## 6. Any Other Business

### Exposure-related tasks

The outcome of the public consultation on the CEF Panel's draft Statement on Exposure Assessment of Food Enzymes was presented. The revision of the Statement is underway. A Technical Report summarising the exercise will be presented at the Plenary meeting and published together with the final Statement.

## 7. Next meetings

The next meeting is scheduled for 28-29 June 2016.

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 15<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 21-22/04 2016, Dublin

(Agreed on 10/05/2016)

### Participants

#### a) Working Group Experts:

- Christina Tlustos

#### Hearing Experts<sup>1</sup>:

- none

#### b) European Commission and/or Member States representatives:

- none

#### c) EFSA:

- DATA Unit: Davide Arcella
- FIP Unit: Yi Liu

### 1. Welcome and apologies for absence

The EFSA staff welcomed all participants and explained that this meeting was to focus on technical aspects of dietary exposure to food enzymes. The outcome will be shared with all enzyme WG members at the next WG meeting.

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

#### **4. Scientific topics for discussion**

##### **4.1 Public consultation ([EFSA-Q-2015-00515](#))**

A public consultation was held from 16 February to 31 March 2016 to collect feedback for the "Draft statement on exposure assessment of food enzymes". Comments received were discussed with the purpose of revising the draft statement. The outcome of this public consultation will be published in a technical report. The draft technical report will be presented at the next meeting.

##### **4.2 Draft statement on exposure assessment of food enzymes ([EFSA-Q-2015-00468](#))**

The group focussed on one challenging technical issues, i.e. how to synchronise the calculated TOS value with the consumption data reported in the dietary surveys. The so called starch process was used as an example. Discussions will continue in forthcoming meetings.

#### **5. Next meetings**

The next meeting is scheduled for 18-19 May 2016.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 14<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 09/03 – 10/03 2016, Parma

(Agreed on 18/05/2016)

### Participants

#### a) Working Group Experts:

- Karl-Heinz Engel (chair), Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andy Smith, Christina Tlustos, Holger Zorn

#### Hearing Experts<sup>1</sup>:

- none

#### b) European Commission and/or Member States representatives:

- Rafael Pérez Berbejal (DG SANTE)

#### c) EFSA:

- FIP Unit: Claudia Roncancio Peña, Margarita Aguilera-Gómez, Zoltán Divéki, Yi Liu, Marina Goumenou, Kim Rygaard, Magdalena Andryszkiewicz

### 1. Welcome and apologies for absence

The Chair welcomed all and explained the order of the meeting. He announced that Sirpa Kärenlampi became a Vice-Chair of the WG what was officially announced at the 60th Plenary meeting.

The apologies were received from: Davor Zeljezic (both days), Zoltán Divéki (on 10/03) and Marina Goumenou (both days).

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 13<sup>th</sup> Working Group meeting held from 12 to 14 January in Parma (Italy)

The minutes of the 13<sup>th</sup> WG meeting were adopted with minor editorial changes.

## 5. Scientific topics for discussion

### 5.1 Draft opinion on beta-amylase from *Hordeum vulgare* ([EFSA-Q-2014-00731](#))

The WG discussed the draft opinion and identified a need for clarification. The Secretariat will request the applicant to provide the additional data. The draft opinion will be revised accordingly and prepared for the discussion at the Plenary meeting.

## 6. Any Other Business

### Allergenicity approach

An approach for enzymes from plants, animals and microorganisms as sources was proposed and discussed. Based on the discussion the changes were made directly into the flowcharts. The draft opinion on barley was taken as an example for workability of the approach for the plant source. An approach for enzymes from animals' sources will be proposed and discussed in the future.

### Non-GMM derived food enzymes

The draft proposal including the criteria to be checked for non-GMM microorganisms was discussed. The general criteria were agreed on, however there were some issues identified that need further investigation (Antimicrobial Resistance, QPS status only for food enzyme) and they will be discussed in the future.

## 7. Next meetings

The next meeting is scheduled for 21-22 April 2016.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 13<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 12/01 – 14/01 2016, Parma

(Agreed on 9/03/2016)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (chair), Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andy Smith, Christina Tlustos, Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- none

#### c) European Commission and/or Member States representatives:

- Rafael Pérez Berbejal (DG SANTE)

#### d) EFSA:

- FIP Unit: Claudia Roncancio Peña, Margarita Aguilera-Gómez (via TC), Magdalena Andryszkiewicz, Zoltán Divéki, Marina Goumenou, Yi Liu, Kim Rygaard

### 1. Welcome and apologies for absence

The first day of the meeting was chaired by Lieve Herman due to the absence of Karl-Heinz Engel. Second and third day were chaired by Karl-Heinz Engel.

Apologies were received from: Karl-Heinz Engel (12/01), Christina Tlustos (12/01, on 13/01 and 14/01 via TC), Manfred Metzler (all three days) and Davor Zeljezi (all three days).

Zoltán Divéki who joined the Enzyme Team on 1/01 was introduced to the WG.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 12<sup>th</sup> Working Group meeting held from 8 to 10 December in Parma (Italy)

The minutes of the 12th WG meeting were adopted without changes.

## 5. Scientific topics for discussion

### 5.1 Draft opinion on trypsin (serine protease) from pig pancreas ([EFSA-Q-2014-00163](#))

The WG discussed the Tech part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

### 5.2 Draft opinion on beta-amylase from *Hordeum vulgare* ([EFSA-Q-2014-00731](#))

The draft opinion was not discussed due to the lack of time.

### 5.3 Draft opinion on beta-galactosidase from *Kluyveromyces lactis* ([EFSA-Q-2014-00669](#))

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

### 5.4 Draft opinion on trypsin, chymotrypsin, elastase, carboxypeptidase from pig pancreas ([EFSA-Q-2015-00066](#))

The WG discussed the Tech part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

### 5.5 Draft opinion on trypsin from porcine pancreas ([EFSA-Q-2015-00338](#))

The draft opinion was not discussed due to the lack of time.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## **5.6 Draft opinion on beta-amylase from wheat ([EFSA-Q-2015-00083](#))**

The draft opinion was not discussed due to the lack of time.

## **6. Any Other Business**

### Strain identification for non-GMM dossiers

A proposal of the summary of the data requirements for non-GM strains was drafted and discussed in the GMM-WG. There were some issues identified that need further investigation and will be discussed in the future.

## **7. Next meetings**

The next meeting is scheduled for 9-10 March 2016.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 12<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 8/12 – 10/12 2015, Parma

(Agreed on 12/01/2016)

### Participants

#### a) Working Group Experts:

Karl-Heinz Engel (chair), Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Andy Smith, Cristina Tlustos, Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- none

#### c) European Commission and/or Member States representatives:

- Rafael Perez Berbejal (DG SANTE)

#### d) EFSA:

- FIP Unit: Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Marina Goumenou, Yi Liu, Kim Rygaard, Anne Theobald

### 1. Welcome and apologies for absence

The secretariat informed the WG that Karl-Heinz Engel was nominated at the last CEF Panel meeting as chair of this WG and congratulated him. The chair welcomed the members. Apologies were received from Cristina Tlustos for 9 December afternoon and 10 December and from Davor Zeljezic and Manfred Metzler for the whole meeting.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 11<sup>th</sup> Working Group meeting held from 20 to 22 October in Parma (Italy)

The minutes of 11th WG meeting were agreed with minor editorial changes.

## 5. Scientific topics for discussion

### 5.1 Draft opinion on glucose oxidase from GM *Aspergillus niger* (strain ZGL) ([EFSA-Q-2013-01005](#))

The WG discussed additional information received for the GMM part of the draft opinion and identified a need for further clarification. The draft opinion will be discussed again at a future WG meeting.

### 5.2 Draft opinion polygalacturonase from GM *Trichoderma reesei* (strain RF6197) ([EFSA-Q-2014-00798](#))

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

### 5.3 Draft opinion on asparaginase from GM *Bacillus subtilis* (strain NZYM-CK) ([EFSA-Q-2014-00845](#))

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

### 5.4 Draft opinion on alpha-amylase from GM *Bacillus subtilis* (strain NBA) ([EFSA-Q-2014-00912](#))

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

#### **5.5 Draft opinion on lysophospholipase from GM *Aspergillus niger* (strain NZYM-PL) ([EFSA-Q-2014-00919](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

#### **5.6 Draft opinion on glucans 1, 4 alpha-maltohydrolase from GM *Bacillus subtilis* (strain NZYM-OC) ([EFSA-Q-2014-00922](#))**

The WG discussed the GMM part of the draft opinion and will continue the discussion at the future meeting.

#### **5.7 Draft opinion on glucans 1, 4 alpha-maltohydrolase from GM *Bacillus subtilis* (strain NZYM-SO) ([EFSA-Q-2015-00046](#))**

The WG discussed the GMM part of the draft opinion and will continue the discussion at the future meeting.

#### **5.8 Draft opinion on xylanase from GM *Bacillus licheniformis* (strain NZYM-CE) ([EFSA-Q-2015-00064](#))**

The draft opinion was not discussed due to the lack of time.

#### **5.9 Draft opinion on trypsin and chymotrypsin from pig pancreas ([EFSA-Q-2014-00163](#))**

The WG discussed the Tech part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data.

#### **5.10 Draft opinion on beta-amylase from *Hordeum vulgare* ([EFSA-Q-2014-00731](#))**

The WG discussed the draft opinion and identified the issues for further clarification. The opinion will be discussed at the future meeting.

#### **5.11 Draft opinion on beta-galactosidase from *Kluyveromyces lactis* ([EFSA-Q-2014-00669](#))**

The WG discussed the draft opinion and identified the issues for further clarification. The opinion will be discussed at the future meeting.

#### **5.12 Draft opinion on trypsin, chymotrypsin, elastase, carboxypeptidase from pig pancreas ([EFSA-Q-2015-00066](#))**

The WG discussed the draft opinion and identified the issues for further clarification. The opinion will be discussed at the future meeting.

#### **5.13 Draft opinion on trypsin\_porcine pancreas ([EFSA-Q-2015-00338](#))**

The WG discussed the draft opinion and identified the issues for further clarification. The opinion will be discussed at the future meeting.

#### **5.14 Draft opinion on beta-amylase from wheat (*Triticum app*) ([EFSA-Q-2015-00083](#))**

The WG discussed the draft opinion and identified the issues for further clarification. The opinion will be discussed at the future meeting.

#### **6. Any Other Business**

None

#### **7. Next meetings**

The next meeting is scheduled for 12-14 January 2016.



# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 11<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 20 – 21/10 2015, Parma

(Agreed on 8/12/2015)

### Participants

#### a) Working Group Experts:

- Cristina Tlustos (chair), Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- none

#### c) European Commission and/or Member States representatives:

- Rafael Perez Berbejal (DG SANTE)

#### d) EFSA:

- FIP Unit: Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Marina Goumenou, Yi Liu, Kim Rygaard, Alexandra Tard, Anne Theobald
- Data Unit: Davide Arcella

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## **1. Welcome and apologies for absence**

The meeting was chaired by Cristina Tlustos. The apologies were received from Karl-Heinz Engel, Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, Manfred Metzler, André Penninks, Andy Smith and Davor Zeljezic did not attend this meeting because it was dedicated to exposure assessment. The chair welcomed Yi Liu who joined the FIP unit as from 1 October as scientific officer in the enzyme team.

## **2. Adoption of agenda**

Agenda was adopted without changes.

## **3. Declarations of Interest of Working Group Members**

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## **4. Agreement of the minutes of the 10<sup>th</sup> Working Group meeting held from 22 to 24 September 2015**

The approval of the minutes of 10th WG meeting was postponed and will be done via written procedure.

## **5. Scientific topics for discussion**

### **5.1 Discussion on the draft statement on exposure assessment of food enzymes ([EFSA-Q-2015-00468](#))**

The WG members were informed that the draft statement on exposure assessment of food enzymes was endorsed by the CEF Panel at its meeting on 13-15 October and is intended to be presented to stakeholders at the Infosession to be held in Brussels on 24 November<sup>4</sup>. The enzyme team and the WG experts applied the tiered approach with examples from various dossiers and discussed the outcome.

## **6. Any Other Business**

None

## **7. Next meetings**

The next meeting is scheduled for 8-10 December 2015.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>4</sup> <http://www.efsa.europa.eu/en/events/event/151124a>

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 10<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 22/09 – 24/09 2015, Parma

(Agreed on 06/11/2015)

### Participants

#### a) Working Group Experts:

- Lieve Herman, Sirpa Kärenlampi, Klaus-Dieter Jany, Francesca Marcon, Manfred Metzler, André Penninks, Davor Zeljezic, Andy Smith, Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- none

#### c) European Commission and/or Member States representatives:

- Rafael Perez Berbejal (DG SANTE)

#### d) EFSA:

- FIP Unit: Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Marina Goumenou, Anne Theobald

### 1. Welcome and apologies for absence

The meeting was chaired by Lieve Herman. The apologies were received from, Karl-Heinz Engel, Boet Glandorf, Cristina Tlustos, Andy Smith (22/10 and 24/10), Francesca Marcon (22/10) and Manfred Metzler (24/10).

The secretariat informed the WG about the resignation of Fidel Toldrá from this and other EFSA working groups and from the CEF Panel for private reasons. As of 15 September 2015, Fidel Toldra is not a member of the WG on Enzymes. The vice chair expressed her and the Working Group's regrets about this resignation and expressed her gratitude for his valuable contributions in the past.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

Agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 9<sup>th</sup> Working Group meeting held from 29 June to 1 July

The minutes of 9th WG meeting were agreed with minor editorial changes.

## 5. Scientific topics for discussion

### 5.1 Draft opinion on glucan 1,4- $\alpha$ -maltohydrolase from genetically modified *Bacillus subtilis* (strain MAM) ([EFSA-Q-2013-00790](#))

The WG discussed additional information received and identified a need for further clarification. The draft opinion will be discussed again at a future WG meeting.

### 5.2 Draft opinion on phosphodiesterase from *Leptographium procerum* (FDA) ([EFSA-Q-2013-01006](#))

The WG discussed additional information received and will update the toxicological part of the opinion accordingly. The draft opinion will be discussed again at a future WG meeting.

### 5.3 Draft opinion on endo 1,4-beta xylanase from genetically modified *Aspergillus acidus* (RF 7398) ([EFSA-Q-2014-00165](#))

The WG discussed additional data received and identified a need for further clarification. The Secretariat will request the applicant to provide additional clarification. The draft opinion will be discussed again at a future WG meeting.

### 5.4 Draft opinion on polygalacturonase and beta-glucanase from *Aspergillus aculeatus* (NZYM-RE) ([EFSA-Q-2014-00200](#) and [EFSA-Q-2014-00201](#))

The WG discussed additional information received and continued revising the toxicological part of the opinion. The draft opinion will be discussed again at a future WG meeting.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

**5.5 Draft opinion on xylanase from genetically modified *Aspergillus niger* (DS26538) ([EFSA-Q-2014-00305](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

**5.6 Draft opinion on alpha-amylase from genetically modified *Aspergillus niger* (strain NZYM-MC) ([EFSA-Q-2014-00306](#))**

The WG discussed additional information received and continued revising the toxicological part of the opinion. The draft opinion will be discussed again at a future WG meeting.

**5.7 Draft opinion on glucoamylase from genetically modified *Aspergillus niger* (NZYM-BF) ([EFSA-Q-2014-00307](#))**

The WG discussed the toxicological part of the draft opinion and continued revising it accordingly. The draft opinion will be discussed again at a future WG meeting.

**5.8 Draft opinion on xylanase/alpha-amylase from *Disporotrichum dimorphosporum* (strain DXL) ([EFSA-Q-2014-00355](#) and [EFSA-Q-2014-00356](#))**

The WG discussed additional information received and identified a need for further clarification. The draft opinion will be discussed again at a future WG meeting.

**5.9 Draft opinion on asparaginase from genetically modified *Aspergillus niger* (AGN) ([EFSA-Q-2014-00401](#))**

The WG discussed the GMM part of the opinion and continued revising it accordingly. The draft opinion will be discussed again at a future WG meeting.

**5.10 Draft opinion on alpha-amylase from genetically modified *Aspergillus niger* (NZYM-SB) ([EFSA-Q-2014-00413](#))**

The WG discussed the toxicological part of the draft opinion and continued revising it accordingly. The draft opinion will be discussed again at a future WG meeting.

**5.11 Draft opinion on xylanase from *Trichoderma citrinoviride* ([EFSA-Q-2014-00543](#))**

The draft opinion was not discussed due to the lack of time.

**5.12 Draft opinion on alpha-amylase from genetically modified *Microbacterium imperiale* (AE-AMT) ([EFSA-Q-2014-00544](#))**

The WG discussed the toxicological part of the draft opinion and continued revising it accordingly. The draft opinion will be discussed again at a future WG meeting.

**5.13 Draft opinion on pectin esterase from genetically modified *Trichoderma reesei* (RF6201) ([EFSA-Q-2014-00799](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

**5.14 Draft opinion on propyl endopeptidase from genetically modified *Aspergillus niger* (GEP) ([EFSA-Q-2014-00852](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

**5.15. Draft opinion on beta-galactosidase from genetically modified *Aspergillus niger* (TOL) ([EFSA-Q-2014-00853](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

**5.16. Draft opinion on aqualisin from genetically modified *Bacillus subtilis* (Raα3114) ([EFSA-Q-2014-00920](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

**5.17. Draft opinion on trypsin, chymotrypsin, elastase, carboxypeptidase from pig pancreas ([EFSA-Q-2015-00066](#))**

The draft opinion was not discussed due to the lack of time.

**5.18. Draft opinion beta-amylase from wheat ([EFSA-Q-2015-00083](#))**

The draft opinion was not discussed due to the lack of time.

**6. Any Other Business**

None

**7. Next meetings**

The next meeting is scheduled for 20-21 October.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 9<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 29/06 – 01/07 2015, Teleconference

(Agreed on 22/09/2015)

### Participants

#### a) Working Group Experts:

Fidel Toldrá (chair), Karl-Heinz Engel, Boet Glandorf, Lieve Herman, Sirpa Kärenlampi, Boet Glandorf, Klaus-Dieter Jany, Francesca Marcon, Manfred Metzler, André Penninks, Davor Zeljezic, Andy Smith, Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- none

#### c) European Commission and/or Member States representatives:

- Rafael Perez (DG SANTE)

#### d) EFSA:

- FIP Unit: Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Marina Goumenou, Kim René Rygaard Nielsen, Anne Theobald
- Data Unit: Davide Arcella

### 1. Welcome and apologies for absence

The chair welcomed the participants. The apologies were received from Cristina Tlustos.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

Agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 8<sup>th</sup> Working Group meeting held from 20 to 21 May in Parma (Italy)

The minutes of 8th WG meeting were agreed.

## 5. Scientific topics for discussion

### 5.1 Draft opinion on glucose oxidase from GM *Aspergillus niger* (strain ZGL) ([EFSA-Q-2013-01005](#))

The WG discussed additional information received, updated accordingly and finalised the technical part of the opinion.

### 5.2 Draft opinion on beta-glucanase from *Aspergillus aculeatus* (NZYM-RE) ([EFSA-Q-2014-00201](#))

The WG discussed, updated and finalised the technical part of the opinion.

### 5.3 Draft opinion on xylanase from *Trichoderma citrinoviride* ([EFSA-Q-2014-00543](#))

The WG discussed the toxicological part of the draft opinion and identified a need for additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

### 5.4 Draft opinion on xylanase from GM *Aspergillus niger* (strain CBS 612.94) ([EFSA-Q-2014-00202](#))

The WG discussed the technical part of the draft opinion and identified a need for additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### **5.5 Draft opinion on peroxidase obtained from soy bean hulls ([EFSA-Q-2013-00897](#))**

The WG discussed the technical part of the draft opinion and identified a need for additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

#### **5.6 Draft opinion on asparaginase from GM *Aspergillus niger* (strain ASP) ([EFSA-Q-2013-00895](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

#### **5.7 Draft opinion on triacylglycerol lipase from genetically modified *Aspergillus niger* (LFS) ([EFSA-Q-2014-00325](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

#### **5.8 Draft opinion on asparaginase from genetically modified *Aspergillus niger* (strain AGN) ([EFSA-Q-2014-00401](#))**

The WG partially discussed the GMM part of the draft opinion. The draft opinion will be discussed in depth at the future meeting.

#### **5.9 Draft opinion on alpha-amylase from genetically modified *Bacillus licheniformis* (NZYM-AV) ([EFSA-Q-2014-00794](#))**

The GMM part of the draft opinion was not discussed due to the lack of time.

#### **5.10 Draft opinion on alpha-amylase from genetically modified *Aspergillus niger* (NZYM-SB) ([EFSA-Q-2014-00413](#))**

The WG discussed the toxicological part of the draft opinion and identify no need for additional data. The draft opinion will be discussed in depth at a future WG meeting. The GMM part of the draft opinion was not discussed due to the lack of time.

#### **5.11 Draft opinion on alpha-amylase from genetically modified *Aspergillus niger* (NZYM-MC) ([EFSA-Q-2014-00306](#))**

The WG discussed the toxicological part of the draft opinion and identify no need for additional data at this stage. The draft opinion will be discussed in depth at a future WG meeting. The GMM part of the draft opinion was not discussed due to the lack of time.

#### **5.12 Draft opinion on pectine lyase from genetically modified *Trichoderma reesei* (RF6199) ([EFSA-Q-2014-00164](#))**

The WG discussed additional information received, updated accordingly the technical part of the opinion and identified a need for additional data. The Secretariat will request the

applicant to provide additional data. The draft opinion will be discussed again at a future WG meeting. The GMM part of the draft opinion was not discussed due to the lack of time.

**5.13 Draft opinion on trypsin (serine protease) from genetically modified *Bacillus licheniformis* (NZYM-RH) ([EFSA-Q-2014-00292](#))**

The GMM part of the draft opinion was not discussed due to the lack of time.

**5.14 Draft opinion on phospholipase A2 from genetically modified *Trichoderma reesei* (RF8793) ([EFSA-Q-2014-00411](#))**

The WG discussed the toxicological and the GMM part of the draft opinion and identified a need for additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

**5.15. Draft opinion on xylanase from genetically modified *Bacillus subtilis* TD160 (229) ([EFSA-Q-2014-00733](#))**

The WG discussed and finalised the GMM part of the draft opinion.

**5.16. Draft opinion on xylanase from a genetically modified strain of *Trichoderma reesei* (RF5703) ([EFSA-Q-2014-00410](#))**

The WG discussed the toxicological part of the draft opinion and proposed changes. The draft opinion will be revised accordingly and discussed at the future meeting.

**5.17. Draft opinion on endo 1,4-beta xylanase from a genetically modified strain of *A. acidus* (RF 7398) ([EFSA-Q-2014-00165](#))**

The WG discussed the toxicological part of the draft opinion and identified a need for additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

**5.18. Draft opinion on triacylglycerol lipase from *Candida cylindracea* (strain AE-LAYH) ([EFSA-Q-2014-00113](#))**

The WG discussed the toxicological and the GMM part of the draft opinion and identified a need for additional information. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

**5.19. Draft opinion on triacylcerol lipase from *Penicillium roqueforti* (AE-LRF) ([EFSA-Q-2014-00545](#))**

The WG discussed the toxicological part of the draft opinion and identify a need for additional data at this stage. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed at a future WG meeting.

**5.20. Draft opinion on glucoamylase from a genetically modified strain of *Aspergillus niger* (NZYM-BF) ([EFSA-Q-2014-00307](#))**

The WG discussed the toxicological part of the draft opinion and identify no need for additional data at this stage. The draft opinion will be discussed at a future WG meeting.

## **6. Any Other Business**

None

## **7. Next meetings**

The next meeting is scheduled for 22 to 24 September 2015.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 8<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 20 – 21 May 2015, Parma (Italy)

(Agreed on 29/06/2015)

### Participants

#### a) Working Group Experts:

Fidel Toldrá (TC), Karl-Heinz Engel, Boet Glandorf, Lieve Herman, Sirpa Kärenlampi, Klaus-Dieter Jany, Francesca Marcon (TC), Manfred Metzler, André Penninks, Davor Zeljezic, Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- none

#### c) European Commission and/or Member States representatives:

- Rafael Perez (DG SANTE)

#### d) EFSA:

- FIP Unit: Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Marina Goumenou, Kim René Rygaard Nielsen, Anne Theobald

### 1. Welcome and apologies for absence

The meeting has been chaired by Karl-Heinz Engel who welcomed the participants. Apologies were received from Andy Smith.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Group Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Working Group Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 6<sup>th</sup> and 7<sup>th</sup> Working Group meeting held from 14 to 16 April and 22 to 23 April in Parma (Italy)

The minutes of the 6<sup>th</sup> and 7<sup>th</sup> Working Group meeting held from 14-16 April and 22-23 April were agreed by written procedure on 28 April and 30 April, respectively.<sup>4</sup>

## 5. Scientific topics for discussion

### 5.1 Draft opinion on Glucose oxidase from GM *Aspergillus niger* (strain ZGL) (EFSA-Q-2013-01005)

The WG discussed toxicological and the GMM part of the draft opinion and considered the information partially acceptable and that more data are needed to proceed with the evaluation. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

### 5.2 Draft opinion on Phosphodiesterase I obtained from *Leptographium procerum* (FDA) (EFSA-Q-2013-01006)

The WG discussed the GMM and toxicological part of the draft opinion. The WG identified additional data need for the toxicological part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

### 5.3 Draft opinion on Alpha-galactosidase from a genetically modified strain of *Saccharomyces cerevisiae* (CBS 615-94) carrying a gene from *Cyamopsis tetragonoloba* (EFSA-Q-2013-01019)

The previously requested additional information for the GMM and toxicological part has not been received from the applicant.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>4</sup> <http://www.efsa.europa.eu/en/fipwgs/documents/enzymesminuteswg.pdf>

**5.4 Draft opinion on Beta-glucanase from *Aspergillus aculeatus* (NZYM-RE) ([EFSA-Q-2014-00201](#))**

The WG discussed the toxicological part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

**5.5 Draft opinion on Xylanase from *Trichoderma citrinoviride* ([EFSA-Q-2014-00543](#))**

The draft opinion was not discussed due to lack of time.

**5.6 Draft opinion on Pectin lyase from genetically modified *Trichoderma reesei* (strain RF6199) ([EFSA-Q-2014-00164](#))**

The draft opinion was not discussed due to lack of time.

**5.7 Draft opinion on Endo-1,4-beta xylanase from GM *Aspergillus niger* (strain CBS 612.94) ([EFSA-Q-2014-00202](#))**

The draft opinion was not discussed due to lack of time.

**5.8 Draft opinion on Peroxidase obtained from soy bean hulls ([EFSA-Q-2013-00897](#))**

The draft opinion was not discussed due to lack of time.

**5.9 Draft opinion on Polygalacturonase from genetically modified *Aspergillus niger* (strain EPG) ([EFSA-Q-2014-00402](#))**

The WG discussed the GMM part of the draft opinion and identified a need for additional data. The Secretariat will request the applicant to provide the additional data. The draft opinion will be finalised at a future WG meeting.

**5.10 Draft opinion on Serine protease (with trypsin specificity) from genetically modified *Fusarium venenatum* (NZYM-FG) ([EFSA-Q-2014-00412](#))**

The WG discussed the GMM part of the draft opinion. The draft opinion will be discussed again at a future WG meeting.

**5.11 Draft opinion on Endo-1,4-beta xylanase from genetically modified *Bacillus subtilis* (strain XAS) ([EFSA-Q-2014-00293](#))**

The draft opinion was not discussed.

**5.12 Draft opinion on Asparaginase from genetically modified *Aspergillus niger* (strain AGN) ([EFSA-Q-2014-00401](#))**

The draft opinion was not discussed due to lack of time.

**5.13 Draft opinion on Alpha-amylase from genetically modified *Bacillus licheniformis* (NZYM-AV) ([EFSA-Q-2014-00794](#))**

The draft opinion was not discussed due to lack of time.

**5.14 Draft opinion on Alpha-amylase from genetically modified *Aspergillus niger* (NZYM-SB) ([EFSA-Q-2014-00413](#))**

The draft opinion was not discussed due to lack of time.

**5.15 Draft opinion on Alpha-amylase from genetically modified *Bacillus licheniformis* (NZYM-BC) ([EFSA-Q-2013-00685](#))**

The draft opinion was discussed. It is intended for presentation to the CEF Panel.

**5.16 Draft opinion on glucose oxidase from genetically modified *Aspergillus oryzae* (NZYM-KP) ([EFSA-Q-2013-00687](#))**

The draft opinion was discussed. It is intended for presentation to the CEF Panel.

**6. Any Other Business**

None

**7. Next meetings**

The next meeting will be held 29/06 – 01/07.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 7<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 22 – 23 April 2015, Parma (Italy)

(Agreed on 30 04 2015)

### Participants

#### a) Working Group Experts:

- Boet Glandorf, Lieve Herman (chair), Klaus-Dieter Jany, Sirpa Kärenlampi

#### b) Hearing Experts<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

FIP Unit: Margarita Aguilera-Gómez, Anne Theobald

### 1. Welcome and apologies for absence

The meeting was chaired by Lieve Herman who welcomed the participants.

### 2. Adoption of agenda

The agenda was adopted without changes.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



### **3. Declarations of Interest of Scientific Committee/Scientific Panel/ Members**

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Scientific Panel Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

### **4. Agreement of the minutes of the 6<sup>th</sup> Working Group meeting held on 14-16 April 2015, Parma.**

The minutes of the 6<sup>th</sup> Working Group meeting held on 14-16 April 2015 were agreed.

### **5. Scientific topics for discussion**

#### **5.1. Draft opinion on Pectin lyase from a genetically modified strain of *Trichoderma reesei* (RF 6199) ([EFSA-Q-2014-00164](#))**

The GMM chapter of the draft opinion was discussed and changes were proposed. The draft opinion will be finalised at a future WG meeting.

#### **5.2. Draft opinion on Endo 1,4-beta xylanase from a genetically modified strain of *Aspergillus acidus* (RF 7398) ([EFSA-Q-2014-00165](#))**

The WG discussed the GMM part of the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

#### **5.3. Draft opinion on Serine protease from genetically modified *B. licheniformis* (strain NZYM-RH) ([EFSA-Q-2014-00292](#))**

The GMM chapter of the draft opinion was discussed and changes were proposed. The draft opinion will be finalised at a future WG meeting.

#### **5.4. Draft opinion on Alpha-amylase from genetically modified *Aspergillus niger* (strain NZYM-MC) ([EFSA-Q-2014-00306](#))**

GMM Issues: Finalised, prepared for GMM harmonized text revision.

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 5.5.

### **Draft opinion on Glucose oxidase from genetically modified *Aspergillus niger* (strain ZGL) ([EFSA-Q-2014-01005](#))**

The GMM part of the draft opinion was not discussed due to lack of time.

## 5.6. Draft opinion on Gluco-amylase from genetically modified *Aspergillus niger* (strain NZYM-BF) ([EFSA-Q-2014-00307](#))

The WG discussed the GMM part of the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

## 5.7. Draft opinion on Asparaginase from genetically modified *Aspergillus niger* (strain ASP) ([EFSA-Q-2014-00401](#))

The GMM chapter of the draft opinion was discussed and changes were proposed. The draft opinion will be finalised at a future WG meeting.

## 5.8. Draft opinion on Xylanase from genetically modified *Aspergillus niger* (strain CBS 612/94) ([EFSA-Q-2014-00202](#))

The WG discussed the GMM part of the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

## 5.9. Draft opinion on Xylanase from genetically modified *Aspergillus niger* (strain XYL) ([EFSA-Q-2014-00305](#))

The WG discussed the GMM part of the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

## 5.10. Draft opinion on Lipase from genetically modified *Aspergillus niger* (strain LFS) ([EFSA-Q-2014-00325](#))

The WG discussed the GMM part of the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

## 5.11. Draft opinion on Xylanase from genetically modified *Trichoderma reesei* (strain RF5703) ([EFSA-Q-2014-00410](#))

The WG discussed the GMM part of the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

## 5.12.

### **Draft opinion on Alpha-amylase from genetically modified *Bacillus licheniformis* (NZYM-AV) ([EFSA-Q-2014-00794](#))**

The GMM chapter of the draft opinion was discussed and changes were proposed. The draft opinion will be finalised at a future WG meeting.

## 5.13

### **Draft opinion on serine protease (with trypsin specificity) from a genetically modified strain of *Fusarium venenatum* (strain NZYM-FG) ([EFSA-Q-2014-00412](#))**

The GMM part of the draft opinion was not discussed due to lack of time.

## 5. 14.

### **Draft opinion on alpha-amylase from genetically modified *Aspergillus niger* (strain NZYM-SB) ([EFSA-Q-2014-00413](#))**

The GMM part of the draft opinion was not discussed due to lack of time.

## 6. Any other business

None

## 7. Next meeting

The next meeting, 8<sup>th</sup> WG Food Enzyme, is scheduled for 20-21<sup>th</sup> May 2015.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 6<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

**Held on 14 – 16 April 2015, Parma (Italy)**

**(Agreed on 28 04 2015)**

### Participants

#### a) Working Group Experts:

- Fidel Toldrá (chair), Karl-Heinz Engel, Klaus-Dieter Jany, Francesca Marcon, Manfred Metzler, André Penninks, Andy Smith, Christina Tlustos, Davor Zeljezic, Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- Rafael Perez (DG Santé)

#### d) EFSA:

- FIP Unit: Marina Goumenou, Kim René Rygaard Nielsen, Anne Theobald, Magdalena Andryszkiewicz

### 1. Welcome and apologies for absence

The chair welcomed the participants. Apologies were received from Manfred Metzler (three days) and Karl-Heinz Engel (for the first day).

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Scientific Committee/Scientific Panel/ Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Scientific Panel Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 5<sup>th</sup> Working Group meeting held from 10 to 12 February 2015 in Parma (Italy)

The minutes of the 5<sup>th</sup> Working Group meeting held from 10 to 12 February were agreed.<sup>4</sup>

## 5. Scientific output submitted for discussion

### 5.1 Draft opinion on Glucoamylase from genetically modified *Aspergillus niger* (strain NZYM-BE) ([EFSA-Q-2013-00896](#))

The toxicological chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

### 5.2 Draft opinion on Glucose oxidase from GM *Aspergillus niger* (strain ZGL) ([EFSA-Q-2013-01005](#))

The draft opinion was not discussed due to lack of time. It will be discussed in a future WG meeting.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>4</sup> <http://www.efsa.europa.eu/en/fipwgs/documents/enzymesminuteswg.pdf>

### **5.3 Draft opinion Trypsin from pig pancreas ([EFSA-Q-2014-00163](#))**

The technical chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

### **5.4 Draft opinion on Endo-1-4, beta-xylanase from genetically modified *Aspergillus acidus* (strain RF7398) ([EFSA-Q-2014-00165](#))**

The technical chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

### **5.5 Draft opinion on Xylanase from GM *Aspergillus niger* (strain CBS 612/94) ([EFSA-Q-2014-00202](#))**

The draft opinion was not discussed due to lack of time. It will be discussed in a future WG meeting.

### **5.6 Draft opinion on Serine protease from genetically modified *Bacillus licheniformis* (strain NZYM-RH) ([EFSA-Q-2014-00292](#))**

The technical and toxicological chapters of the draft opinion were discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

### **5.7 Draft opinion on Xylanase beta-glucanase from *Disporotrichum dimorphosporum* (strain DXL) ([EFSA-Q-2014-00355](#) and [EFSA-Q-2014-00356](#))**

The technical and toxicological chapters of the draft opinion were discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

### **5.8 Draft opinion on Polygalacturonase from genetically modified *Aspergillus niger* (strain EPG) ([EFSA-Q-2014-00402](#))**

The toxicological chapter of the draft opinion was discussed and changes were proposed. The remaining chapters of the draft opinion will be discussed in a future WG meeting.

### **5.9 Draft opinion on Xylanase from *Trichoderma citrinoviride* ([EFSA-Q-2014-00543](#))**

The draft opinion was not discussed due to lack of time. It will be discussed in a future WG meeting.

#### **5.10 Draft opinion on Trypsin (serine protease) from genetically modified *Fusarium venenatum* ([EFSA-Q-2014-00412](#))**

The toxicological chapter of the draft opinion was discussed and changes were proposed. The remaining chapters of the draft opinion will be discussed in a future WG meeting.

#### **5.11 Draft opinion on Alpha-amylase *M. imperial* (strain AE-AMT) ([EFSA-Q-2014-00544](#))**

The technical and toxicological chapters of the draft opinion were discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

#### **5.12 Draft opinion on Beta-glucanase from *Aspergillus aculeatus* ([EFSA-Q-2014-00201](#))**

The draft opinion was not discussed due to lack of time. It will be discussed in a future WG meeting.

#### **5.13 Peroxidase obtained from soy bean hulls ([EFSA-Q-2013-00897](#))**

The draft opinion was not discussed due to lack of time. It will be discussed in a future WG meeting.

#### **5.14 Beta-amylase from Barley (*Hordeum vulgare*) ([EFSA-Q-2014-00731](#))**

The technical chapter of the draft opinion was discussed and changes were proposed. The remaining chapters of the draft opinion will be discussed in a future WG meeting.

#### **5.15 Alpha-amylase from a GM strain of *Bacillus licheniformis* ([EFSA-Q-2012-00898](#))**

The requested additional information related to the exposure assessment was received from the applicant. The WG considered the information and the draft opinion will be discussed again in a future WG meeting.

#### **5.16 Alpha-amylase from *Aspergillus oryzae* (strain NZYM-NA) ([EFSA-Q-2012-01010](#))**

The requested additional information related to the toxicological and technical parts was received from the applicant. The WG considered the information and the draft opinion will be discussed again in a future WG meeting.

## **6. Any other business**

None

## **7. Next meeting**

The next meeting, 7<sup>th</sup> WG Food Enzyme, is scheduled for 22-23<sup>rd</sup> April 2015.



# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 5<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 10 – 12 February 2015, Parma (Italy)

(Agreed on 14/04/2015)

### Participants

#### a) Working Group Experts:

- Fidel Toldrá (chair), Karl-Heinz Engel, Boet Glandorf, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, Manfred Metzler, André Penninks, Andy Smith, Davor Zeljezic, Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- none

#### c) European Commission and/or Member States representatives:

- Rafael Perez (DG SANTE)

#### d) EFSA:

- FIP Unit: Margarita Aguilera-Gómez, Magdalena Andryszkiewicz, Marina Goumenou, Kim René Rygaard Nielsen, Anne Theobald
- APDESK Unit: Carla Martino (point 5)

### 1. Welcome and apologies for absence

The chair welcomed the participants, specifically Boet Glandorf who participated first time to the full WG meeting and Magdalena Andryszkiewicz who started beginning of February as scientific officer in the FIP unit. Apologies were received from Christina Tlustos (for all days) and Manfred Metzler (for day 3).

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Scientific Committee/Scientific Panel/ Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Scientific Panel Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 3<sup>rd</sup> and 4<sup>th</sup> Working Group meeting held from 6 to 8 January and 13 to 15 January in Parma (Italy)

The minutes of the 3<sup>rd</sup> and 4<sup>th</sup> Working Group meeting held from 6-8 January and 13 to 15 January were agreed.<sup>4</sup>

## 5. Scientific topics for discussion

### 5.1 Draft opinion on Alpha-amylase from *Bacillus licheniformis* (strain NZYM-AC) ([EFSA-Q-2013-00586](#))

The WG discussed the GMM, toxicological and technical part of the draft opinion. It will be presented for discussion and endorsement of these parts at the next meeting of the CEF Panel.

### 5.2 Draft opinion on Amyloglucosidase from a genetically modified strain of *Aspergillus niger* (strain NZYM-BR) ([EFSA-Q-2013-00686](#))

The WG discussed the GMM, toxicological and technical part of the draft opinion. It will be presented for discussion and endorsement of these parts at the next meeting of the CEF Panel.

### 5.3 Draft opinion on Glucose oxidase from *Aspergillus niger* ([EFSA-Q-2013-01018](#))

The previously requested additional information for the technical part was received from the applicant. The WG considered the information partially acceptable and that more data are needed to proceed with the evaluation. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>4</sup> <http://www.efsa.europa.eu/en/fipwgs/documents/enzymesminuteswg.pdf>

#### **5.4 Draft opinion on Endo-1,4-beta-xylanase from genetically modified *Trichoderma reesei* (strain RF5427) ([EFSA-Q-2013-00876](#))**

The WG discussed the technical and GMM part of the draft opinion and identified additional data need for the technical part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

#### **5.5 Draft opinion on Glucoamylase from genetically modified *Aspergillus niger* (strain NZYM-BE) ([EFSA-Q-2013-00896](#))**

The toxicological chapter of the draft opinion was discussed and changes were proposed. The draft opinion will be finalised at a future WG meeting.

#### **5.6 Draft opinion on Glucose oxidase from GM *Aspergillus niger* (strain ZGL) ([EFSA-Q-2014-01005](#))**

The previously requested additional information was received from the applicant. The WG considered the information partially acceptable and that more data are needed to finalise the evaluation. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

#### **5.7 Draft opinion on Triacylglycerol lipase from non-GM *Rhizopus oryzae* (strain AE-TL) ([EFSA-Q-2014-00112](#))**

The WG discussed the draft opinion and identified additional data need for the technical part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

#### **5.8 Draft opinion on Pectine lyase from genetically modified *Trichoderma reesei* (strain RF6199) ([EFSA-Q-2014-00164](#))**

The WG discussed the draft opinion and identified additional data need for the technical part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again at a future WG meeting.

#### **5.9 Draft opinion on Endo-1-4, beta-xylanase from genetically modified *Aspergillus acidus* (strain RF7398) ([EFSA-Q-2014-00165](#))**

The draft opinion was not discussed due to lack of time.

#### **5.10 Draft opinion on Serine protease from genetically modified *Bacillus licheniformis* (strain NZYM-RH) ([EFSA-Q-2014-00292](#))**

The toxicological chapter of the draft opinion was discussed and changes were proposed. The draft opinion will be finalised at a future WG meeting.

#### **5.11 Draft opinion on Alpha-amylase from genetically modified *Aspergillus niger* (strain NZYM-MC) ([EFSA-Q-2014-00306](#))**

The WG discussed the technical and GMM part of the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be finalised at a future WG meeting.

**5.12 Draft opinion on Glucoamylase from genetically modified *Aspergillus niger* (strain NZYM-BF) ([EFSA-Q-2014-00307](#))**

The WG discussed the technical and GMM part of the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be finalised at a future WG meeting.

**5.13 Draft opinion on Xylanase alpha-amylase from *Disporotrichum dimorphosporum* (strain DXL) ([EFSA-Q-2014-00355](#))**

The draft opinion was not discussed due to lack of time.

**5.14 Draft opinion on Beta-Glucanase from *Disporotrichum dimorphosporum* (strain DXL) ([EFSA-Q-2014-00356](#))**

The draft opinion was not discussed due to lack of time.

**5.15 Draft opinion on Asparaginase alpha-amylase from genetically modified *Aspergillus niger* (strain AGN) ([EFSA-Q-2014-00401](#))**

The WG discussed the draft opinion and identified additional data need for the GMM part. The Secretariat will request the applicant to provide the additional data. The draft opinion will be finalised at a future WG meeting.

**5.16 Draft opinion on Polygalacturonase from genetically modified *Aspergillus niger* (strain EPG) ([EFSA-Q-2014-00402](#))**

The draft opinion was not discussed due to lack of time.

**5.17 Draft opinion on Alpha-amylase from genetically modified *Aspergillus niger* (Strain NZYM-SB) ([EFSA-Q-2014-00413](#))**

The technical and GMM chapter of the draft opinion were discussed and changes were proposed. The draft opinion will be finalised at a future WG meeting.

**6. Any Other Business**

None

**7. Next meetings**

The next meeting will be held 14-16 April in Parma.

# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 4<sup>th</sup> meeting of the Food Enzymes WG 2014-2017

Held on 13 – 15 January 2015, Parma (Italy)

(Agreed on 10 02 2015)

### Participants

#### a) Working Group Experts:

- Fidel Toldrá (chair), Karl-Heinz Engel, Klaus-Dieter Jany, Francesca Marcon, Manfred Metzler, André Penninks, Andy Smith, Christina Tlustos, Davor Zeljezic, Holger Zorn

#### b) Hearing Experts<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- Rafael Perez (DG Sante)

#### d) EFSA:

- FIP Unit: Marina Goumenou, Kim René Rygaard Nielsen, Claudia Roncancio, Anne Theobald

### 1. Welcome and apologies for absence

The chair welcomed the participants. Apologies were received from Andy Smith for the half of the second day and the third day, from Francesca Marcon for the third day, Karl-Heinz Engel (for the first and third day). The chair welcomed also Claudia Roncancio, the new head of the FIP unit since 1 January 2015.

The FIP secretariat explained to the participants that during this meeting only the parts related to the technical and toxicological sections of the draft opinions would be presented and discussed. The part on GMM of those draft opinions dealing with GMM enzymes will or were already discussed in separate meetings dedicated to GMM only. Once all parts of the draft opinions have been revised and finalised by the Working Group, the draft opinions will be submitted to the CEF Panel for discussion and possible adoption.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Scientific Committee/Scientific Panel/ Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Scientific Panel Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

## 4. Agreement of the minutes of the 3<sup>rd</sup> Working Group meeting held from 6 to 8 January 2015 in Parma (Italy)

The minutes of the 3<sup>rd</sup> Working Group meeting held from 6 to 8 January 2015 were agreed.<sup>4</sup>

## 5. Scientific topics for discussion

### 5.1 Draft opinion on asparaginase from genetically modified *Aspergillus oryzae* (strain NZYM-SP) ([EFSA-Q-2013-00587](#))

The technical, toxicological, GMM and allergenicity chapters were endorsed during the 50<sup>th</sup> CEF Panel meeting. The exposure assessment, risk characterization, discussion, conclusion and summary chapters are pending. They will be discussed in future WG meeting.

### 5.2 Draft opinion on alpha-amylase from genetically modified *Bacillus licheniformis* (strain NZYM-BC) ([EFSA-Q-2013-00685](#))

The technical, toxicological, GMM and allergenicity chapters were endorsed during the 50<sup>th</sup> CEF Panel meeting. The exposure assessment, risk characterization, discussion, conclusion and summary chapters are pending. They will be discussed in future WG meeting.

### 5.3 Draft opinion on amyloglucosidase from genetically modified *Aspergillus niger* (strain NZYM-BR) ([EFSA-Q-2013-00686](#))

The toxicological chapter of the draft opinion was discussed and changes were proposed. The remaining chapters of the draft opinion will be discussed in a future WG meeting.

### 5.4 Draft opinion on Thrombin obtained from cattle or pig blood by applicant Sonac ([EFSA-Q-2013-00499](#))

The technical chapter of the draft opinion was discussed and changes were proposed. It will be presented for adoption in the next meeting of the CEF Panel.

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<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>4</sup> <http://www.efsa.europa.eu/en/fipwgs/documents/enzymesminuteswg.pdf>

## 5.5

### **Draft opinion on xylanase from genetically modified *Aspergillus oryzae* (strain NZYM-FA) ([EFSA-Q-2013-00789](#))**

The requested additional information related to the toxicological tests was received from the applicant. The WG considered the information partially acceptable and concluded that more data are needed to finalise the evaluation. The Secretariat will request the applicant to provide the additional data. The draft opinion will be discussed again in a future WG meeting.

## 5.6 Draft opinion on Glucoamylase and alpha-amylase from a genetically modified strain of *Aspergillus niger* (strain NZYM-BX) ([EFSA-Q-2013-00877](#))

The toxicological chapter of the draft opinion was discussed and changes were proposed. The remaining chapters of the draft opinion will be discussed in a future WG meeting.

## 5.7 Draft opinion on glucose oxidase from *Aspergillus niger* ([EFSA-Q-2013-01018](#))

The toxicological chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data

## 5.8 Draft opinion on glucose oxidase from genetically modified *Aspergillus oryzae* (strain NZYM-KP) ([EFSA-Q-2013-00687](#))

The draft opinion was not discussed due to lack of time. It will be discussed in a future WG meeting.

## 5.9 Draft opinion on glucan 1,4- $\alpha$ -maltohydrolase from genetically modified *Bacillus subtilis* (strain MAM) ([EFSA-Q-2013-00790](#))

The toxicological chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data

## 5.10 Draft opinion on asparaginase from genetically modified *Aspergillus niger* (strain ASP) ([EFSA-Q-2013-00895](#))

The toxicological chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data

## 5.11 Draft opinion on endo 1,4-beta xylanase from genetically modified *Trichoderma reesei* (strain RF5427) ([EFSA-Q-2013-00876](#))

The toxicological chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data

## 5.12 Draft opinion on Glucoamylase from genetically modified *Aspergillus niger* (strain NZYM-BE) ([EFSA-Q-2013-00896](#))

The technical chapter of the draft opinion was discussed and changes were proposed. The remaining chapters of the draft opinion will be discussed in a future WG meeting.

### **5.13 Draft opinion on alpha-galactosidase from genetically modified *Saccharomyces cerevisiae* (strain CBS 615-94) (EFSA-Q-2013-01019)**

The toxicological and technical chapters of the draft opinion were discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

### **5.14 Draft opinion on endo-1,4-beta-xylanase from genetically modified *Bacillus subtilis* (strain XAS) ([EFSA-Q-2014-00293](#))**

The technical chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

### **5.15 Draft opinion on polygalacturonase from genetically modified *Aspergillus niger* (strain EPG) ([EFSA-Q-2014-00402](#))**

The technical chapter of the draft opinion was discussed and changes were proposed. More data are needed to finalise the evaluation and the Secretariat will request the applicant to provide the additional data.

## **6. Any other business**

None

## **7. Next meeting**

The next meeting, 5<sup>th</sup> WG Food Enzyme, is scheduled for 10-12<sup>th</sup> February 2015.



# Scientific Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

## Minutes of the 3<sup>rd</sup> meeting of the Food Enzymes WG 2014-2017

Held on 6 – 8 January 2015, Parma (Italy)

(Agreed on 10 02 2015)

### Participants

#### a) Working Group Experts:

- Boet Glandorf, Lieve Herman (chair), Klaus-Dieter Jany, Sirpa Kärenlampi

#### b) Hearing Experts<sup>1</sup>:

- None

#### c) European Commission and/or Member States representatives:

- None

#### d) EFSA:

- FIP Unit: Margarita Aguilera-Gómez, Anne Theobald

### 1. Welcome and apologies for absence

The meeting was chaired by Lieve Herman who welcomed the participants. Apologies were received from Fidel Toldrá. The FIP secretariat explained to the participants that during this meeting only the parts related to the genetically modified microorganisms (GMM) of the draft opinions would be presented and discussed. The other parts of the draft opinions will be discussed separately for the technical and toxicological section. Once all parts of the draft opinions have been finalised and revised by the Working Group, the draft opinions will be submitted to the CEF Panel for discussion and possible adoption.

### 2. Adoption of agenda

The agenda was adopted without changes.

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<sup>1</sup> As defined in Article 11 of the Decision of the Executive Director on Declarations of Interest:  
<http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

### 3. Declarations of Interest of Scientific Committee/Scientific Panel/ Members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>2</sup> and the Decision of the Executive Director on Declarations of Interest<sup>3</sup>, EFSA screened the Annual Declarations of Interest and the Specific Declarations of Interest filled in by the Scientific Panel Members invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of the meeting.

### 4. Agreement of the minutes of the 2<sup>nd</sup> Working Group meeting held from 10 to 12 November 2014 in Parma (Italy)

The minutes of the 2nd Working Group meeting held from 10 to 12 November 2014 were agreed.<sup>4</sup>

### 5. Scientific topics for discussion

#### 5.1 Draft opinion on asparaginase from genetically modified *Aspergillus niger* (strain ASP) ([EFSA-Q-2013-00895](#))

Additional information related to the GMM part received has been discussed. However, more data are needed to finalise the evaluation in the WG. The Secretariat will request the applicant to provide the additional data.

#### 5.2 Draft opinion on Glucoamylase from genetically modified *Aspergillus niger* (strain NZYM-BE) ([EFSA-Q-2013-00896](#))

The GMM part of the draft opinion has been finalised. The draft opinion is now awaiting finalisation of the other parts in a future WG meeting.

#### 5.3 Draft opinion on alpha-galactosidase from genetically modified *Saccharomyces cerevisiae* (strain CBS 615-94) ([EFSA-Q-2013-01019](#))

The GMM part of the draft opinion was discussed. The WG members asked further clarifications. The Secretariat will request the applicant to provide the additional data.

#### 5.4 Draft opinion on Pectin lyase from a genetically modified strain of *Trichoderma reesei* (RF 6199) ([EFSA-Q-2014-00164](#))

The GMM part of the draft opinion was discussed. The WG members asked further clarifications. The Secretariat will request the applicant to provide the additional data.

#### 5.5 Draft opinion on Endo 1,4-beta xylanase from a genetically modified strain of *Aspergillus acidus* (RF 7398) ([EFSA-Q-2014-00165](#))

The GMM part of the draft opinion was discussed. The WG members asked further clarifications. The Secretariat will request the applicant to provide the additional data.

#### 5.6 Draft opinion polygalacturonase from genetically modified *Aspergillus niger* (strain EPG) ([EFSA-Q-2014-00402](#))

The GMM part of the draft opinion was discussed. The WG members asked further clarifications. The Secretariat will request the applicant to provide the additional data.

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>4</sup> <http://www.efsa.europa.eu/en/fipwgs/documents/enzymesminuteswg.pdf>

**5.7 Draft opinion on Serine protease from genetically modified *B. licheniformis* (strain NZYM-RH) ([EFSA-Q-2014-00292](#))**

The GMM part of the draft opinion was discussed. The WG members asked further clarifications. The Secretariat will request the applicant to provide the additional data.

**5.8 Draft opinion on Serine protease (with trypsin specificity) from a genetically modified strain of *Fusarium venenatum* (strain NZYM-FG) ([EFSA-Q-2014-00412](#))**

A first discussion of the GMM part of the draft opinion took place and changes were proposed. It will be finalised in a future WG meeting.

**6. Any other business**

None

**7. Next meeting**

The next meeting, 4<sup>th</sup> WG Food Enzyme, is scheduled for 13-15<sup>th</sup> January 2015.

Food Ingredients and Packaging UNIT

**Scientific Panel on Food Contact Materials, Enzymes, Flavourings, and Processing Aids (CEF)**

**Minutes of the 2<sup>nd</sup> meeting of the Food Enzymes WG 2014-2017**

**Held on 10 – 12 November 2014, Parma**

**(Agreed on 5 12 2014)**

**Participants**

- **Working Group Experts:**
  - Fidel Toldrá (chair), Karl-Heinz Engel, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Manfred Metzler, André Penninks, Andy Smith, Christina Tlustos, Davor Zeljezic, Holger Zorn,
- **Hearing Experts:**
  - for item 6: Jean-Charles Leblanc, Therese Lillegaard, Karl McDonald, Vittorio Silano
- **European Commission and/or Member States representatives:**
  - Rafael Perez
- **EFSA:**
  - FIP Unit: Margarita Aguilera-Gomez, Marina Goumenou, Kim René Rygaard Nielsen, Anne Theobald
  - DATEX: Davide Arcella (for item 6)
  - APDESK: Carla Martino and Christine Ehlert (point 5)

**1. Welcome and apologies for absence**

The Chair welcomed the participants. Apologies were received from Boet Glandorf, Francesca Marcon, Klaus-Dieter Jany for the third day and Karl-Heinz Engel for the first and third day.

**2. Adoption of agenda**

The agenda was adopted without changes.

### 3. Declarations of interest

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director implementing this Policy regarding Declarations of Interests<sup>2</sup>, EFSA screened the Annual Declaration of interest and the Specific Declaration of interest filled in by the experts invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

### 4. Agreement of the minutes of the 1<sup>st</sup> Working Group meeting held from 29 September to 1 October in Valencia

The minutes of the 1<sup>st</sup> Working Group meeting held from 29 September to 1 October were agreed.<sup>3</sup>

### 5. Discussion on Exposure assessment

The WG discussed various approaches for exposure assessment and will prepare a discussion document for the next CEF Panel meeting in November.

### 6. Scientific topic(s) for discussion

#### 6.1 Draft opinion on asparaginase from genetically modified *Aspergillus oryzae* (strain NZYM-SP) ([EFSA-Q-2013-00587](#))

The technical, toxicological, GMM and allergenicity chapters were endorsed during the 50<sup>th</sup> CEF Panel meeting. The exposure assessment, risk characterization, discussion, conclusion and summary chapters are pending. They will be discussed on future WG meeting.

#### 6.2 Draft opinion on alpha-amylase from genetically modified *Bacillus licheniformis* (strain NZYM-BC) ([EFSA-Q-2013-00685](#))

The technical, toxicological, GMM and allergenicity chapters were endorsed during the 50<sup>th</sup> CEF Panel meeting. The exposure assessment, risk characterization, discussion, conclusion and summary chapters are pending. They will be discussed on future WG meeting.

#### 6.3 Draft opinion on xylanase from genetically modified *Aspergillus oryzae* (strain NZYM-FA) ([EFSA-Q-2013-00789](#))

The draft opinion was discussed. The WG members asked further clarifications on some toxicological findings, particularly compared to the historical control data. The Secretariat will request the applicant to provide the additional data.

#### 6.4 Draft opinion on amyloglucosidase from genetically modified *Aspergillus niger* (strain NZYM-BR) ([EFSA-Q-2013-00686](#))

The draft opinion was discussed and changes were proposed. It will be discussed on future WG meeting.

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules.pdf>

<sup>3</sup> <http://www.efsa.europa.eu/en/fipwgs/documents/enzymesminuteswg.pdf>

**6.5 Draft opinion on glucose oxidase from genetically modified *Aspergillus niger* (strain ZGL) ([EFSA-Q-2013-01005](#))**

Additional information has been asked. The draft opinion was further discussed. More data are needed to finalise the evaluation in the WG. The Secretariat will request the applicant to provide the additional data.

**6.6 Draft opinion on Glucose Oxidase from genetically modified *Aspergillus oryzae* (strain NZYM- KP) ([EFSA-Q-2013-00687](#))**

The draft opinion was discussed and changes were proposed. It will be discussed on future WG meeting.

**6.7 Draft opinion on Glucoamylase and alpha-amylase from a genetically modified strain of *Aspergillus niger* (strain NZYM-BX) ([EFSA-Q-2013-00877](#))**

Additional information received was discussed and accepted. The draft opinion was further discussed and changes were proposed. It will be discussed on future WG meeting.

**6.8 Draft opinion on glucan 1,4- $\alpha$ -maltohydrolase from genetically modified *Bacillus subtilis* (strain MAM) ([EFSA-Q-2013-00790](#))**

Additional information received was discussed and accepted. The draft opinion was further discussed and changes were proposed. It will be discussed on future WG meeting.

**6.9 Draft opinion on glucose oxidase from *Aspergillus niger* ([EFSA-Q-2013-01018](#))**

The draft opinion was discussed. More data are needed to finalise the evaluation in the WG. The Secretariat will request the applicant to provide the additional data.

**6.10 Draft opinion on asparaginase from genetically modified *Aspergillus niger* (strain ASP) ([EFSA-Q-2013-00895](#))**

Additional information received was discussed. More data are needed to finalise the evaluation in the WG. The Secretariat will request the applicant to provide the additional data. It will be discussed on future WG meeting.

**6.11 Draft opinion on endo 1,4-beta xylanase from genetically modified *Trichoderma reesei* (strain RF5427) ([EFSA-Q-2013-00876](#))**

Additional information received was discussed. More data are needed to finalise the evaluation in the WG. The Secretariat will request the applicant to provide the additional data. It will be discussed on future WG meeting.

**6.12 Draft opinion on Glucoamylase from genetically modified *Aspergillus niger* (strain NZYM-BE) ([EFSA-Q-2013-00896](#))**

The draft opinion was not discussed due to lack of time. It will be discussed on future WG meeting.

**6.13 Draft opinion on alpha-galactosidase from genetically modified *Saccharomyces cerevisiae* (strain CBS 615-94) ([EFSA-Q-2013-01019](#))**

The draft opinion was not discussed due to lack of time. It will be discussed on future WG meeting.

**6.14 Draft opinion on endo-1,4-beta-xylanase from genetically modified *Bacillus subtilis* (strain XAS) ([EFSA-Q-2014-00293](#))**

The draft opinion was not discussed due to lack of time. It will be discussed on future WG meeting.

**6.15 Draft opinion polygalacturonase from genetically modified *Aspergillus niger* (strain EPG) ([EFSA-Q-2014-00402](#))**

The draft opinion was not discussed due to lack of time. It will be discussed on future WG meeting.

**6.16 Draft opinion on Thrombin obtained from cattle or pig blood ([EFSA-Q-2014-00499](#))**

The draft opinion was not discussed due to lack of time. It will be discussed on future WG meeting.

**7. Any other business**

None

**8. Next meetings**

The next meeting is scheduled for 6-8 January 2015.

Food Ingredients and Packaging UNIT

**Scientific Panel on Food Contact Materials, Enzymes, Flavourings, and Processing Aids (CEF)**

**Minutes of the 1<sup>st</sup> meeting of the Food Enzymes WG 2014-2017**

**Held on 29 09 – 1 10 2014, Valencia**

**(Agreed on 10 10 2014)**

**Participants**

- **Working Group Experts:**
  - Fidel Toldrá (chair), Karl-Heinz Engel, Lieve Herman, Klaus-Dieter Jany, Sirpa Kärenlampi, Francesca Marcon, André Penninks, Davor Zeljezic, Holger Zorn,
  - Christina Tlustos has participated via teleconference (for item 6)
- **Hearing Experts:**
  - Dorthe Helnov (for item 6), Peter Hvass (for item 6), Marc Leclerc (for item 6)
- **European Commission and/or Member States representatives:**
  - Rafael Perez
- **EFSA:**
  - FIP Unit: Margarita Aguilera-Gomez, Marina Goumenou, Kim René Rygaard Nielsen, Anne Theobald

**1. Welcome and apologies for absence**

The Chair welcomed the participants. Apologies were received from Boet Glandorf, Manfred Metzler and Andy Smith, Lieve Herman for the first day and Karl-Heinz Engel for the third day.

**2. Adoption of agenda**

The agenda was adopted without changes.

**3. Declarations of interest**

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director implementing this Policy regarding

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>



Declarations of Interests<sup>2</sup>, EFSA screened the Annual Declaration of interest and the Specific Declaration of interest) filled in by the experts invited for the present meeting. No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of interest at the beginning of this meeting.

## 5. Scientific topic(s) for discussion

### 5.1 Draft opinion on asparaginase from genetically modified *Aspergillus oryzae* (strain NZYM-SP) ([EFSA-Q-2013-00587](#))

The draft opinion was discussed and changes were proposed. The opinion will be presented to the CEF Panel.

### 5.2 Draft opinion on xylanase from genetically modified *Aspergillus oryzae* (strain NZYM-FA) ([EFSA-Q-2013-00789](#))

The draft opinion was discussed and changes were proposed. The opinion will be presented to the CEF Panel.

### 5.3 Draft opinion on alpha-amylase from genetically modified *Bacillus licheniformis* (strain NZYM-BC) ([EFSA-Q-2013-00685](#))

The draft opinion was discussed and changes were proposed. The opinion will be presented to the CEF Panel.

### 5.4 Draft opinion on amyloglucosidase from genetically modified *Aspergillus niger* (strain NZYM-BR) ([EFSA-Q-2013-00686](#))

The draft opinion was discussed and changes were proposed. It will be discussed on future WG meeting.

### 5.5 Draft opinion on phosphodiesterase I from *Leptographium procerum* (FDA) ([EFSA-Q-2013-01006](#))

The draft opinion was discussed. More data are needed to finalise the evaluation in the WG. The Secretariat will request the applicant to provide the additional data.

### 5.6 Draft opinion on glucose oxidase from genetically modified *Aspergillus niger* (strain ZGL) ([EFSA-Q-2013-01005](#))

The draft opinion was discussed. More data are needed to finalise the evaluation in the WG. The Secretariat will request the applicant to provide the additional data.

### 5.7 Draft opinion on Glucose Oxidase from genetically modified *Aspergillus oryzae* (strain NZYM- KP) ([EFSA-Q-2013-00687](#))

The draft opinion was discussed and changes were proposed. It will be discussed on future WG meeting.

### 5.8 Draft opinion on Glucoamylase and alpha-amylase from a genetically modified strain of *Aspergillus niger* (strain NZYM-BX) ([EFSA-Q-2013-00877](#))

The draft opinion was discussed and changes were proposed. It will be discussed on future WG meeting.

### 5.9 Draft opinion on glucan 1,4- $\alpha$ -maltohydrolase from genetically modified *Bacillus subtilis* (strain MAM) ([EFSA-Q-2013-00790](#))

The draft opinion was discussed. More data are needed to finalise the evaluation in

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules.pdf>

the WG. The Secretariat will request the applicant to provide the additional data.

#### **5.10 Draft opinion on glucose oxidase from genetically modified *Aspergillus niger* ([EFSA-Q-2013-01018](#))**

The draft opinion was discussed. More data are needed to finalise the evaluation in the WG. The Secretariat will request the applicant to provide the additional data.

#### **6. Meeting with hearing experts regarding additional data needs**

At its last meeting the CEF Panel raised the need for additional data related to exposure assessment for the food enzyme amylase. Dorthe Helnov, Peter Hvas and Marc Leclerc from Novozymes were invited as hearing experts and representatives of the applicant and attended on 1<sup>st</sup> October 2014 from 9:30 to 11:30 to elaborate on the specific questions regarding exposure data. They attended the meeting only for this specific agenda item.

#### **7. Next meetings**

The next meeting is scheduled for 10-12<sup>th</sup> of November.

#### **8. Any other business**

None