

## ADVISORY COMMITTEE FOR NOVEL FOODS AND PROCESSES

### *DIGITARIA EXILIS* (FONIO)

#### ISSUE

1. A notification has been received under the traditional foods authorisation process for *Digitaria exilis* (Fonio) under the Novel Foods Regulation (EU) No 2015/2283.
2. The Committee is asked whether there are safety concerns with the proposed use of this traditional food in the EU market. The information from the Committee will provide the basis for any safety objections raised at EU level.

#### Background

3. On 28 February the European Commission forwarded the notification from Obà Food Sri for *Digitaria exilis* (Fonio) a type of millet seed traditionally consumed in porridges, steam cooked products such as couscous, alcoholic and non-alcoholic beverages. The applicant intends to use the seeds in the following food categories bakery products and ready to eat steamed cereal products such as porridge.
4. Member States have until 28 May to submit reasoned objections to the notification. If authorised, the authorisation will be open to any company subject to the specification and conditions of use detailed in section 2.7.2 of the dossier.
5. The notification dossier is attached as **Annex A**. **Annex A** contains protected information.

#### This application

6. The applicant is seeking authorisation for *Digitaria exilis* (Fonio). *Digitaria exilis* is a type of millet which can grow on poor soils and which is ready to harvest within 6-8 weeks of sowing. It grows from West Africa to Central Africa, mainly in countries between Senegal and Cameroon.

#### *Composition and Specification*

7. The applicant has supplied a composition of analysis at Appendix 1. They have also supplied information from the West African Food Composition table – the relevant data for Fonio is attached at Appendix 2<sup>1</sup>. Information on Fatty Acid, amino acid, mineral and antioxidant contents is at Appendix 32.
8. The proximate analysis suggests the composition to be:

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<sup>1</sup> West African Food Composition Table, Food and Agriculture Organisation of the United Nations (2012)

<sup>2</sup> Fatty acid, amino acid, mineral and antioxidant contents of acha (*Digitaria exilis*) Grown on the Jos Plateau, Nigeria, Glew R, Laabes E, Presley J, Schulze J, Andrews R, Wang Y.C, Chang Y.C, Chuang L.T (2013) Int J Nutr Metab 2013 January; 5(1): 1-8.

<b>Nutrient</b>	<b>Reported values per 100g</b>
Energy	358kcal/kg, 1517kJ/kg
Carbohydrate	74.4g
Of which sugars	<0.5g
Fat	2.8g
Of which saturates	0.7g
Protein	7.1g
Dietary fibre	3.4g
Salt	0.03g

9. A summary of the composition supplied by the applicant is in the attached table:

<b>Composition</b>	<b>Average quantity in raw whole grains</b>	<b>Whitened Fonio</b>
Carbohydrates	69.3g/100g	76.10g/100g
Proteins	7.0g/100g	6.90g/100g
Fat	3.1g/100g	1.20g/100g
Total Dietary Fat	7.4g/100g	2.20g/100g
<b>Minerals</b>		
Ash	2.1g/100g	1.20g/100g
Calcium	40.0mg/100g	28.00mg/100g
Iron	8.3mg/100g	1.80mg/100g
Manganese	430.0mg/100g	121.00mg/100g
Phosphorous	191.0mg/100g	104.00mg/100g
Potassium	337.0mg/100g	178.00 mg/100g
Sodium	7.0mg/100g	14.00mg/100g
Zinc	1.5mg/100g	2.02mg/100g
Copper	0.44mg/100	0.43mg/100g
<b>Vitamins</b>		
Vit A-RAE	0.00mcg	0.00mcg
Retinol	0.00mcg	0.00mcg
Beta Carotene equiv	0.00mcg	1.00mcg (low quality sample)
Vitamin D	0.00mcg	0.00mcg
Vitamin E	0.0005 mg	0.05mg
Thiamin	0.25mg	0.17mg
Riboflavin	0.10mg	0.22mg
Niacin	1.70mg	1.10mg
Vitamin B <sub>6</sub>	0.73mg	0.74mg
Folate	29.00mg	29.00mg
Vitamin B <sub>12</sub>	0.00mg	0.00mg
Vitamin C`	0.00mg	0.00mg

#### *Nutritional aspects*

10. The applicant suggests Fonio is widely eaten up to three times a day in North Togo. It is regarded as a grain with medicinal and healing properties. The

notification states that Fonio is an important source of vitamins in the B group and folate. The most abundant fatty acid reported was omega-6 fatty acid linoleic acid..

#### *Production Process*

11. The *Digitaria exilis* is hand harvested, the sheaves are then left to dry, threshed and sifted by machine. After threshing the grains are dried for 3-4 days and stored in high granaries for 18 months. The gains are then mechanically husked to remove the outer husk, then undergo whitening which removes the pericarp and germ to produce whitened Fonio. After whitening the Fonio is cleaned. The Fonio is then dried in a Greenhouse solar dryer. A sample of each production batch is sent to a laboratory where an analysis is carried out for mycotoxins and microorganisms. The Fonio is stored in hermetic polythene triple bags and stored in a warehouse.

#### *Evidence of Traditional Use*

12. The applicant states that *Digitaria exilis* has been consumed in West Africa for 7,000 years. It is no longer found in a wild form. It is traditionally cooked with boiling water in a pan and eaten in porridge, as couscous, in preparations with beans, ground and mixed into other flours, eaten as a Fonio paste or brewed for beer. They indicate that where it is grown it is used almost as a staple crop. It is estimated that it is currently consumed by approximately 4 million people.
13. The applicant indicates that Guinea the world's leading Fonio consuming country produced 479,9985 tons of Fonio in 2014. The daily intake is assumed to be 60g per day.

#### *Safety concerns identified by the applicant*

14. The applicant indicates that no safety risks were identified in their literature review. Further information on this review and how it was conducted has not been provided.
15. Allergy information was not provided by the applicant.
16. Microbiological data is included in Annex 1.

#### **COMMITTEE ACTION REQUIRED**

- Members are asked whether there are safety concerns that need to be managed with this traditional food from third countries.
- The Committee's advice will form the basis for the UK's formal response to the Commission and whether reasoned safety objections are submitted.

**Annexes attached:**

**Annex A** Notification dossier for *Digitaria Exilis* as a traditional food from third countries.