

Summary of the dossier

Applicant: Obà Food Srl, Via V. Montiglio 67, Roma-Italy

Fonio (*Digitaria Exilis*) is constituted by the decorticated grains of a small seeded cereal, indigenous to West Africa, which is generally classified, as a member of the Paniceae tribe, among the millets, and historically used in West-Africa as a substitute for rice (Cobley, 1956, Page 35).

Fonio is grown in various parts of Nigeria, Sierra Leone, Ghana, Burkina Faso, Senegal, Guinea Bissau and Togo on poor sandy soils which could not sustain the growth of others, more demanding cereals. The 1000-kernel weight of fonio (determined by Jideani and Akingbala, 1993) indicates that Fonio is one of the smallest cereal grain.

The decorticated tiny seeds of Fonio provide the staple food in some areas in Africa where they are nutritionally important. They are consumed mostly whole, but they are also milled into flour and they constitute a versatile raw material which can be processed into a variety of different foods.

As far as the nutritional composition of fonio is concerned, similarly to all the other cereals it has a proximate composition where carbohydrates, starch in particular, are the main components (around 70%) (Carcea and Acquistucci, 1997). Proteins are present at low levels (around 7%) however, Fonio proteins are unique among cereals because they have a higher content of the essential aminoacid methionine (Carcea and Salvatorelli, 1998). Lipids, present in the germ (around 3%) and mineral elements (around 4%) and vitamins (mainly B group vitamins) are also interesting components of this grain.

The crop is generally hand harvested, the sheaves are left to dry and then threshed. The obtained grains are then hand or mechanically husked to remove the outer husks and make them edible. Depending on the usage of Fonio the husked/decorticated grains can be further milled into a finer or coarser flour (Carcea M., 1991)

The intended use of Fonio for this notification is similar to its traditional use as decorticated grain which can be directly cooked in water. Alternatively, it is intended to mill the decorticated grains to produce a flour that can be used as any cereal flour. Given the chemical nature of the Fonio protein fractions which in the presence of water are not able to give gluten, Fonio is suitable to be used also in gluten-free products.

In 2006 the EC financed a 2 years project under FP6-INCO Project ID 15403: "Upgrading quality and competitiveness of Fonio for improved livelihoods in West Africa" coordinated by CIRAD (International Cooperation Centre in Agronomic Research for Development) - France.

Fonio is not meant whatsoever to replace any food or ingredient. It will be just an additional option for consumers looking for natural grains and cereals with good nutritional values and delicious taste. It will also represent an incremental opportunity for people gluten intolerant. Fonio consumption is already going on in France and USA with, in both countries, some companies selling this grain.