

KAMUT®

BRAND KHORASAN WHEAT

An ancient relative of modern wheat

Loved for its unique taste,
ease of digestibility,
its versatility, it provides
many culinary benefits.

**CONTAINS
MORE**
protein, lipids,
amino acids,
vitamins,
and minerals

TASTE
naturally sweet
nutty flavour

HIGH IN
selenium, zinc
and magnesium

LIGHT
digestible
(different gluten)

ALWAYS NON GMO
always organic

www.kamut.com

nele.callebert@kamut.com - Phone +33 (0)6 64 87 72 92



Summary

Contact	p. 3
The wheat family.....	p. 4
Origin	p. 6
Growing area	p. 8
Quality criteria	p. 10
The growing	p. 11
The trademark	p. 15
Nutritional value and research	p. 20
Taste the difference	p. 21
Where to buy	p. 23
Recipe: KAMUT® khorasan whole wheat bread	p. 24
Recipe: KAMUT® khorasan sandwich bread	p. 25
Recipe: KAMUT® khorasan brioche	p. 26
Recipe: KAMUT® shortbread	p. 28
Recipe: KAMUT® khorasan pizza dough	p. 30

KAMUT®

BRAND KHORASAN WHEAT

With its soft texture, natural flavour and its nutty taste, organically grown KAMUT® brand khorasan wheat has never been genetically modified or changed in any way by intensive modern breeding programs.

It is also appreciated for its nutritional values and its great versatility.

KAMUT® is a registered trademark of Kamut International and Kamut Enterprises of Europe.

Contact

*Nele Callebert
Regional director
France-Benelux-UK-Ireland*

*Kamut Enterprises of Europe
Mobile +33 6 64 87 72 92
nele.callebert@kamut.com*

www.kamut.com

Triticum: the wheat family

- **Diploids (2 pairs of 7 chromosomes)**
 - *T. monococcum* - einkorn or small spelt
- **Tetraploids (4 pairs of 7 chromosomes)**
 - *T. turgidum* - emmer wheat
 - *T. turgidum polonicum* - Polish wheat
 - *T. turgidum durum* - durum wheat
 - *T. turgidum turanicum* - khorasan wheat
- **Hexaploids (6 pairs of 7 chromosomes)**
 - *T. aestivum spelta* - spelt
 - *T. aestivum vulgare* - common wheat



Khorasan wheat

Scientific name:

Triticum turgidum ssp. turanicum

Common name:

khorasan wheat

***Marketed using
a brand name to guarantee
the quality and to protect
the original characteristics:***

KAMUT® khorasan wheat



Origin - Rediscovery

An ancestor of modern wheat, khorasan wheat originated in Mesopotamia and spread throughout the Fertile Crescent, a territory spanning the region from Egypt to the valleys of the Tigris and Euphrates.

Introduced to the world in the late 1980s by Bob Quinn, an organic farmer and research scientist who took an interest in the ancient wheat and discovered its great taste, its exceptional nutritional value and the fact that most non celiac people, but sensitive to modern wheat, can eat it.



Why did modern wheat varieties replace ancient ones?

Wheat breeding programs of the past century have mainly focused on:

- *Higher yields (requires higher inputs)*
- *Resistance to all types of plant diseases*
- *Technological qualities which aid in manufacturing such as:*
 - *Creating a hard seed coat to make white flour extraction easier*
(May contribute to texture problems in pasta made from wholegrain meal)
 - *Changing protein and starch make up to increase bread loaf volume*
(These changes may contribute towards increases in digestive problems and other sensitivities to wheat)

Wheat breeding programs normally do not consider the following:

- *Flavour and Nutrition*
- *Adaptation to low input systems, such as sustainable organic farming, ...*



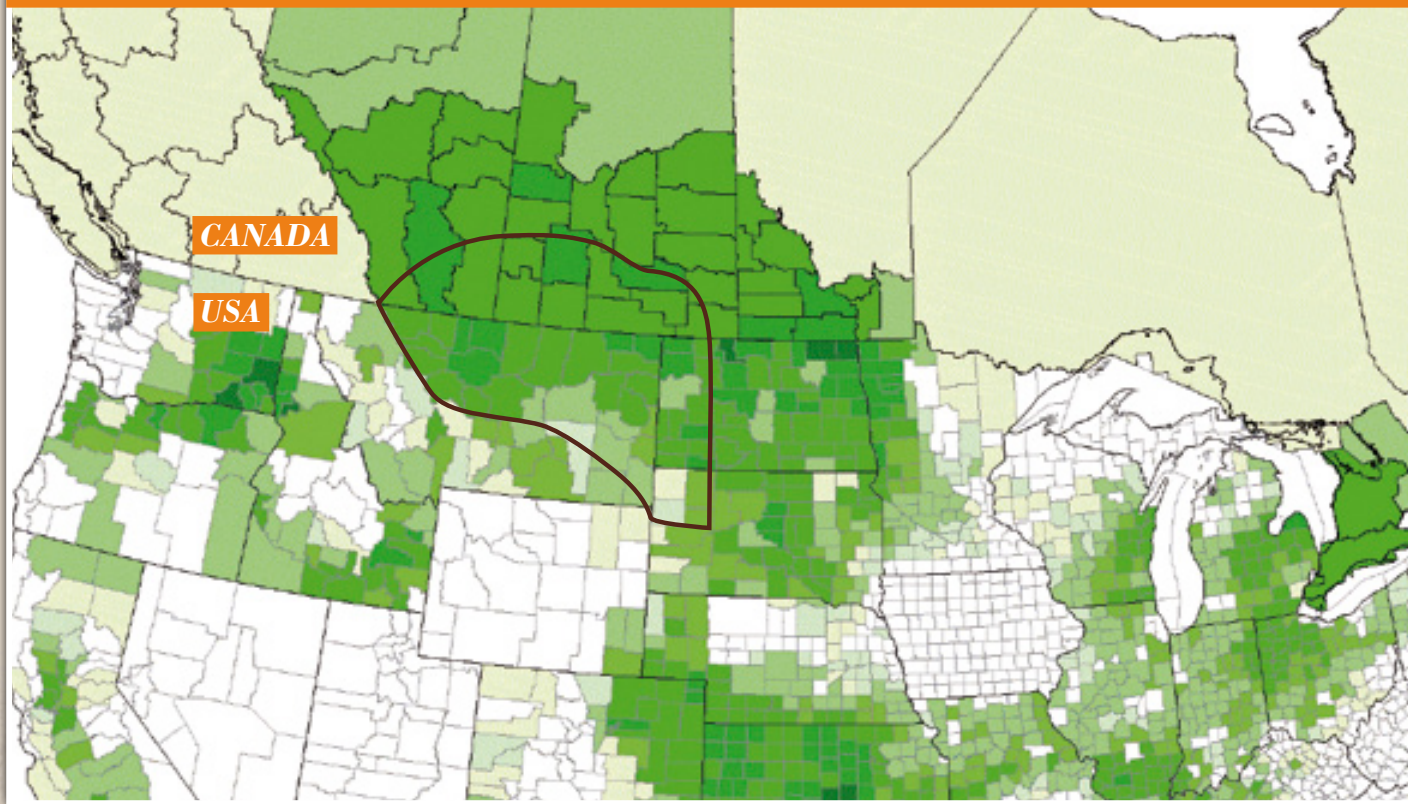
Growing area

Our experiences of almost 20 years of growing trials of khorasan in Europe is that khorasan very sensitive is to diseases due to the humid climate which causes deterioration in quality, colour and flavour. For this reason and in order to guarantee consistently the quality criteria of the KAMUT® brand, the wheat is currently grown in a small portion of the entire grain belt of North America. It grows best in the dry prairies of Southern Saskatchewan (Canada) and in the Northern Montana (USA), on soil that is rich in selenium and other minerals. The summers are hot and dry so almost no rain falls the last 6 weeks before the harvest in mid August thus protecting the grain from diseases.

Khorasan wheat is originating in the very dry climate of Mesopotamia and can only keep its characteristics if it is grown in such conditions. There is a similarity to basmati rice originating in the North of India and jasmine rice originating in the North of Thailand. Experiments showed that basmati rice grown in other regions is losing, after a few years of production, the flavour which is so typical for basmati rice.

We continue to carry out crop trials in other countries, closer to Europe, which have appropriate climatic and growing conditions.

THE KAMUT® KHORASAN WHEAT GROWING AREA



The darker green areas indicate higher production.

Quality criteria

for the farming of KAMUT® Khorasan wheat

KAMUT® khorasan wheat

- 1- must be grown from original KAMUT® brand khorasan wheat seeds*
- 2- must be grown exclusively as a certified organic product*
- 3- must have a protein content of between 12 and 18%*
- 4- must be 99% free of contamination by modern wheat varieties*
- 5- must be 98% free of any signs of disease*
- 6- must contain between 400 and 1000 ppb selenium*
- 7- packaging must be correctly labeled so that there is a clear description of its true contents*



Off-spec wheat is sold as animal feed.

The farmers

The farmers are paid a fair and generous price as a compensation for the smaller yield, in order to ensure the profitability of their operation. They are also supported with research and technical advice.

Yields are less than modern wheat, however the main goal of the project is not yield, but quality.



The production of KAMUT® Khorasan wheat

Production is contracted with only certified organic farmers

There are currently more than 200 organic farmers participating.

Seeding (April & May in North America)

Clean and pure seeds supplied to the growers.

To guarantee a high level of protein, a legume crop is grown the previous year to help build the soil.

Harvest mid August - late September
Average yield of 1.2 ton/ha (0.5 ton/acre)

*During wetter than average years:
khorasan wheat yield will
be lower than modern durum
wheat (20 - 30%)*

*During drier than average years:
khorasan wheat can have
a higher yield than
modern durum wheat (20-30%)*



Storing, cleaning and shipping

Most of the grain is stored in steel bins on the farm where it is grown. Dry hot summers and cold winters help naturally maintain grain quality.

3 companies are authorized to contract with the organic farmers, collect samples, take delivery and clean the grain.

1 in Montana (USA), 1 in Alberta and 1 in Saskatchewan (Canada).

*Once the required quality criteria have been met, the khorasan wheat is sold as **KAMUT®** khorasan wheat and shipped to distributors.*



Our objectives

- *The farmers receive a good price, set before seeding, stable as possible from one year to the next year, with a guaranteed market.*
- *Processors have a guaranteed product quality that enables them to produce consistent quality in their product range.*
- *Organic farming is promoted.*
- *Food quality and diversity for consumers are increased.*
- *Our company philosophy is the preservation of purity, uniqueness and authenticity of this exceptional wheat variety, while caring for human and environmental resources.*

KAMUT[®] Khorasan wheat

Ancient wheat for modern life

Advantages:

- *Remarkable taste & sweet, nutty flavour*
- *Can be consumed by most non-celiac people sensitive to modern wheat varieties*
- *High nutritional value: very rich in amino-acids, selenium, Vitamin E, zinc, magnesium, etc.*
- *Wide range of uses (bread, pasta, biscuits, French toast, pizza, drinks, etc.)*
- *Some drought tolerance*
- *Strong straw quality with little tendency to lodge in the field*

Disadvantages:

- *Long straw*
- *Longer vegetative cycle (late maturing)*
- *Low potential yield (average 1.2 ton/ha - 0.5 ton/acre in Canada)*
- *Highly susceptible to fungal diseases (especially black tip)*

Today

- *There are many organic first level mill distributors in Europe who buy the grain in full containers. They sell grain and flour in 1, 5, 25, 50 kg bags as well as in bulk quantities.*
- *Those first level mills have many and different kinds of customers, as for example, millers, distributors, processors, bakers, etc.*
- *There is a very large product range.*
- *The KEE company is present at most organic trade fairs in Europe.*

Protection of the brand

1- The European authorized first level distributors who process and distribute the grain and/or flour are audited each year (in/out balance of raw material and conformity to license provisions).

2- Their customers/producer are audited every 3 to 5 years.

3- All distributors and producers sign a license agreement (free of charge) with KEE which gives them the legal right to use the KAMUT® trademark on their products:

1- KAMUT® khorasan pizza must contain 100% KAMUT® khorasan wheat in order to be named KAMUT® khorasan Pizza.

2- KAMUT® khorasan bread and pasta must contain at least 50% KAMUT® khorasan wheat in order to use “KAMUT® khorasan” in the product name.

3- Mixed products must contain at least 33% KAMUT® khorasan wheat in order to use “KAMUT® khorasan” in the product name.

A highly interesting nutritional value

This ancient wheat provides more energy than modern wheat and contains 20 % more proteins, more lipids, essential amino-acids, vitamins and minerals, such as zinc, magnesium, Vitamin E and selenium, a trace element well-known for its antioxidant properties.

This grain is an excellent alternative for modern wheat. An IFAA study in the USA (International Food Allergy Association) reveals that 70 % of the people who were tested, and who were non celiac but sensitive to modern wheat had no difficulty eating KAMUT® khorasan products.

Our research :

See our website for research on: anti-inflammatory properties, irritable bowel syndrome, circulatory problems and heart disease, DNA fingerprinting, food sensitivities, anti-oxidant properties, dietary fibers.



Taste the difference

With its unique flavour and ease of digestibility, this is the ideal grain to prepare lots of different dishes, from complete meals to quick snacks.

It is perfect in traditional and gourmet cuisine. It is also suitable for active people, growing children and athletes who are looking for high-energy, healthy and balanced food. Thanks to its very light taste, it can be used easily to prepare rather sweet dishes, without having to add any sugar.

Beyond flour, which is the basic ingredient for bread, pancakes, biscuits and cakes, KAMUT® brand khorasan wheat is also ideal for snacks, breakfast cereals and muesli, pasta, bulgur, couscous, pizzas, starters and even, more surprisingly: syrup, drinks, wheatgrass juice, etc.

Recipes:

www.kamut.com



KAMUT®

BRAND KHORASAN WHEAT

Light and unique flavour

KAMUT® brand khorasan wheat provides many culinary benefits.

Loved for its naturally sweet nutty taste and ease of digestibility (different gluten, always non GMO).



PERFECT FOR:

- flour
- bread
- pizza
- pasta
- pancakes
- biscuits
- shortbread
- snacks
- bulgur
- couscous
- muesli
- flakes
- puffed grain
- salad
- dessert
- drinks
- syrup
- green food



Where to buy

KAMUT® khorasan products in consumer packages are present in most of the organic retail shops and bakeries in Europe.

To find all the available KAMUT® khorasan products produced in your region: see www.kamut.com / Products / Product search / select your country / choose your product.

KAMUT® khorasan grain and flour in 25 kg, 50 kg and bulk quantities is available by contacting our, first level distributors: see www.kamut.com / Products / 1st level importers.

KAMUT® khorasan grain in container quantities is available by contacting the company Ostara: ostara@ostara-bio.be

The KAMUT® brand is used to reintroduce an ancient wheat variety to the market, make purity and quality guarantees and to promote consumer health and organic farming.

Recipe

KAMUT® khorasan whole wheat bread with natural wheat sourdough

Ingredients

- 1 kg KAMUT® khorasan whole flour
- 600 g water
- 20 g salt
- 20 g dehydrated organic sourdough
or 200 g fresh natural sourdough



Kneading

By hand or with the machine:

10 min in first gear and 6 min in second gear.

First raise

The dough must double in volume, minimum 2 hours.

Knock back the dough to expel the fermentation gases.

Second raise

Double the volume, minimum 1h30.

Baking

Put a bowl of hot water in the oven.

Temperature between 210° and 220° C or gas-mark 8.

1 hour for 1 kg.

Recipe

KAMUT® Khorasan sandwich bread Sugar-free, fat-free, milk-free

Ingredients

- 1 kg KAMUT® khorasan white flour
- 20 g salt
- 15 g yeast or sourdough
- 600 g water

Kneading

By hand or with the machine:
10 min in first gear and 6 min in second gear
(until it unsticks from bowl).

First raise

The dough must double in volume,
minimum 2 hours.

Second raise

1 hour until 2/3 of the height of the tin.

Preheat the oven

Temperature 210° to 220° C or gas-mark 8.

Baking in the oven

1 hour for 1 kg dough, temperature
210° to 220° C or gas-mark 8.



Recipe

KAMUT® Khorasan brioche

Ingredients

- 1 kg KAMUT® khorasan flour
- 20 g salt
- 100 g organic golden cane sugar
- 20 g yeast
- 14 eggs
- 600 g butter at room temperature



Dissolve the yeast in 10 cl milk.

In a large salad bowl, make a well in the flour, put in the eggs, milk and yeast.

Knead the dough until it doesn't stick on the bowl anymore.

Soften the butter with the sugar.

Mix the dough and the butter and sugar mixture until it doesn't stick.

Cover with cling film.

Leave the dough to rise until its volume has doubled.

Put overnight in the refrigerator.

The next morning.

Knock back the dough to expel fermentation gases.

Put the dough in a buttered cake tin.

Leave to double in volume away from draughts.

Beat a whole egg with a fork and a pinch of salt and coat the brioche with a soft brush.

Preheat the oven: temperature 190° to 200°C or gas-mark 7.

Bake in the oven for 45 minutes.

Turn out of the tin as soon as you take the brioche out of the oven and leave to cool down on a rack.

Recipe

KAMUT® Khorasan shortbread

Ingredients

- 1 kg KAMUT® khorasan white flour
- 300 g almond or hazelnut powder
- 5 g phosphate-free baking powder
- 400 g powdered sugar or brown sugar
- 500 g butter at room temperature, (cream butter)
- 5 g cinnamon or 5-spice powder
- 6 eggs



In a large salad bowl, mix the flour, cinnamon, almond powder, icing sugar and yeast with a whisk to form a smooth mixture.

Make a well, put in the eggs and butter and mix with your fingertips until the dough is smooth, without kneading the dough too much.

Cover with cling film and put in the refrigerator for 1 hour.

Always take the dough out of the refrigerator 30 minutes before working it.

Flatten the dough with a roller pin until it is about 2 to 3 mm thick.

Make the shapes you want with a cookie-cutter.

Beat a whole egg with a fork and a pinch of salt, coat the biscuits with a soft brush and repeat this operation twice at 20 minute intervals.

Preheat the oven: temperature 160° - 170° C or gas-mark 6 - 7.

Put in the oven. Keep an eye on the biscuits and take them out of the oven when they have a nice golden colour (15 - 20 min).

You can also use this recipe for pastry bases.

Recipe

KAMUT® Khorasan yeast free pizza dough

Ingredients

- 600 g water
- 7 g baking soda (bicarbonate)
- 3 drops lemon juice
- 1 kg KAMUT® khorasan white or whole flour

Put in a bowl the tepid water, the baking soda and the lemon drops, mix until the solution becomes foamy, rapidly add the flour making the dough. When finished do the usual dough balls and roll out for your pizza crusts.

