Kamut®: Ancient Grain, New Cereal

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Kamut® is a registered trademark of Kamut International, Ltd., used in marketing products made with a remarkable grain. The new cereal is an ancient relative of modern durum wheat, two to three times the size of common wheat with 20–40% more protein, higher in lipids, amino acids, vitamins and minerals, and a "sweet" alternative for all products that now use common wheat (Fig.1). Nutritionally superior, it can be substituted for common wheat with great success. Kamut brand wheat has a rich, buttery flavor, and is easily digested. A hard amber spring type wheat with a huge humped back kernel, this grain is "untouched" by modern plant breeding programs which appear to have sacrificed flavor and nutrition for higher yields dependent upon large amounts of synthetic agricultural inputs.

Although the Kamut brand wheat is thousands of years old, it is a new addition to North American grain productions. It's origins are intriguing. Following WWII, a US airman claimed to have taken a handful of this grain from a stone box in a tomb near Dashare, Egypt. Thirty-six kernels of the grain were given to a friend who mailed them to his father, a Montana wheat farmer. The farmer planted and harvested a small crop and displayed the grain as a novelty at the local fair. Believing the legend that the giant grain kernels were taken from an Egyptian tomb, the grain was dubbed "King Tut's Wheat." But soon the novelty wore off and this ancient grain was all but forgotten. In 1977, one remaining jar of "King Tut's Wheat" was obtained by T. Mack Quinn, another Montana wheat farmer, who with his son Bob, an agricultural scientist and plant biochemist soon perceived the value of this unique grain. They spent the next decade propagating the humped-backed kernels originally selected from the small jar. Their research revealed that wheats of this type originated in the fertile crescent area which runs from Egypt to the Tigris-Euphrates valley. The Quinns coined the trade name "Kamut" an ancient Egyptian word for wheat. Egyptologists claim the root meaning of Kamut is "Soul of the Earth."

In 1990, the USDA recognized the grain as a protected variety officially named 'QK-77'. The Quinns also registered Kamut as a trademark. Perhaps the most significant aspect of the introduction and cultivation of Kamut brand wheat is that it is an important new crop for sustainable agriculture. This grain's ability to produce high quality without artificial fertilizers and pesticides make it an excellent crop for organic farming.

The real history of the Kamut brand grain has been as elusive as its taxonomic classification. Although not thought to have been in commercial production anywhere in the world in the recent past, most scientists believe it probably survived the years as an obscure grain kept alive by the diversity of crops common to small peasant farmers perhaps in Egypt or Asia Minor*. It is thought to have evolved contemporary with the free-threshing tetraploid wheats. Scientists from the United States, Canada, Italy, Israel, and Russia have all examined the grain and have reached different conclusions regarding its identification. All agree that it is a *Triticum turgidum* (AABB) which also includes the closely related durum wheat. The correct subspecies is in dispute. It was originally identified as *polonicum*. Some now believe it is *turanicum*, while others claim it is *durum*. One Russian scientist believes it is a durum cultivar called 'Egiptianka' or "the durum of Egypt." Still others believe it is may evolve from a mixture of many types which would be consistent with its supposed descent from an ancient landrace originally gathered by primitive farmers from the wild. The majority now identify the grain as *turanicum* commonly called Khorasan wheat. Although its true history and taxonomy may be disputed, what is not disputed is its great taste, texture, and nutritional qualities as well as its hypo-allergenic properties.

KAMUT BRAND WHEAT

Kamut Brand Wheat can be found in cereals, breads, cookies, snacks, waffles, pancakes, bread mixes, baked goods, and prepared and frozen meals. Because of the inherent sweetness of this grain (referred to by some as "the sweet wheat"), no sugar is required to hide the subtle bitterness associated with most wheats and whole wheat products. Many are utilizing the natural firmness of the kernels to produce tasty pilafs, cold

^{*}This belief has now been substantiated by collections made in the upper Nile area of Egypt in mid 1998 under the direction of the author.

salads, soups, or a substitute for beans in chili. Kamut brand bulgur and couscous are also popular in Europe. Kamut brand wheat also makes an outstanding pasta which is superior to all other whole grain pastas in texture and flavor. Because of the strong gluten in the protein, Kamut pasta can be frozen and reheated without losing its firmness. Recently, Green Kamut was introduced. It is becoming the rage of the green foods market because of its concentrated health benefits and mild, fresh taste when compared to other wheat grass juices. Thus the leaves as well as the grain of this remarkable plant are proving to be valuable.

The complete nutritional analysis of Kamut brand grain substantiates that it is higher in energy than other wheats. Compared to common wheat, it is higher in eight out of nine minerals; contains up to 65% more amino acids; and boasts more lipids and fatty acids. The most striking superiority of Kamut brand wheat is found in its protein level—up to 40% higher than the national average for wheat. Because of its higher percentage of lipids, which produce more energy than carbohydrates, Kamut brand can be described as a "high energy grain." Athletes, people with busy lives and anyone looking for quality nutrition will find Kamut brand products a valuable addition to their diet.





Fig 1. Kamut® wheat.

A bowl of hot Kamut cereal in the morning, or a delicious serving of Kamut pasta at noon will satisfy between meal hunger pangs as well as urges for snacking.

For those suffering wheat sensitivities, Kamut brand products also play a unique role. Recent research by the International Food Allergy Association (IFAA) concluded "For most wheat sensitive people, Kamut grain can be an excellent substitute for common wheat." Dr. Ellen Yoder, President of IFAA and a team of independent scientists and physicians reached this conclusion through their work with two different wheat sensitive populations—those who have immediate immune responses and those with delayed immune responses. In the delayed immune response group, a remarkable 70% showed greater sensitivity to common wheat than Kamut brand grain. In the immediate immune response group—the severely allergic—70% had no, or minor, reaction to Kamut brand wheat. However, those with severe allergies should always seek the advice of a physician. Research is now underway in Austria to study gluten intolerance but is yet unfinished so no recommendations can be made for those suffering this affliction. For many wheat sensitive people, however, Kamut brand grain has become "the wheat you can eat."

Yield comparison between Kamut and hard red spring wheats are similar to results observed in comparison between "the covered wheats" and other free threshing wheats (Stallknecht et al. 1996). Kamut will outyield spring wheats under drought stress during the growing season, but yields equal or lower in ideal seasons. Plant height is 127 cm with good to excellent straw strength.

THE KAMUT ASSOCIATIONS

The Kamut Association of North America (KANA) was formed to promote the use of the Kamut brand, provide consumer education and to encourage the expansion of organic agriculture. KANA members include food manufacturers and distributors of Kamut brand products. KANA provides information about available Kamut products and their manufacturers, results of research and nutritional studies, general history and background of the grain, and also information and other assistance in available to the general public as well as retailers and manufacturers by request from the offices of KANA. A similar association has been formed in Europe (KAE). These associations maintain a homepage at kamut.com.

REFERENCE

Stallknecht, G.F., K.M. Gilbertson, and J.E. Ramey. 1996. Alternate wheat cereals as food grains: Einkorn emmer, spelt, kamut, and triticale. p. 156–170. In: J. Janick (ed.), Progress in new crops. ASHS Press, Alexandria VA.