



EMMER WHEAT

(Triticum dicoccon)



Global
Facilitation
Unit
for Underutilized
Species

enabling deployment of underutilized species



What is Emmer and where does it come from?

Emmer wheat is one of the three hulled wheats known in Italy as *farro*. It is a low yielding, awned wheat. It was one of the first crops domesticated in the Near East. It was widely cultivated in the ancient world, but is now a relict crop in mountainous regions of Europe and Asia. Its main use is for human food, though it is also used for animal feed. In recent years, farro has been enjoying a resurgence in popularity among gourmets and the health-conscious, who sing the grain's praises for its high nutritional value and adore the hearty, flavorful taste of the "Pharaoh's Wheat".

Emmer was a wholesome daily staple of the ancient Egyptians, and has been grown for millennia in the Middle East and North Africa. Originating 12,000 to 9,000 years ago, emmer gave rise to all durum wheat. Its younger cousin (by about 2,000 years) spelt, which is a soft wheat, often masquerades as true farro. After Julius Caesar's invasion of Egypt in 30 B.C., farro found a home in Italy, the only country today where it is cultivated on a large scale. The nutritious grain became a staple at every level of Roman society, sustaining the Roman Legions and even giving rise to the Italian word for flour: farina. Delicious and high in protein, Emmer nonetheless saw its place at the table usurped in modern times by higher-yield, easily-harvested wheat, such as those found in breads, pastas and cereals today.

PROPERTIES

Rich in fiber, protein, magnesium, and vitamins, Emmer also becomes a complete protein source when combined with legumes, making Emmer grains and pastas ideal for vegetarians, or for anyone simply looking for a plant-based high-protein food source.

❖ Food Preparation

Emmer makes good bread, and in Italy, farro is traditionally consumed as whole or crushed grains in soup. Its use for making pasta and biscuits is a recent response to the health food market.





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GROWING

Today emmer is primarily a relict crop in marginal mountainous and hilly areas. Its value lies in its ability to give good yields on poor soils, and its resistance to fungal diseases such as stem rust that are prevalent in wet areas. Emmer is grown in Morocco, Spain, the Carpathian mountains on the border of the Czech and Slovak republics, Albania, Turkey, Switzerland and Italy. Italy is an interesting case as, uniquely, farro cultivation is well established and even expanding. In the mountainous Garfagnana area of Tuscany the farro is grown by farmers as a GI (*Geographical Indication*) product, with its geographic identity protected by law. Production is certified by a co-operative body, the Consorzio Produttori Farro della Garfagnana. GI-certified farro is widely available in health food shops across Europe, and even in some British supermarkets. The demand for Italian farro has led to competition from spelt, a non-certified farro, grown in lowland areas.

PROCESSING

Emmer is a hulled wheat. In other words, it has strong glumes (husks) that enclose the grains, and a resistant rachis. On threshing, a hulled wheat spike breaks up into spikelets. These require milling or pounding to release the grains from the glumes.

Achieving social and ecological sustainability

Wild emmer wheat is the immediate progenitor of tetraploid and hexaploid cultivated wheats. It is recognized as a source of genes for agronomically important traits. These include genes for large spike and grain size, high grain and protein yield, desirable composition of storage proteins, photosynthetic yield, herbicide response, salt tolerance, disease resistance, profuse tillering, drought tolerance, and, presumably, genes for other quantitative traits. With the advent of, and easy access to, molecular genetics and breeding tools, wild emmer wheat is expected to contribute the full range of its diversity, in qualitative and quantitative traits, for a more sustainable wheat production, especially in the developing world. It is also valuable for its contribution in the safeguard of biodiversity.

The exhibits on show are just few of many commercial products made from Emmer and Spelt:

Farro spaghetti, penne and tagliatelle

Farro grains

Farro chocolate chip cookies

Farro taralli

Farro beer

Pre-cooked farro

SOME PRODUCERS / RETAILERS / DISTRIBUTORS

❖ Prometeo - www.prometeourbino.it

❖ The Passionate Gourmet - www.thepassionategourmet.com/farro/

❖ Poggio del Farro - www.poggiodelfarro.com





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