2021 GRAIN CATALOG



COMMUNITY COLLABORATORS

Mad Agriculture
Lewis Family Farm
Jones Farms Organics
MASA Seed Foundation
Freshly Milled
Colorado Grain Chain

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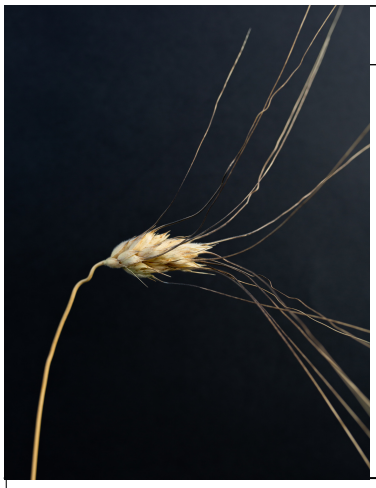


BLUE BEARD DURUM

AWN: Awned
TYPE: Soft White Spring
ACRES GROWN: 4 acres
PLANT HEIGHT: 29 inches
HEAD LENGTH: 2 inches
SEEDS/HEAD: 14 seeds
GROWN BY: Lewis Family Farm

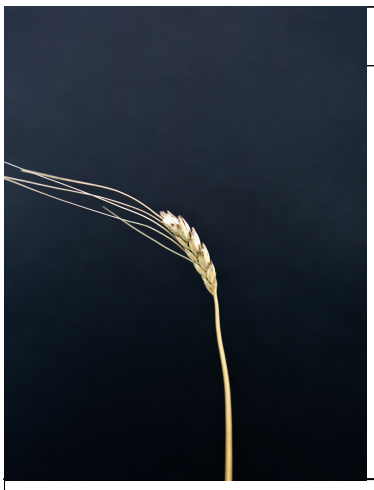
Thought to have originated in Iran, this landrace is best known for its remarkable, dark blue head. It has primarily been planted in the Central Valley and southern desert regions of California. It is known to be drought tolerant, tall, and resistant to powdery mildew, Septoria tritici leaf blotch, and somewhat resistant to stripe rust. Blue Beard Durum is well suited for use as semolina in pastas. Its unique appearance has also commanded the attention of straw artists and wheat weavers.



DEFIANCE

AWN: Awnless
TYPE: Soft White Spring
ACRES GROWN: <1 acre
PLANT HEIGHT: 45 inches
HEAD LENGTH: 3.5 inches
SEEDS/HEAD: 32 seeds
GROWN BY: MASA Seed Foundation

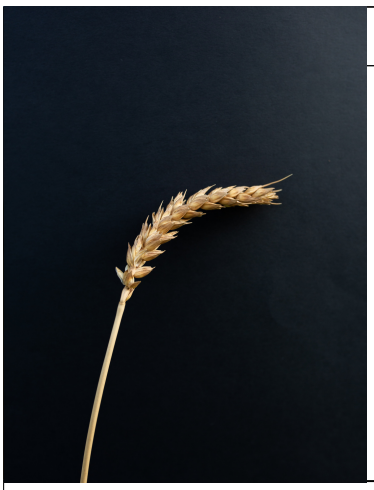
Defiance wheat is a cross between White Hamburg and Golden Drop wheat varieties, originally cultivated at the Colorado Experiment Station in 1871. This tall, white-stemmed wheat is typically grown from spring sowing and was once grown across parts of the western United States. Defiance is Colorado's most famous wheat. However, it disappeared after the Green Revolution. Mad Ag discovered one lb. in northern Vermont and planted it again in Colorado for the first time in 75 years.



EINKORN

AWN: Awned
TYPE: Winter/spring Ancient
ACRES GROWN: <1 acre
PLANT HEIGHT: 22 inches
HEAD LENGTH: 1.9 inches
SEEDS/HEAD: 12 seeds
GROWN BY: MASA Seed Foundation

Einkorn, meaning "single grain" in German, originated in the Fertile Crescent more than 10,000 years ago and was introduced to the U.S. before the 1900's. This ancient grain is the mother of all domesticated wheat. Einkorn is a short, hulled wheat, which makes it difficult to process. It is also a relatively unproductive crop, but it has gained a resurgence in popularity for its high levels of protein and micronutrients compared to modern wheat varieties. Einkorn is also easier to digest for those with gluten sensitivities.



FOISY

AWN: Awnless
TYPE: Soft White Spring
ACRES GROWN: <1 acre
PLANT HEIGHT: 46 inches
HEAD LENGTH: 3.6 inches
SEEDS/HEAD: 29 seeds
GROWN BY: MASA Seed Foundation

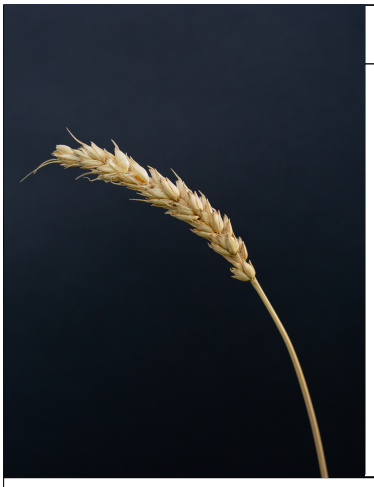
In 1865, this red chaff was discovered by M.G. Foisy in his field of white chaff in Oregon. Foisy is a historically west coast wheat cultivar and considered a soft white wheat. It is recommended to be planted in slower draining soils. The whole wheat flour can be used for bread, cookies, cakes, pastries, and breakfast cereals



GHIRKA 1517

AWN: Awned
TYPE: Soft White Spring
ACRES GROWN: <1 acres
PLANT HEIGHT: 32 inches
HEAD LENGTH: 2.5 inches
SEEDS/HEAD: 29 seeds
GROWN BY: MASA Seed Foundation

Ghirka, also called Russian Fife, originated in Southern Russia and was collected in Belarus for the 1900 Paris Exposition. Ghirka is drought-resistant and adapts well to the northern Great Plains region of the US, but is susceptible to rust in moist conditions. Ghirka differs from other Fife strains in that its spike is more slender and tapered. The kernels are also the softest of all hard spring wheat varieties. Ghirka produces light flour, with a high loaf volume and low protein content. It has a relatively low milling value, producing low texture, quality, and yield.



HOURANI

AWN: Awned
TYPE: Soft Durum Landrace
ACRES GROWN: <1 acre
PLANT HEIGHT: 27 inches
HEAD LENGTH: 2.5 inches
SEEDS/HEAD: 33 seeds
GROWN BY: MASA Seed Foundation

Dating back to 35 BC, Hourani seeds were stored in the Fertile Crescent's Masada Fortress by King Herod to be cultivated on the volcanic Houran Plateau of Syria and Jordan. In the 1920s, botanist Nikolay Vavilov collected Hourani seeds and brought them to the Leningrad seed bank in Russia. This drought-resistant durum landrace has large hard kernels that are perfect for semolina and flatbreads. Bakers describe the flavor as hints of golden raisins and ripe apricots.



IRAQI DURUM

AWN: Awned
TYPE: Spring Durum
ACRES GROWN: <! acre
PLANT HEIGHT: 29 inches
HEAD LENGTH: 2.75 inches
SEEDS/HEAD: 31 seeds
GROWN BY: MASA Seed Foundation

Iraqi Durum is a bearded landrace wheat variety from Iraq that is well adapted to hot, dry climates. It is a tetraploid, free threshing wheat with a sweet, malty flavor and high protein content. It gives a beautiful golden hue and is a favorite for use in pasta and pancakes. The strong stems and long black awns mark this cultivar and draw the attention of weavers, straw artists, florists, and cooks alike.



INDIA JAMMU

AWN: Awnless
TYPE: Hard White Spring
ACRES GROWN: 4 acres
PLANT HEIGHT: 23 inches
HEAD LENGTH: 3 inches
SEEDS/HEAD: 25 seeds
TEST WEIGHT: 57.5 lb/bu
PROTEIN: 14.7%
FALLING #: 200 seconds
MOISTURE: 10.7%
GROWN BY: Michele Moffat, Treehouse Collective

India Jammu is a landrace variety from Jammu and Kashmir, India, collected by the USDA in 1923. India Jammu grows similarly to White Sonora, differing only by its brown rather than white glumes and a slightly lower yield. It grows well in warm climates. Compared to most soft white wheat varieties, India Jammu has a significantly harder kernel and highly elastic gluten that makes it more similar to hard red varieties in baking performance. It is best suited for use in artisan breads.



KHORASAN

AWN: Awned
TYPE: Hard Amber Spring
ACRES GROWN: 4 acres
PLANT HEIGHT: 27 inches
HEAD LENGTH: 2.25 inches
SEEDS/HEAD: 38 seeds
GROWN BY: Lewis Family Farm

Commercially known as Kamut, Khorasan likely made its way to the United States from Egypt in 1949. Kamut can be enjoyed as a cereal grain or in baked goods as a versatile flour. Kamut is also prized for its digestibility. Those that trademarked the Kamut brand state that some people with wheat sensitivities have reported no issues with this variety



LARGO

AWN: Awned
TYPE: Winter Landrace
ACRES GROWN: <1
PLANT HEIGHT: 29 inches
HEAD LENGTH: 2.75 inches
SEEDS/HEAD: 32 seeds
GROWN BY: MASA Seed Foundation

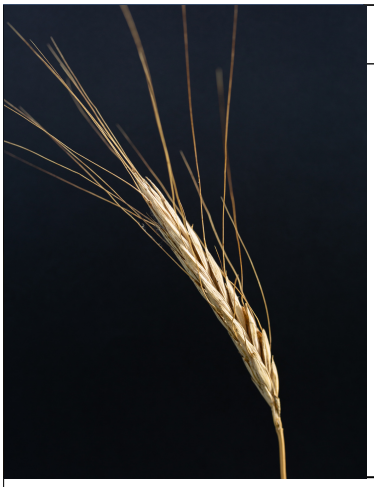
Largo is a Mexican landrace wheat named for its long awns. It originated in Oaxaca's Mixteca Alta region, so it is well adapted to warm, humid climates but can tolerate water stress with effective tillering. Being a common wheat, Largo is well suited for use in breads.



METHOW

AWN: Awned
TYPE: Hard Red Spring
ACRES GROWN: <1 acre
PLANT HEIGHT: 41 inches
HEAD LENGTH: 3.25 inches
SEEDS/HEAD: 29 seeds
GROWN BY: MASA Seed Foundation

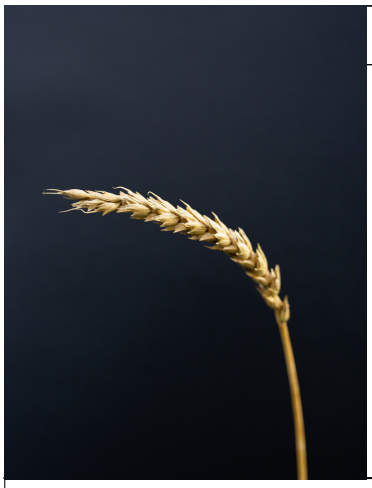
Methow wheat originated in Canada over 100 years ago. Methow seed heads are broad, awned, and deep gold in color. This variety contains between 12.5-14% protein and has a slightly bitter or tangy flavor that makes it a good candidate for whole wheat baked goods and pizzas.



MIRABELLA

AWN: Awned, Hulled
TYPE: Spring Landrace
ACRES GROWN: <1 acre
PLANT HEIGHT: 44 inches
HEAD LENGTH: 4.5inches
SEEDS/HEAD: 24 seeds
GROWN BY: MASA Seed Foundation

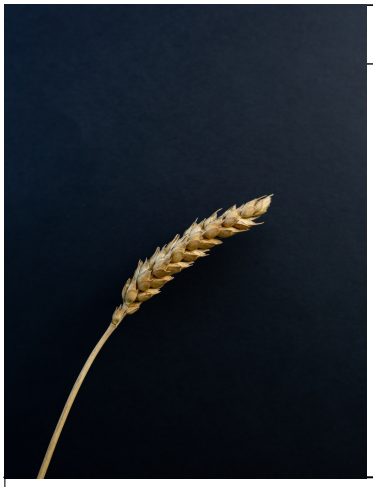
Mirabella is a Polish landrace wheat collected from Italy in the 1960s. The variety is known for its tremendous height potential and sturdy hollow stems. Due to its height, Mirabella is prone to lodging.



RED FIFE

AWN: Awnless
TYPE: Hard Red Spring
ACRES GROWN: 38 acres
PLANT HEIGHT: 23 inches
HEAD LENGTH: 2.25 inches
SEEDS/HEAD: 39 seeds
TEST WEIGHT: 58.2 lb/bu
PROTEIN: 11.7%
FALLING #: 356 seconds
MOISTURE: 9.9%
GROWN BY: Lewis Family Farm, Michele Moffat

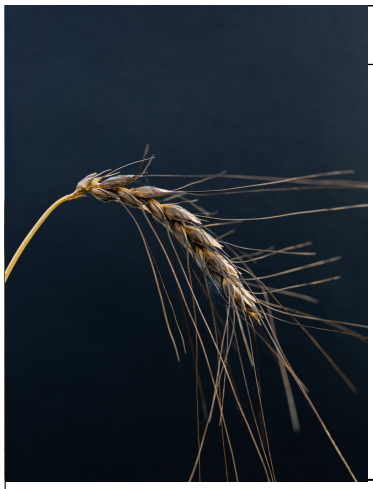
Red Fife is Canada's oldest wheat variety. Likely a descendant of Ukrainian Halychanka wheat, the variety was sent to farmer David Fife in Ontario, Canada, who named them and began planting them around 1840. With hard, red, awnless seed heads, this wheat is easily milled for bread flour and makes a moist bread with a cohesive crumb. Red Fife is enjoying renewed popularity as a specialty grain and flour.



ROUGE DE BORDEAUX

AWN: Awned
TYPE: Soft White Spring
ACRES GROWN: 11 acres
PLANT HEIGHT: 35 inches
HEAD LENGTH: 3.25 inches
SEEDS/HEAD: 27 seeds
TEST WEIGHT: 55.1 lb/bu
PROTEIN: 12.7%
FALLING #: 534 seconds
MOISTURE: 10.1%
GROWN BY: Michele Moffat

This awnless hard red heritage wheat dates back to 19th century Southern France where it has been the favorite of traditional bakers for generations. It is well adapted to clay soil and a mediterranean climate, consisting of warm, dry summers and wet, mild winters. The grain is revered for its production of breads with rich, nutty flavors and spicy aromas. The high protein content gives way to an excellent rise and open crumb. It is best suited for breads, cookies, muffins, and pancakes.



RUSAK

AWN: Awned
TYPE: Winter Landrace
ACRES GROWN: <1 acre
PLANT HEIGHT: 30 inches
HEAD LENGTH: 2.75 inches
SEEDS/HEAD: 24 seeds
GROWN BY: MASA Seed Foundation

Rusak is a Persian wheat that was originally collected by Russian botanist Nikolai Vavilov in the early 1900s.



SIN EL-PHEEL

AWN: Awned, Hulled
TYPE: Soft White Spring
ACRES GROWN: <1 acre
PLANT HEIGHT: 23 inches
HEAD LENGTH: 2.5 inches
SEEDS/HEAD: 15 seeds
GROWN BY: MASA Seed Foundation

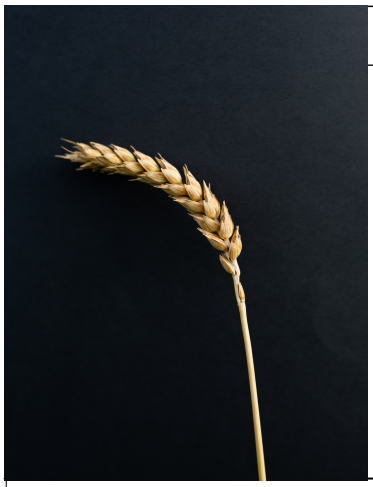
Sin El-Pheel is a landrace wheat cultivated and collected in ancient Mesopotamia. With large heads of grain, stiff stems, and tall stalks, this wheat variety may be described as "elephantic." This variety is well suited for breads and pastas.



WHITE SONORA

AWN: Awned
TYPE: Soft White Spring
ACRES GROWN: 45 acres
PLANT HEIGHT: 36 inches
HEAD LENGTH: 2.75 inches
SEEDS/HEAD: 30 seeds
GROWN BY: Jones Farms Organics, Lewis Family Farm, Dan Lisco

This bronze-tinged, awnless wheat was brought to North America from Spain in the late 1600s. Initially used to make communion bread, it evolved to become a staple of "borderland cuisine," exemplified by the large white flour tortillas in the Southwest U.S. and Northern Mexico. The grain is well adapted to the semi-arid climate of the Southwest and is disease resistant. It produces a light wheat that is especially good for tortillas, pastries, and pastas. It is a well- tolerated variety for those with wheat allergies or celiac disease.



YECORA ROJO

AWN: Awnless
TYPE: Hard Red Spring
ACRES GROWN: 1 acre
PLANT HEIGHT: 30 inches
HEAD LENGTH: 3.75 inches
SEEDS/HEAD: 44 seeds
TEST WEIGHT: 56.8 lb/bu
PROTEIN: 12.6%
FALLING #: 127 seconds
MOISTURE: 10.2%
GROWN BY: Michele Moffat

Yecora Rojo, a favorite of West Coast artisan sourdough bakers (i.e. Tartine) was developed by the International Maize & Wheat Improvement Center in Cooperation with the Mexican ministry of Agriculture in Mexico. The variety excels for bread making, creating a smooth and lightweight loaf with buttery and malty flavors. The grain can also be used for making cookies, brownies, croissants, and crackers.

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