

THREATENED ANCIENT GEORGIAN WHEATS

growseed.org



PALEO COLCHICUM



MACHA



TIMOPHEEVII



CARTH LICUM ZHUKOWSKY



EINKORN



SINSKAJAE



CLUB



MILITINAE



TURGIDUM



RIVET



Zanduri



Macha



Einkorn

SEED ARK

Restoring Heritage Grains & Food Traditions

Baking
with
Einkorn

growseed.org

Botanical Noah's Ark discovered in the Caucasus Mountains

World scientists are working feverishly to avert global famine by searching for resilient crop varieties that can feed the world as we face climate change. Modern wheats are failing under heavy rain and drought extremes, predicted to significantly decrease yields in the next decades. Resilient traits are bred out of the gene pool of modern wheat due to selecting for high yield uniformity in agrochemical-soaked soil.

It is critical that we diversify food production or face crop loss, famines and migrations of hungry people.

Fortunate for all of us, a botanical Noah's Ark of rare ancient grains with extraordinary climate resilience, nutrition and flavor has been discovered in the remote Caucasus Mountains, nestled between Russia and Turkey. Unlike typical archaeological remains of broken pottery, these are *living seeds* passed down generation by generation by peasant farmers.



Caucasus Mountains ancient grains were the first food crops domesticated by Neolithic farmers at the dawn of agriculture. These grains evolved traits to survive in harsh conditions, are the most disease resistant in the world, producing stable yields under weather extremes when modern wheats fail. Extensive root systems attract mycorrhizae that absorb minerals from soil, imparting rich flavor for the proverbial staff of life.

The Caucasus Mountains are a center of biodiversity of wheat spanning fourteen species that include: *Timopheevii*, *Monococcum*, *Macha*, *Zhukowskyi*, *Paleocolchicum*, *Carthlicum* and more. Einkorn is gluten-safe, easy to digest for most people with gluten allergies, nutrient dense and incredibly delicious.

In contrast to the 'Doomsday' Svalbard Seed Vault buried under ice, our *Seed Arks* distribute living seeds to farmers and seed-savers so that season by season we will increase access to the world's most resilient grains in the face of climate change.

For further information and to be involved, contact

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growseed.org

Plant Landrace Grains

*All our profits support grow-outs for
our Community Seed Bank.*

For more see: growseed.org

Einkorn (*T. monococcum*) - Our population of diversity was collected in the Karacadag Mountains, Caucasus Mountains, Carpathian Mountains, Golan Heights & biodynamic darzau.de. Selected for rich flavor and resilience on my farm.

Macha - Ancient mother of hexaploid bread wheat, hulled Macha is most robust grain we grow. We plant each seed one foot apart to allow this plant to reach its potential. 18% protein, rich in minerals, stretchy dough for delicious breads.

Chelta Zanduri (*T. timopheevii*) - Ancient hulled tetraploid grain renowned for robust resistances, extraordinary flavor. Known as 'Royal Wheat' in its ancestral homeland of Georgia.

Caucasus Rouge aka Tsiteli Doli, rare heritage aestivum bread wheat being restored in Georgia, stunning honey-mahogany sheaves, makes sweet fragrant flour.

Banatka - Beloved heritage Hungarian wheat, high yield, rich flavor, and excellent baking quality.



Bake Landrace Bread

Einkorn Flour - Stone-milled fresh for each order with all the goodness left in for rich nutrition and flavor.

Einkorn Grain - Organic, whole berries to mill or sprout

Sprouted Einkorn Flour aka Malt - Neolithic breads were baked with sprouted grains. We sprout, dry at a low temperature to preserve the enzymes and mill fresh for each order. Sprouted einkorn flour is rich in flavor, nutrients and fermentability. Brew beer with our malt!

'Restoring Heritage Grains' book - Eli Rogosa's guidebook on the history, biodiversity, growing methods and recipes for ancient and heritage grains.

Which would you rather eat?



5' tall heritage wheat

1900

*Deep roots. 500% more leaves
for photosynthesis. Evolved
over millennia in organic soil.*



1' short modern wheat

2000

*Modern wheat roots & height
dwarfed to be dependent on
synthetic agrochemicals.*

Seed Ark

Mission

To restore the wild resiliences of landrace seed inspired by Neolithic practices of population diversity, selective seed-saving, and seed exchanges, with sprouting and fermenting grains - as themes for community building.

1. Keeping the Story of Seed Alive

Although Georgia is the center of biodiversity of wheat, she was occupied by Russia for ninety years. Russia made it illegal to grow landrace grains. As the shackles of oppression were thrown off, the restoration of the peasants' heritage of landraces is rising up. Season by season Georgian farmers are restoring precious handfuls of landrace seed. Eli worked with Elkana to plant the first Seed Ark six years ago. The Caucasus Mountain ancient grains that we hold in our hands were gifted to Eli Rogosa by Elkana <elkana.org.ge> as a gift to continue the Seed Ark project with an expanding network of growers.

2. Farmers' Rights

Caucasus Mountain ancient grains are the most climate resilience grains in the world. We strive to turn the table from a top heavy seed system to a farmer-based system where the traditional farmers who stewarded landrace seed generation by generation, and small-scale growers today are at the heart of the seed system. As Elkana growers restore their ancient grains, US Seed Ark farmers pledge to contribute a portion of our profit back to the indigenous Seed Ark to continue to restoration of rare seed in its region of origin. This not only ensures survival of rare seed, but provides a direct supply of the healthiest harvest to plant in our own farms and gardens.

3. Gifting

In response to rampant materialism causing us and our planet to lose balance, we are introducing an innovative solution to this unprecedented problem. *Gifting*. Seed Ark promotes small-scale seed exchanges and farmer-to-farmer cooperation, in hope to rebuild relationships rooted in social and ecological values instead of economic commodification of seed.

US Seed Ark growers will be invited to meet Georgian farmers to build farmer-to-farmers circles to share knowledge, skills and seed. We will coordinate Zoom meetings and visits to Georgia to meet the peasant farmers, taste delicious foods, and dance in the fields. In return we will host a US festival to celebrate restoration of almost-lost Caucasus Mountain ancient grains with a farmers market, food tastings and dance.

Each person who receives our seed becomes part of our Seed Ark circle with agreements for: Organic ecological seed production. Cover crop the season before planting to build mycorrhizae and living soil fertility. Plant at wide spacing of at least 10" between each seed. Under-sow clover in early spring. Save seed for whole plant health and population diversity.

Coordinators:

Eli Rogosa - Heritage Grain Conservancy, <http://growseed.org>

Bill McDorman - <https://heritagegrains.org>

Lee Ann Hill - <https://heritagegrains.org>

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