# HEIRLOOM SEEDS & SEED BANKS



# What are heirloom seeds?

Heirloom seeds have been kept through multiple generations and are carefully saved to preserve genetics and plant in the future.



Heirloom seeds are open-pollinated, which means they rely on natural pollination from insects or wind. After WW2, hybrid seeds came by artificial pollination genetically altered to attain varieties that are resistant to frosts, droughts and chemical inputs.



Hybrid seeds were a result of industrialization that led to mechanized agricultural practices, allowing farmers to produce and harvest plants at a specific time.

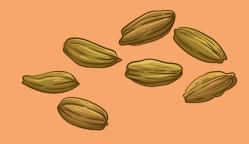
The most adverse effect of this phenomenon was a reduction in the crop-genetic diversity by a gapping of 75%.

## Types of seeds today

GMO Genetically modified seeds have had been altered through human intervention.

#### ORGANIC

Organic seeds are free-from synthetic agricultural chemicals and have not pre-treated with any form of chemical fungicide.



### HYBRIDS

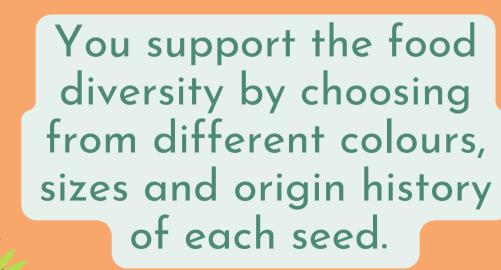
Created by crossing two different varieties of the same plant. Crossing involves taking the pollen from the male flower and transferring it to the female flower parts of a different plant..



# Why choosing heirloom crops?

By planting heirloom seeds, you can have a more resilient and self-sufficient production, by being able to save your own seeds.

Heirloom varieties can have higher nutrient-density, providing better nutritional profiles to your crops.



### What are seed banks?

A seed bank or germplasm bank is a place where suitable conditions are maintained to conserve seed specimens of different plant species (wild or cultivated).

"Well-funded, wellmaintained seed banks are critical to reducing the negative impact of the climate crisis on our food systems globally."

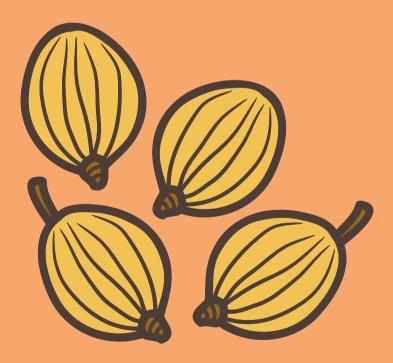
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SEEDS

(The Guardian, 2022)

### The importance of seed banks

There are at least 250.000 edible plant species on our planet, however we depend only on three – corn, rice and wheat– for 60% of our total calorie consumption.



There are roughly 1,700 seed banks keeping plant species that are invaluable for scientific research, education, species preservation and safeguarding indigenous cultures.

(The Guardian, 2022)

### Seed banks around the world

The Millennium Seed Bank, in England, the most diverse wild plant genetic resource in the world.

The National Laboratory for Genetic Resources Preservation in US, houses more than 500,000 samples of genetic material from close to 12,000 plant

species.

The Potato Park, in Peru. Run by Indigenous communities houses around 2,300 of the 4,000 varieties of potatoes known in the world, and 23 of the more than 200 wild species of potatoes known to humanity.

The seed vault is sited in the Svalbard archipelago, halfway between mainland Norway and the north pole.

Located in St Petersburg, Russia, the Vavilov Research Institute of Plant Industry was established more than 100 years ago

(The Guardian, 2022)

### How can I save seeds?

#### Know what to grow

- Start With Open-Pollinated Seeds
- Learn About Species



#### Plan for seed saving

- Start With Easy Crops
- Grow Enough Plants
- Put A Little Space Between Varieties

#### **Collect Your Bounty**

- Know When Your Seeds Are Mature
- Know How To Harvest Seeds
- Store Seeds

Save, grow and reproduce traditional seed varieties to safeguard biodiversity.

### Join us in our mission!

Coalition of Health Professionals for Regenerative Agriculture