

Barbed Corn and Clüsven bean

Ancient seeds in Bergamo





GANDINO

The place

Gandino is a small town belonging to the tourist district called "Le Cinque Terre" of "Gandino's Valley". It is located a few kilometres away from Bergamo. It is a place rich of history, architecture and local traditions. A journey in this place gives you the possibility to discover this territory and its unique cultural and natural heritage with its outstanding cuisine, starting from its cornmeal called Barbed Corn of Gandino.

Interview

We have interviewed Angelo Savoldelli responsible for the didactics of the Barbed Corn Community of Gandino so that we can better understand what's behind the Barbed Corn and Clüsven Bean.

(<https://drive.google.com/drive/my-drive>)



Some more information about the Barbed Corn



Where is it stored?

The seeds of Barbed Corn are today stored by the CRA (Centre for Corn Cultivation Research) of Bergamo, by the Bank of Germoplasm of Pavia and by the Svalbard Global Seed Vault in Norway.

Events

"Days of Melgotto" in Gandino, dedicated to the ancient corn to coincide with the harvest season.



A book of themed meetings that has become indispensable for all lovers of zero-kilometer quality products, joined in the latest editions by the "Galà dello Spinato".



Clüsven bean

- The Clüsven Bean has been grown in the municipality of Gandino, in the province of Bergamo for over 100 years.
- Used in vegetable soups, for pasta and beans, stewed with tomatoes and spices, it was included in the **Slow Food Ark of Taste** in 2016, together with Barbed Corn: an ancient tradition that becomes topical excellence.

The consumption of vegetable proteins for food use is increasing, so new varieties are needed and existing genetic resources must be properly exploited to improve the adaptation of crops to European agroecosystems



Delegation of Bergamo at the FAO (Food and Agriculture Organization) in Rome. From right - Angelo Savoldelli, Filippo Servalli e Roberto Colombi.

Activities continue for the European research project **INCREASE** which, thanks to a budget of over 7 million euros, brings together **28 international partners** from 14 different countries, among which, for the Bergamo area, also the Community of Barbed Corn of Gandino.

The project aims to examine the state four of important traditional European legumes (chickpeas, beans, lentils and lupins) and to develop efficient conservation tools and methods and promote the use of agricultural biodiversity in Europe and the cultivation and consumption of leguminous plants.

INCREASE Barbed Corn of Gandino is working on the project of "**Clüsven Bean**", a legume of the *Phaseolus Coccineus* family that has been cultivated for over a century in Gandino (Bergamo - Italy), in the same area where the Gandino's Barbed Corn variety was cultivated since 1632.



The project **INCREASE**, funded by the EU's Horizon 2020 research programme and launched in May 2020, aims to develop efficient and effective conservation tools and methods for genetic resources to foster agricultural biodiversity in Europe through participatory research.

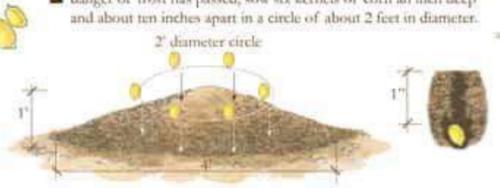
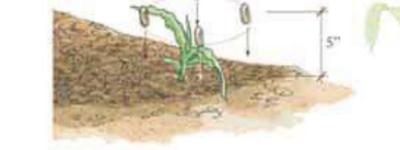
It is not only the variety, but also all the work around it..

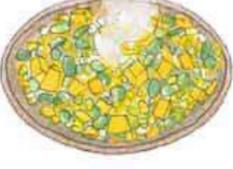
In Gandino, refers Mr. **Angelo Savoldelli**:
"we have been experimenting the cultivation of corn, climbing beans called *Clüsven* (which not only find a support on the corn plant, but also extract from the air nitrogen and fixes it in the ground, the corn plant needs nitrogen and finds it ready in the ground). The "third friend" of the group is the **pumpkin** because pumpkins have very **large leaves**, which mantain the ground wet with their **shadow**. Therefore you **don't need so much water** for the plants, expecially in the mountains where there are no canalizations and in particular with today's shortage of water. Our way is totally natural and local."

THREE SISTERS COMPANION PLANTING

By the time European settlers arrived in America in the early 1600s, the Iroquois had been growing the "three sisters" for over three centuries. The vegetable trio sustained the Native Americans both physically and spiritually. In legend, the plants were a gift from the gods, always to be grown, eaten and celebrated together. The three sisters provide both sustainable soil fertility as well as a healthy diet from a single planting.

- 1** In spring, prepare the soil by adding fish scraps or wood ash to increase fertility.

- 2** Make a mound of soil a foot high and four feet wide. When the danger of frost has passed, sow six kernels of corn an inch deep and about ten inches apart in a circle of about 2 feet in diameter.

- 3** When the corn is about 5 inches tall, plant four bean seeds, evenly spaced, around each stalk.

- 4** About a week later, plant six squash seeds, evenly spaced, around the perimeter of the mound.

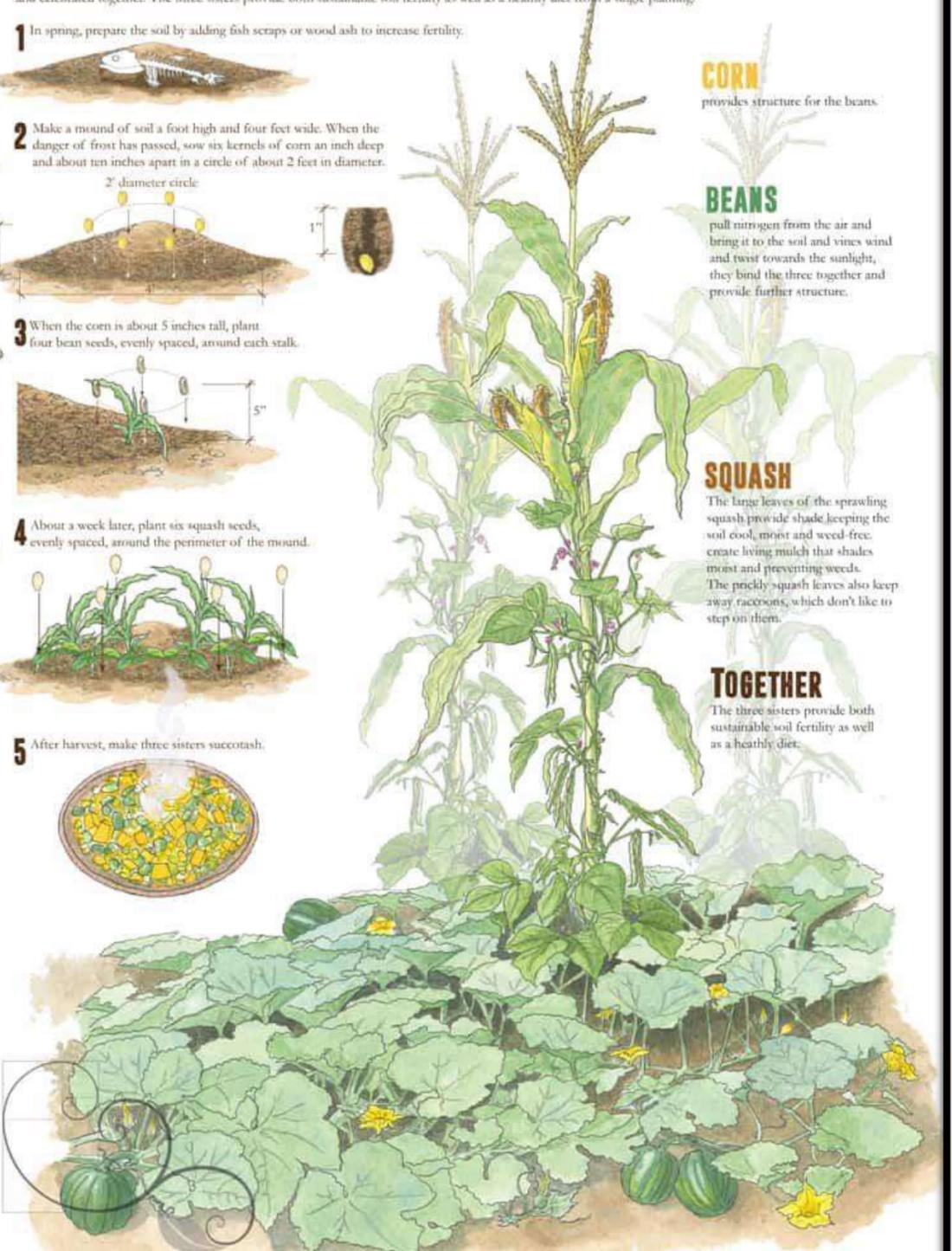
- 5** After harvest, make three sisters succotash.


CORN
provides structure for the beans.

BEANS
pull nitrogen from the air and bring it to the soil and vines wind and twist towards the sunlight, they bind the three together and provide further structure.

SQUASH
The large leaves of the sprawling squash provide shade keeping the soil cool, moist and weed-free. create living mulch that shades moist and preventing weeds. The prickly squash leaves also keep away raccoons, which don't like to step on them.

TOGETHER
The three sisters provide both sustainable soil fertility as well as a healthy diet.



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Thanks for the attention!!!

and thanks to professor Angelo Savoldelli for the interview!

Mais Spinato website:

<https://www.mais-spinato.com/>

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