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SEED NETWORK IN VET

PROJECT NUMBER: 2019-1-PL01-KA202-065239

Seed saving and custody process: good practices from partners' countries





The SeedNet project

"Seed networking in VET" is an Erasmus+ Strategic Partnership which aims to save and protect sowing endemic seeds, to spread the knowledge of the value of endemic productions. In this way, we can combine and share different European traditions and good practices in network of project organizations of countries involved.



The target groups of the SEEDNET project are VET staff members, teachers, trainers and mentors that need professional growth to answer to new challenges of the labour market. That's because through the sharing of good practices and knowledge we want to create an interest of different stakeholders about endemic seeds production and safeguard inside a sustainable developing economy, enhance the respect to biodiversity and safeguard rural heritage.

Starting from the work based on learning methodology which we applied during short-term joint staff training events we exchanged and shared good practices on the safeguard of seeds and ancient species.



Partners

SEEDNET is created by different bodies - two VET schools from Italy and France, two NGOs working in VET from Estonia and France and two networks of VET schools (EUROPEA) from Poland and Hungary. Coordinator of the project is EUROPEA Poland. Partners' organisations belong to different economic and educational sectors which gives synergy to this project in order to promote the diffusion of native seed saving practices on local, national and European levels.

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GOOD PRACTICES ON ANCIENT SEEDS SAVING AND PRESERVATION IN PARTNERS COUNTRIES

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Italy's good practice

ISS Piedimonte Matese *tesoretto* *di antichi semi*

(ancient seeds little treasure)

The Agricultural Technical Institute of Piedimonte Matese stores a collection of seeds of over one hundred different varieties dating back last century is still preserved in the science laboratory.



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The seeds are preserved with mothballs in small glass containers sealed with wax.

The label shows the name of the variety written in ink with a nib: a handful of seeds is stored in each container.

There are hundreds of containers inside which we can find from onion to chilli, from white cannellino bean to queen margherita tomato (one of the ingredients of what is now called Margherita pizza, dedicated to the queen), from Rieti wheat to clover, on some containers the label is no longer present and this makes the seeds temporarily unusable as they cannot be classified.





Seed varieties kept in the collection

- Rieti wheat variety

Nazareno Strampelli in the fascist era by crossing this variety with others obtained:

- Gentil Rosso
- Falerna
- Mentana
- Odessa hard wheat
- Dauno rye
- local barley
- oats from Puglia

these varieties are part of the collection too.

Briada che si dà & semenza
in q^{to} anno 1795 in 96

A Gio: Vico tt:	16
A Cosimo Mennone tt: q. n.	08
A Nicola Lombardo tt:	26
A Pasquale Pietrosimone tt:	12
A Lorenzo Federico tt:	03
A Marcellino Majuccio tt:	01
A Angiolo Riccio tt:	12
A Tommajo Riccio tt:	03
A Marcellina Lombardo tt:	12
A Filippo Casella tt:	02
A Filippo Anillo d ^m Felice	01
A Pasquale di Chello tt:	09
A Nicola Mennone tt:	01
A Marcellino Riccio tt:	03
A Pasquale Colapetella tt:	06
Ad Ant ^o Santagata tt:	02
130	

Anno che si dà in d^o anno.

A Maddalena Coluccio tt: ^{alt. 2.50}	01
A Garzone di Nobia Coluccio tt:	03
A Mutano Leggiero tt:	01
A Pasquale di Chello tt:	2 04
A Gio: Vico tt:	06
A Andrea d' Onofrio tt:	01
A Pasquale di Pietrosimone tt:	01
A Nicola Lombardo tt:	21
Ad Ant ^o Santagata tt:	00
A Don ^o Ant ^o Lambertino tt:	06
A Marcellina Lombardo tt:	00
A Pietro d' Amato	00
62 ² / ₁₂	

Briada, ossia sterna, che si esige
nel 1796.

A Da Gio: Ant ^o Pasquale tt:	02
Da Marcellino Riccio tt:	01
Da Lorenzo Federico tt:	03
Da Nicola Mennone tt:	05
Da Gio: Vico & terr ^o tt:	22
E & conto suo tt:	20
Da Pasquale Colapetella & terr ^o	02
Per conto suo dal sud ^o tt:	09 ² / ₁₂
Da Ant ^o Santagata per terr ^o	02 ¹ / ₁₂
Ed a conto suo tt:	02 ¹ / ₁₂
Da Nicola Lombardo & terr ^o	02 ² / ₁₂
E & conto suo tt:	12
Da Nobia Coluccio tt:	17
Da Luigi d' Amato tt:	30
Da Gio: Grazia tt:	20
Da Angiolo Riccio & terr ^o	1 00
E & conto suo tt:	005 ¹ / ₁₂
Da Fran ^o Cancellotto tt:	019 ⁷ / ₁₂
Da Tommajo Riccio tt:	004
Da Filippo Casella & terr ^o & semenza	003
E & altro conto suo tt:	002
Da Tommajo Riccio tt:	006
Da Cosimo Mennone per terr ^o	001
E & conto suo tt:	007
Da Marcellino Lombardo	011
Da Pasquale Pietrosimone & terr ^o	002 ² / ₁₂
E & conto suo tt:	012 ¹⁰ / ₁₂
Da Pasquale di Chello & terr ^o	003 ¹ / ₁₂
E & conto suo tt:	010 ⁷ / ₁₂
Per varj altri terraggi	021
140 ¹ / ₁₂	

Seeds kept and saved by the ISISS Piedimonte Matese

Taking inspiration from a document of the 19th century about rye custody, in the last few years the Institute has decided to keep and preserve a wheat variety that was cultivated by local farmers from the 1930s to the 1980s: the *autonomy*. The name of the variety indicates that Italy sought through this grain to become autonomous, not to always depend on American grains and their import.

Carrying on the tradition

Now the school is officially and proudly a guardian farmer carrying on the tradition of the ancient seed bank.

The ISS Piedimonte Matese is treating the rye ancient seeds in the fields of Letino where students take care of the germination process

In this regard students have a fundamental role in the process of custody.



PANE DI SEGALE

La nostra segale per cinquant'anni generazioni certe è stata coltivata nella Piana delle Secine di Letino, a m. 1050 slm, e nel 2019 è stata coltivata nell'azienda dell'Istituto Agrario di Piedimonte M. Nessun concime, nessun trattamento. La molitura è stata effettuata nel Molino Mariano Antonio, Vincenzo & C. S.n.c a Pietravairano (CE) e la cottura nel forno a legna di Enrico Gaudio a Curti (Giulia S.)



Piedimonte Matese 1949. Trebbiatura con locomobile nell'azienda dell'Istituto Agrario

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Poland's good practice.

The return of ancient grain.

<http://www.pradawneziarno.pl/>



University of Technology and Life Sciences in Bydgoszcz has been multiplying ancient cereal grains for several years. Demonstration plots were sown this year on the territory of the Kujawsko-Pomorskie Agricultural Advisory Centre in Minikowo.

<https://www.farmer.pl/produkcja-roslinna/zboza/pradawne-zboza-na-krotko-przed-zbiorem,109829.html>



The scientists from the University of Science and Technology in Bydgoszcz, together with the specialists from the Agricultural Advisory Centre in Minikowo, farmers and entrepreneurs, want to popularise the ancient grain. Polish scientists managed to reproduce the following species of ancient cereals: samopsza and płaskurka, and the next one is round-grain wheat.

Pszenica perska (*Triticum persicum* Vavilov). Spring Persian Wheat



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<http://www.pradawneziarno.pl/konferencje/>





We can make bread of this flour!
The varieties of cereals from before several thousand years are returning to our menu

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EPLEFFPA



BORDEAUX
GIRONDE

France's Good practice

EPLEFPA Bordeaux case study and results.

Heirloom seeds are sourced, planted, grown and transformed into bread and pasta by Damien Tauzin from Fournil des Dam's



In France, Seednet visited Damien Tauzin at the Fournil des Dam's which means in English the «Bread oven of the two Damiens» The two Damiens are business partners.

The two business partners through crowdfunding have succeeded in renting a terrain of 20 hectares because it would be impossible for them to buy the terrain and have planted the following heirloom seeds:

Four different types of ancient wheat comprising of Rouge de Bordeaux, Blé Poulard d'Auvergne and two kinds of blé population 5 epis and 7 epis.

Heirloom rye Seigle à Gilou and the cover crop used is winter beans. The cover crop used feeds nitrogen to the soil and due to the depth of the roots helps break open the clay soil improving water drainage and the soil is not tilled.

The crops when planted are left to grow untreated without interference from herbicides, pesticides or insecticides.

A small sample of the ancient seeds



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The chosen seeds and their characteristics

- Blé poulard is a species of old bearded wheat, close to durum wheat, characterized by its swollen grains and good resistance to extreme heat. It was named so because its thick, swollen grains resemble a fattened hen. It is today a relic culture but which arouses again interest for its characteristics shared with other ancient grains: taste, tolerance to harsh conditions, low gluten level. It is suitable for pasta production.
- Seigle à Gilou, is a Rye used for sourdough bread. Rye flour contains less gluten than wheat flour, which is why the bread is denser and doesn't rise as high as regular wheat-based breads.
- Rouge de Bordeaux is a hard red winter wheat that dates back several hundred years to the Bordeaux region of France. This wheat makes an excellent bread with a rich brown colour, mellow flavour, and baking spice aroma.
- Winter beans are traditionally grown on moisture-retentive, heavier soils which are less suitable for spring sowing. Winter beans are generally more resilient to soil conditions than other crop legumes and grow well on a range of soil types, from loamy sands to deep silty clay loams.

Farming co-operatives rent equipment to the farmers



The necessary agricultural equipment is made available by a local co-operative. The farmers use a timesheet and calendar reservation system. Each piece of equipment is charged to the farmers on a when used basis without any additional costs.

Granary and Milling area



The harvested and threshed grain is stored in a typical granary above the ground to preserve the stored food from mice, other pests and to provide protection from flooding.



The circular silo holds the grain that are ready to be milled.

Pheromone traps protect the grain. This method naturally discourages insects.



The milling machine is installed in a room next to the grains. A filtration system controls the dust.



The Bakery



The baker's oven is powered by locally sourced oak logs. The Fireguard helps to keep the logs in place and avoids embers from coming in touch with the food. It also is used to act as a fire shield to prevent a direct flame from burning the bread.





The final result

Beautiful, delicious bread and pizzas made from unadulterated ancient seeds.

