



SEED EXTRACTION AND STORAGE

Title	Seed extraction and storage
Skills	- creativity and craftsmanship; - scientific knowledge; - communication and organisation.
Topics	- social cohesion; - responsible consumption; - intergenerational dialogue;
Target Groups	- boys and girls (3-11 years); - people with special needs; - young people (12-25 years);
Brief description	Seeds are the fundamental element of any vegetable garden. It is therefore crucial to understand how and where to obtain them, as they will be the main resource for ensuring a constant food supply. Moreover, the quality and purity of these products are essential, as they directly influence our health and the sustainability of the ecosystem. Proper conservation and storage of seeds also contributes to preserving biodiversity in our gardens. It is essential to recognise the different means by which seeds are found in nature and to learn how to extract and store them correctly. This allows us to ensure the continuity of all the species in our garden, thus fostering a rich and balanced environment.
Objectives	- Recognise seeds as part of the plant and identify their functions and the important role they play in species conservation. - Learn about the process of harvesting and storing seeds. - Identify seeds as the primary source for garden production. - Recognise the different types of seeds and how to harvest them.
Materials	For seed extraction: - Plants, fruits, flowers, pods according to the species selection made. - Sieve or colander.





	- Napkins or paper towels - Water. - Scissors. To dry the seeds - Trays to arrange the seeds and let them dry. To store seeds: - Glass jars and/or PET bottles with lids. - Masking tape. - Indelible markers - Notebook to keep track of collected and stored seeds.
Implementation	Develop the following steps with the group to realise the collection of the selected or desired seeds: 1. Choose the right plants: choose healthy, vigorous plants from which you want to extract seeds. Make sure that the plants selected are not hybrid varieties, as they may not produce plants with the same characteristics. 2. Wait for the right time: let the plants reach full maturity before collecting the seeds. This means that the seeds must be fully developed on the plant. 3. Identify the seeds: look for the parts of the plant where the seeds are found. This can vary from plant to plant: they can be found in flowers, pods or fruits. 4. Collect the seeds: very carefully, use scissors or a shear to cut the parts of the plant containing the seeds. Make sure you do not damage the seeds when harvesting. 5. Separating the seeds from the plant: depending on the type of plant, it may be necessary to separate the seeds from the other parts of the plant. This may involve peeling the fruits, opening the pods or simply shaking the seeds from the flowers. For seed preservation and storage: Seed cleaning: Remove excess material, such as fruit residue or pulp, from the seeds using running water and a fine sieve. Drying: place the seeds in a tray or net in a warm, dry place to dry completely, but be careful not to let





	direct sunlight hit them, which could kill the seeds. This can take several days, depending on the type of seed and environmental conditions. Labelling: Each batch of seeds must be labelled with the name of the plant and the harvest date. This will help keep a clear record of the seeds and their storage time. Storage: store seeds in airtight, opaque containers to protect them from moisture and light. Paper bags, glass jars or sealed plastic containers are good options. Be sure to store the seeds in a cool, dry place, away from direct sunlight. At the time of sowing, a viability test can be performed to ensure that the seed is still alive and viable: this test consists of placing the seeds in a container and adding water, seeds that float are those that are no longer viable or have died, or simply placing a few seeds in a damp cloth or germination medium and observing how many germinate in a given period of time.
Evaluation	The group will be invited to carry out a process of collecting possible seed materials available in the field. At this point, several doubts will certainly arise that can be clarified with the help of the teacher, just as the level of appropriation of the information provided during the day will be assessed. In addition, the process can be evaluated by checking the different packages in which the seeds are stored, verifying their moisture content and checking that there are no remnants of plant materials inside to avoid the generation of fungi and/or the proliferation of insects.
Tips	- Before training, perform the process of extracting some seeds (select 3 or 4 different types of seeds) to dry them and prepare them to show the group of participants the characteristics of the different seeds when they are stored. - Have enough containers (glass or pet bottles, ziplock bags) to store the seeds properly. - Choose a suitable place (dry and dark) to store the seeds. - Make sure that the fruits or flowers from which the seeds will be extracted are of good quality.





Co-funded by
the European Union

ERASMUS PLUS – KA2 STRATEGIC PARTNERSHIP
Grant Agreement No. 2023-1-FR01-KA220-ADU-000153638

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.