University of Pavia . PAVIA

## PLANT CONSERVATION ACTIVITIES AT GERMPLASM BANK OF THE UNIVERSITY OF PAVIA

Plant Germplasm Bank of the University of Pavia (UPSB) is based at the Department of Earth and Environmental Science (Botanic Garden). Our mission is to maintain high levels of agro-biodiversity and preserve the natural environment through ex situ conservation of wild and cultivated plants (landraces). Particular attention is given to plants that are endangered, useful for Mankind like Crop Wild Relatives (CWR), medicinal plants and species useful for floriculture. Seed collection and conservation activities are carried out following international seed bank standards (i.e. freezing at -18°C, after drying at 15°C and 15% RH), to maximize seed longevity in storage. So far, about 1300 accessions have been stored, belonging to more than 500 species. The seed bank is also equipped with a germination laboratory for base and applied research activities, carried out in partnership with industries and international research centers through Italian and European projects (see for e.g. the EU-FP7 project NASSTEC www.nasstec.eu and the Alpine Seed Conservation and Research Network http://www.alpineseedconservation.eu/). Subsample of seeds are used for plant reintroduction (e.g. Leucojum aestivum), population reinforcement (Cariplo BIOPA) and habitat restorations (Wetlife Anfibia).

To further safeguard our seed samples, most of our accessions are duplicates into other seed banks, such as the Millennium Seed Bank (Royal Botanic Gardens, Kew UK) which houses more than 10% of the global biodiversity. Our seed bank is part of the European Native Seed Conservation Network (ENSCONET Consortium, http://ensconet.maich.gr/) and participates, as representative for Italy, to the global project of ex situ CWR conservation supported by the Global Crop Diversity Trust and the Government of Norway (http: //www.cwrdiversity.org / project /).



The excursion will consist in a visit of the laboratories of the Plant Germplasm Bank, including the germination lab and the seed processing and storage rooms. Visit will be implemented with a concise outline of the conservation standards, facilities and ongoing conservation projects, including main recent research interest and outputs.

Finally, we will visit *Flora Conservation*, a farm involved in the production of native herbaceous plants, born as University spin-off with the aim to open a market on the use of native flora for habitat restoration and plant population reinforcement.



**DESTINATIONS** Germplasm Bank of the University of Pavia and Flora Conservation farm (PV)

DATE Wednesday July 3rd, 2019 DEPARTING TIME 8.00AM MEETING POINT Milan train Central Station (further information will be given) DURATION approx. 3 hours of activity, trips not included TRANSPORT train and public transportation MIN. 10 MAX. 20 participants

COST € 55.00 per person

SERVICES INCLUDED transfer from/to Milan, local transportation and Germplasm Bank expert

LUNCH is not included! The activity will end before lunch.

## **EXCURSION TYPE**

In and outdoor scientific visit at laboratories, greenhouse and open fields.

The visit will end before lunch, participants will be given their train ticket to return to Milan and will be therefore free to choose if remaining in Pavia for lunch and for a walk in the city centre on their own or not.

**WALKING TIME** the Botanic Garden is approx. 20min far by foot from the train station, but there is also a public bus service; other walking distances are negligible.

**OTHER INFO** July is normally very hot, it is recommended to bring enough water and wear a hat, especially for the visit at the farm *Flora Conservation*.

**EXCURSION COORDINATOR** Andrea Mondoni

## **INFO & CONTACTS**

For **specific information regarding the contents of the excursion** please contact Andrea Mondoni <u>andrea.mondoni@unipv.it</u>

For **information regarding the excursion registration** please contact Luisa Bacchetta <u>luisa.bacchetta@unimib.it</u>