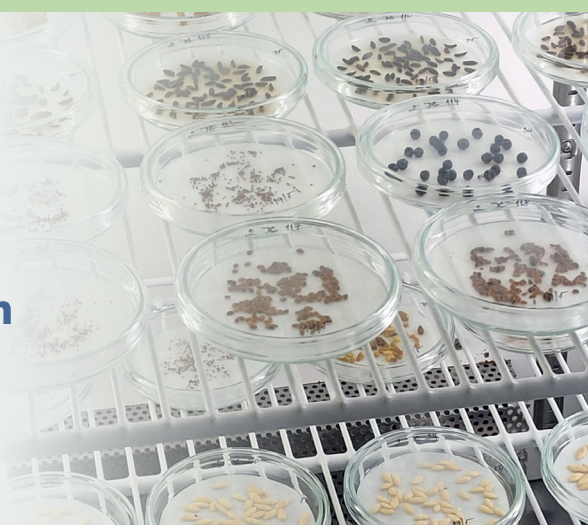


NEW AEGIS

Strengthening the AEGIS Quality System and EURISCO data coverage



The 'New AEGIS' project was launched at the end of 2024 to strengthen *ex situ* conservation and documentation in Europe by improving transparency, harmonizing quality standards, and enhancing the effectiveness of the European Genebank Integrated System (AEGIS), as well as expanding access to characterization and evaluation data for research and breeding through the European Search Catalogue for Plant Genetic Resources (EURISCO).

New AEGIS is funded by the German Federal Ministry for Agriculture, Food and Regional Identity.

About the project

AEGIS is an initiative of the European Cooperative Programme for Plant Genetic Resources (ECPGR) aiming to create a **coordinated, high-quality and cost-effective European genebank system.**

However, differences in operational capacity and documentation standards among Associate Member genebanks limit its full potential.

The New AEGIS project responded to these challenges by **building capacity and quality assurance**, and **enhancing data management** among AEGIS Associate members through activities including:

- Developing and harmonizing **operational genebank manuals** and **Standard Operating Procedures**
- Establishing and testing a **Genebank Metrics Tool** to monitor performance and increase transparency
- Supporting **peer-to-peer learning** through reciprocal genebank visits
- Enhancing **data availability and interoperability** by integrating existing phenotypic and evaluation data into **EURISCO**.

Key outcomes



Improving quality and transparency

The AEGIS Associate Members convened to discuss quality systems, operational manuals and the use of metrics, fostering greater **awareness** and **commitment** within the network. Participants recognized the importance of documenting their operations, improving safety-duplication and adopting measurable standards. In several countries – such as **Hungary, Albania** and **Estonia** – this led to significant increases in accessions included in AEGIS.



Operational genebank manuals

Nineteen new [genebank manuals](#) were developed, with more in progress. These manuals describe each institution's structure, processes and protocols, forming the foundation for continuous quality improvement.

An independent **expert review** of 30 manuals (including both new and existing ones) provided recommendations, calling for clearer, more standardized and regularly updated manuals.



Crop-specific genebank standards

Two new [crop-specific genebank standards](#) were finalized for **Berries** and **Maize**, while the *Malus/Pyrus* standards are under development.

These standards define quality benchmarks for maintaining crop accessions and future certification systems.



Standard Operating Procedures (SOPs)

Three Associate Members – Suceava Genebank (**Romania**), Isoplexis (**Madeira, Portugal**) and the University of Pavia (**Italy**) – shared their SOPs. These examples encouraged greater transparency and shared learning in genebank management practice across the network.



Genebank Metrics Tool

This innovative tool, piloted by 15 genebanks, enables quantitative performance monitoring, creating a **data-driven quality system** for Europe. Feedback from the pilot phase has been published in *Plant Genetic Resources: Characterization and Utilization* (DOI: [10.1017/S147926212510021X](https://doi.org/10.1017/S147926212510021X)).



Peer review and reciprocal visits

Nine genebanks participated in [reciprocal visits](#), building trust and sharing practical experience to identify strengths and areas for improvement.

The resulting reports and presentations, published online, now serve as practical examples of peer-based quality enhancement within AEGIS.



Expanding data in EURISCO

The project enriched EURISCO with **characterization and evaluation data** from Albania, France, Italy, Romania, Serbia and Slovenia, covering crops like **maize, wheat, Brassica, tomato, grapevine** and **hop**.

New AEGIS impact



IMPROVED AWARENESS AND COMMITMENT
among AEGIS Associate Members to operate
according to common standards



ENHANCED DOCUMENTATION & KNOWLEDGE SHARING,
building trust within the European PGR community



GREATER EFFICIENCY AND ACCOUNTABILITY
in genebank management through the metrics tool



STRONGER INTEGRATION
between conservation and data systems,
linking AEGIS operations with EURISCO data flows



BROADER ACCESSIBILITY OF PHENOTYPIC DATA,
facilitating crop improvement initiatives

Looking ahead

New AEGIS has strengthened AEGIS's cooperative framework, enabling European genebanks to progress toward a unified, quality-assured network.

Future priorities include implementing quantitative monitoring, expanding peer review across the network, broadening transparency of procedures, increasing the level of safety-duplication and enriching EURISCO with phenotypic and evaluation data.

This ensures Europe's plant genetic resources are securely conserved and effectively utilized for resilient food systems in the face of climate change and global uncertainty.



www.ecpgr.org/aegis



Federal Ministry
of Agriculture, Food
and Regional Identity