Report of the GRIN-Global Workshop 2021 for European Genebanks (GRIN-Global II)

18-21 October 2022, Prague, Czech Republic

L. Papoušková

Report of the GRIN-Global II

18-21 October 2022, Prague, Czech Republic

CONTENTS

Report of the GRIN-Global II

18-21 October 2022, Prague, Czech Republic

INTRODUCTION

The GRIN-Global Workshop 2021 for European Genebanks (GRIN-Global II) took place from 18-21 October 2022 in Prague, Czech Republic.

This Activity was submitted by the ECPGR Documentation and Information Working Group under the Third Call of the ECPGR Activity Grant Scheme for Phase X and was selected by the Executive Committee and awarded in March 2020. Unfortunately, it had to be postponed until 2022 because of the COVID-19 pandemic.

The primary aim of this activity is to provide know-how and expertise to genebanks interested to migrate to GRIN-Global and secondly to initiate the development of a European GRIN-Global Network. Fulfilment of these aims would lead to quality improvement of European documentation of plant genetic resources for food and agriculture (PGRFA) and stronger collaboration among European genebanks.

The GRIN-Global documentation system was released in December 2011 (first version, 1.0.7) in a joint effort by the Global Crop Diversity Trust, Bioversity International and the Agricultural Research Service of the United States Department of Agriculture (USDA/ARS).

GRIN-Global is a software enabling genebanks to store and manage information associated with plant genetic resources and to deliver that information globally. Researchers, educators and breeders around the world can request germplasm through the GRIN-Global websites. This system could solve the documentation issues of many genebanks in Europe, thus improving the quality of documentation and reducing the associated costs. There are no licensing fees for providers and the system operates on an open-source software. For global use, there is an option to display the system in any language when translation is provided. It also provides access to a worldwide plant taxonomy database and the possibility to document not only *ex situ* collections but also *in situ* and on-farm collections.

Currently, there are 29 sites with the running system and 15 sites evaluating GRIN-Global globally.

Before the workshop started, it was decided to allow the remote participation of those interested who could not attend in person. Seventeen participants attended the workshop in person and 24 participants were connected online.

The workshop was opened by Martin Reisinger from the National Germplasm Resources Laboratory of the USDA. Mikulas Madaras, director of the Crop Research Institute welcomed the participants. Thanks were expressed to ECPGR for funding the workshop through its Activity Grant Scheme. Martin Reisinger also thanked the local hosts. All participants, including online participants, were asked to introduce themselves briefly.

PLENARY PRESENTATIONS

All presentations are available online:
https://www.ecpgr.cgiar.org/working-groups/documentation-information/presentations

GRIN-Global where we are now

Martin Reisinger presented the current status of the GRIN-Global system.

GRIN-Global Community Edition

Juan Carlos Alarcon, from the Crop Trust, introduced the version of GRIN-Global: GRIN-Global Community Edition (GGCE). It should offer a next-generation solution that provides user-friendly tools to technicians without the installation of the Curator Tool.

Migration workflow and experiences

On the 2nd day of the workshop, there were six presentations on migration workflow and experiences from participants running the GRIN-Global system in their countries.

On the 3rd day of the workshop, the topics discussed related to a comparison of different documentation systems.

GRIN-Global x EURISCO

Stephan Weise presented in detail the similarity in structure of both systems and how data could be provided from GRIN-Global to EURISCO by reporting functions in GRIN-Global. Data could be exported in MS Excel.

EURISCO x GENESYS x GRIN Global CE

Matija Obreza presented the online internal structure of all systems and summarized the pros and cons of these systems.

EURISCO CWR Extension of the central ECPGR information system for *in situ* CWR data

Stephan Weise showed the technical concept for the extension of EURISCO for *in situ* data developed in the Farmer's Pride project and subsequent ECPGR project 'Extension of EURISCO for Crop Wild Relatives (CWR) *in situ* data and preparation of pilot countries' data sets' (CWR data in EURISCO), funded by the German Federal Ministry of Food and Agriculture. Information flow needs to be facilitated for the *ex situ* National Inventories data. New descriptors for uploading *in situ* CWR passport data were developed.

HANDS-ON SESSION

Martin Reisinger showed the detailed structure of GRIN-Global in line with the prepared agenda (see Annex1). The training environment was prepared on the USDA server to enable participants to train on the GRIN-Global database. Individual parts of the GRIN-Global system and their function were introduced to participants.
Participants learned how to use the GRIN-Global Curator Tool software to manage their genebank data, including accession, inventory, germplasm requests and characterization data. They also became

acquainted with the GRIN-Global public website, including features reserved for internal, authorized genebank staff.

GRIN-Global overview

GRIN-Global (GG) is a software suite of programs designed for managing of plant genetic resources collections in genebanks; the basic GRIN-Global package is available free of charge and should be adjusted to conditions in different countries.
The GG system is a new and scalable software version of the Germplasm Resource Information Network (GRIN), used by the USDA/ARS National Plant Germplasm System.
The main advantages of the GRIN-Global are online access for the network of cooperating institutions and collection curators, a user-friendly website, access to GRIN taxonomy, a multi-language environment and the ability to adapt the GRIN-Global system to local conditions.

DISCUSSION AND CONCLUSION

Future development and GRIN-Global EU network
Further development of the system according to user needs and the creation of GRIN-Global network among European genebanks was discussed. It was discussed how to increase cooperation between genebanks, which already have GRIN-Global and offer to other genebanks to join the 'GRIN-Global family'. It would be important to have a place where our regional needs suitable for enhancing GRIN-Global could be shared and talked over.

Discussed points:
- Suggestion setting up different groups according to the level of GRIN-Global knowledge (IT, beginners, advanced…)
- Suggestion to make a Google spreadsheet document – responsible person for the institute, contact details
- Set up a place where could be possible to ask questions
- MS Teams – someone has to administrate it
- Set up a committee; question how often to meet
- Meetings for different groups; who will lead them?
- National level; if there is someone in the country who knows GRIN-Global, it should be the first choice as a contact for interested users within the country
- Suggestion to include other genebank activities for discussion
- Question of how broad topics could be; at first start with GRIN-Global
- Invitation of other people; to start → limitation to people interested to improve documentation and GRIN-Global

Summary

The GRIN-Global European network would be welcomed by all participants. At the beginning, it could start with a list of national representatives and interested people (details information, GRIN-Global skills) in the shared document sent by Norbert Kowara. The MS Teams environment could be administered by NordGen.
It would be useful to have meetings twice per year or according to needs (new versions, new tools, new users, etc); set up a 'European committee'. It is needed to decide on groups and topics.
It is important not to separate from GRIN-Global worldwide and participate in GRIN-Global international committee.

At the end of the workshop, participants were encouraged to express their feedback and to join the GRIN-Global community. Most of the participants expressed satisfaction with the given information and indicated their intention to implement the system in their countries, e.g. Poland and Italy.

Report of the GRIN-Global II

18-21 October 2022, Prague, Czech Republic

ANNEX 1

Agenda

GRIN-Global Workshop 2021 for European Genebanks

(GRIN-Global II)
18-21 October 2022, Prague, Czech Republic

Tuesday 18 October

12:30 – 13:00   Lunch

13:00 – 17:00, Moderator: Ludmila Papoušková

13:00 –13:45   Director of CRI: Welcome; Introduction of participants (one slide: name, institution, where are they with GG and so on)

13:45 – 15:00   Martin Reisinger, Matija Obreza, Juan Carlos Alarcon: Presentation of GRIN-Global (general information) - where are we now

15:00 – 15:30   Coffee break

15:30 – 17:00   Martin Reisinger, Matija Obreza, Juan Carlos Alarcon: Presentation of GRIN-Global (general information) - GG CE and so on

17:30   Genebank Tour

Wednesday 19 October

09:00 – 12:30, Moderator: Ludmila Papoušková

09:00 – 10:30   Martin Reisinger: Presentation of GRIN-Global (detailed structure)

10:30 – 11:00   Coffee break

11:00 – 12:30   Martin Reisinger: Presentation of GRIN-Global (detailed structure)

12:30 – 13:30   Lunch

13:30 – 17:30, Moderator: Martin Reisinger

13:30 – 14:00   Martin Reisinger: Presentations of migration workflow and experiences

14:00 – 14:30   Jan Svensson (Kjell-Åke Lundblad): Presentations of migration workflow and experiences

14:30 – 15:00   Merja Hartikainen: Presentations of migration workflow and experiences

15:00 – 15:30 Coffee break

15:30 – 16:00   Ludmila Papoušková: Presentations of migration workflow and experiences

16:00 – 16:30   Octávio Serra: Presentations of migration workflow and experiences

16:30 – 17:00   Vahur Kukk: Presentations of migration workflow and experiences

17:00 – 17:30   Discussion – suggestion of topics for another day

19:00   Social dinner

Thursday 20 October

9:00 – 12:30, Moderator: Ludmila Papoušková

09:00 –10:30   Martin Reisinger, Matija Obreza, Juan Carlos Alarcon: Past, present and future of GRIN-Global (what is needed and nice to have)

10:30 – 11:00   Coffee break

11:00 – 12:30   Martin Reisinger: Topics suggested by GG users (DOI, SMTA, FAO WIEWS, etc.)

12:30 – 13:30   Lunch

13:30 – 17:00, Moderator: Martin Reisinger

13:30 – 14:00   Stephan Weise, Jan Svensson, Ludmila Papoušková: GRIN-Global x EURISCO

14:00 – 14:30   Matija Obreza: EURISCO x GENESYS x GRIN Global

14:30 – 15:00   Stephan Weise: ECPGR project In situ conservation and new descriptors

15:00 – 15:30   Coffee break

15:30 – 17:00   Open discussion

Friday 21 October

9:00 – 12:00, Moderator: Martin Reisinger

9:00 – 10:30   GRIN-Global Networks (users, curators) – google group, teams, blog - suggestions

10:30 – 11:00   Coffee break

11:00 – 12:00   Q&A and closing

12:00 – 13:00   lunch