DOIs & GRIN-Global



Revision Date

May 8, 2024

Author

Martin Reisinger

Review the [Table of Contents](#toc) which contains links to the document’s sections.

Table of Contents

[Overview 2](#_Toc166080334)

[FAO Guidelines 2](#_Toc166080335)

[NPGS Implementation 2](#_Toc166080336)

[Additional DOI Resources 2](#_Toc166080337)

[GRIN-Global & DOIs 2](#_Toc166080338)

[DOI Format 2](#_Toc166080339)

[Using Name Records to Store DOIs in GG 3](#_Toc166080340)

[DOIs in the Public Website 4](#_Toc166080341)

[Genesys and DOIs 5](#_Toc166080342)

[Future DOI Enhancements and Fixes 6](#_Toc166080343)

[Index Needs to be Manually Updated 6](#_Toc166080344)

Comments/Suggestions:

Please contact feedback@ars-grin.gov with any suggestions or questions related to this document. This document is a work-in-progress.

Complete documentation on many aspects of GRIN-Global is available online at the GRIN-Global website: <https://www.grin-global.org/>

#### Overview

##### FAO Guidelines

DOIs are used as Permanent Unique Identifiers (PUID) in the context of the Global Information System ([GLIS](https://ssl.fao.org/glis/doi/10.18730/1PGAP)) of Article 17 of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

FAO’s comprehensive guide “Digital Object Identifiers for Food Crops” is online at <http://www.fao.org/3/I8840EN/i8840en.pdf>

Guidelines for the optimal use of Digital Object Identifiers as permanent unique identifiers for germplasm samples are found at <http://www.fao.org/3/a-bt114e.pdf>

##### NPGS Implementation

The “guides and guidelines” listed above represent the views of the FAO ITPGRFA Secretariat and some CGIAR Centers. The USDA/ARS NPGS implementation and use of DOIs differ from the preceding “guides and guidelines.” NPGS personnel should follow the NPGS’s instructions for implementation and use of DOIs in the context of NPGS germplasm. Presently, the NPGS is not using the DOI field.

##### Additional DOI Resources

Some additional DOI resources which you may find useful:

* <https://www.genebanks.org/resources/dois/>
* <http://www.fao.org/plant-treaty/areas-of-work/global-information-system/faq/en/> (FAQs)
* <https://vimeo.com/258264024> (video)
* [https://youtu.be/o2Gg4H2QxWo](https://youtu.be/o2Gg4H2QxWo%20) (video)

#### GRIN-Global & DOIs

In server release 1.10.4, a schema change was made to add the Digital Object Identifier (DOI) field to the **Accession** table. Also, the field was added to the **Accession** dataview. 

##### DOI Format

A DOI, by itself, is not a URL. However, it can be easily converted to a URL by using the form: https://doi.org/<doi> (e.g. https://doi.org/10.1109/5.771073). When converted to a URL, the DOI points to the landing page provided by the system that registered the DOI.

#### Using Name Records to Store DOIs in GG

If an organization had included DOI data before the DOI field had been added to the schema, (prior to server release 1.10.4), they had the option to add the DOI data as a **Name** record in the **accession\_inventory\_name** table. Some organizations running GRIN-Global have DOI data in their database. For example:


In GG, an accession’s DOI Name can be displayed on the Public Website accession detail page:


The corresponding **Name** record as seen in the Curator Tool:


|  |  |
| --- | --- |
| image2449.png | For complete information on **Names** records and directions for adding to the database, refer to the Names section in the online **Accessions** document at <https://www.grin-global.org/docs/gg_accessions_and_passport_data.docx> |

#### DOIs in the Public Website

The DOI information as of Server Release 2.3.8 displays on the search results and the Accession Detail Pages:




#### Genesys and DOIs

|  |  |
| --- | --- |
| image2449.png | Genesys also uses the text “10.18730/1PGAP” as the link, not the full URL. <https://www.genesys-pgr.org/10.18730/1PGAP> |

Appendix: Change Notes

May 8, 2024

* Added new DOI screens

The following text will be archived; no longer relevant in current versions.

#### Future DOI Enhancements and Fixes

##### Index Needs to be Manually Updated

An index fix is being reviewed and will be addressed in the next build to avoid the following error:



In the meantime, until that fix is available in a released build, the GG administrator should run the following in SSMS to rebuild the index correctly:

**DROP INDEX accession.ndx\_uniq\_doi**

 **-- need to use filter to allow multiple null rows**

**CREATE UNIQUE NONCLUSTERED INDEX ndx\_uniq\_doi**

 **ON dbo.accession(doi)**

 **WHERE doi IS NOT NULL;**