DOIs & GRIN-Global



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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. 

|  |  |
| --- | --- |
| image2449.png | Although the schema has been changed has been changed in the production system, the Public Website is under development.  |

##### 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> |

In Release 1.10.4.1 (not released yet as of 2019, March 27), two changes were made:

1. a column was added to the **web\_accessiondetail\_summary** dataview
2. the accessiondetail.aspx page was changed

#### DOIs in the Public Website

An upcoming enhancement will add the DOI to the Accession Detail Page:


The trac ticket for this change is: <https://www.ars-grin.gov/trac/GG/ticket/1821>

#### 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> |

#### Future DOI Enhancements and Fixes

##### DOI Column Needed on Search Results

A trac ticket to include DOIs in the search results has been submitted:
<https://www.ars-grin.gov/trac/GG/ticket/1833>

##### 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;**