

DOIs & GRIN-Global



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

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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) 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.

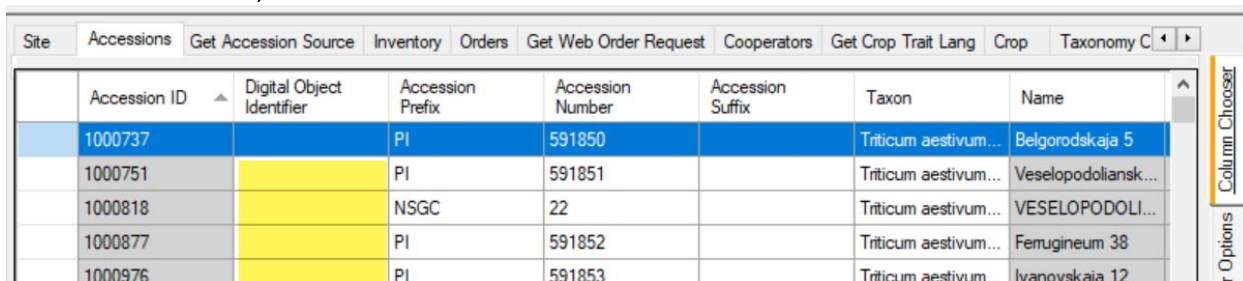
Additional DOI Resources

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> (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.



Accession ID	Digital Object Identifier	Accession Prefix	Accession Number	Accession Suffix	Taxon	Name
1000737		PI	591850		Triticum aestivum...	Belgorodskaja 5
1000751		PI	591851		Triticum aestivum...	Veselopodoliansk...
1000818		NSGC	22		Triticum aestivum...	VESELOPODOLI...
1000877		PI	591852		Triticum aestivum...	Ferugineum 38
1000976		PI	591853		Triticum aestivum...	Ivanovskaja 12



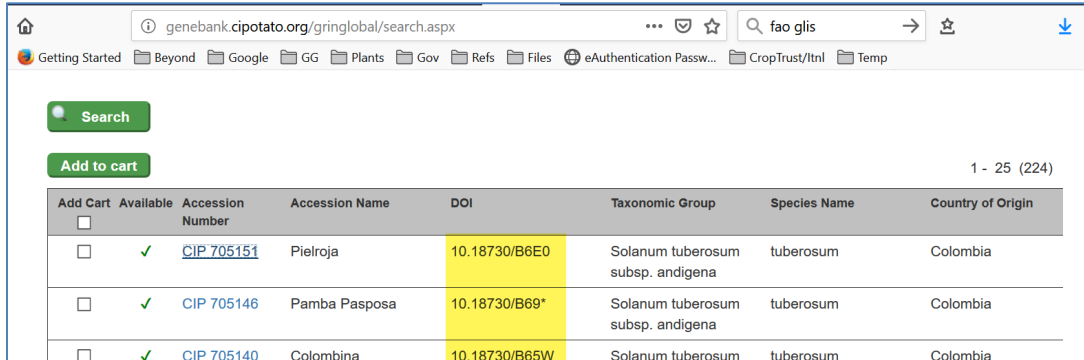
Although the schema has been changed has been changed in the production system, the Public Website is under development.

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.

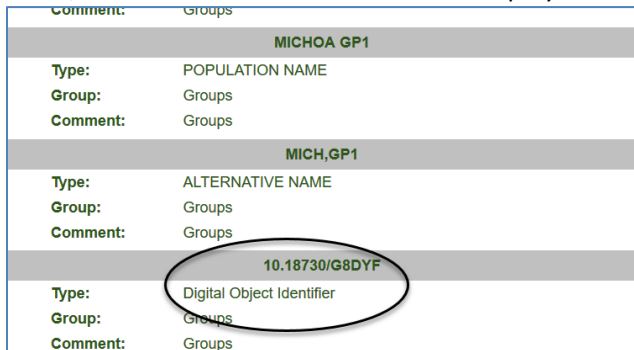
Using Name Records to Store DOIs in GG

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:



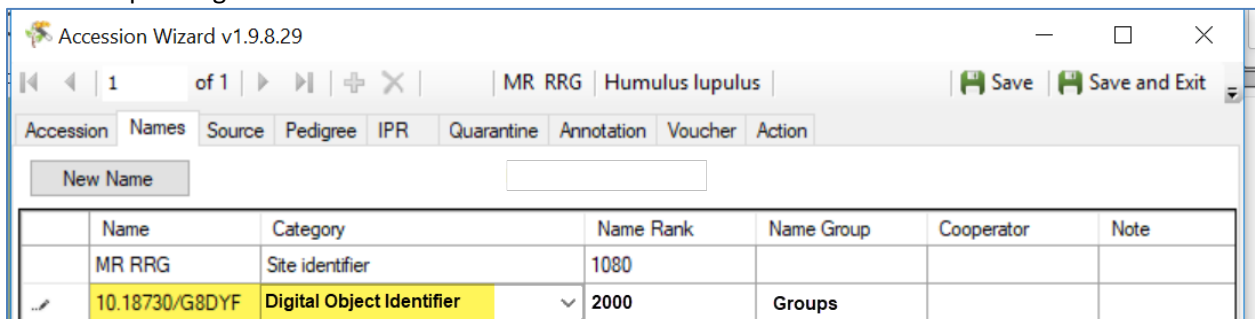
Add Cart	Available	Accession Number	Accession Name	DOI	Taxonomic Group	Species Name	Country of Origin
<input type="checkbox"/>	✓	CIP 705151	Pielroja	10.18730/B6E0	Solanum tuberosum subsp. andigena	tuberosum	Colombia
<input type="checkbox"/>	✓	CIP 705146	Pamba Pasposa	10.18730/B69*	Solanum tuberosum subsp. andigena	tuberosum	Colombia
<input type="checkbox"/>	✓	CIP 705140	Colombina	10.18730/B65W	Solanum tuberosum	tuberosum	Colombia

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



MICHOA GP1	
Type:	POPULATION NAME
Group:	Groups
Comment:	Groups
MICH,GP1	
Type:	ALTERNATIVE NAME
Group:	Groups
Comment:	Groups
10.18730/G8DYF	
Type:	Digital Object Identifier
Group:	Groups
Comment:	Groups

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



Name	Category	Name Rank	Name Group	Cooperator	Note
MR RRG	Site identifier	1080			
10.18730/G8DYF	Digital Object Identifier	2000	Groups		



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:

Improvement status:	Wild material
Reproductive uniformity:	
Form received:	Seed
Digital Object Identifier:	10.18730/1PGAP

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

Genesys and DOIs



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

This accession is in the Multilateral System of the ITPGRFA.	
Accession profile: IRGC 4	
DOI	10.18730/1PGAP
Holding institute	PHL001 International Rice Research Institute
Location	Philippines
Accession number	IRGC 4
Country of origin	Malaysia

Future DOI Enhancements and Fixes

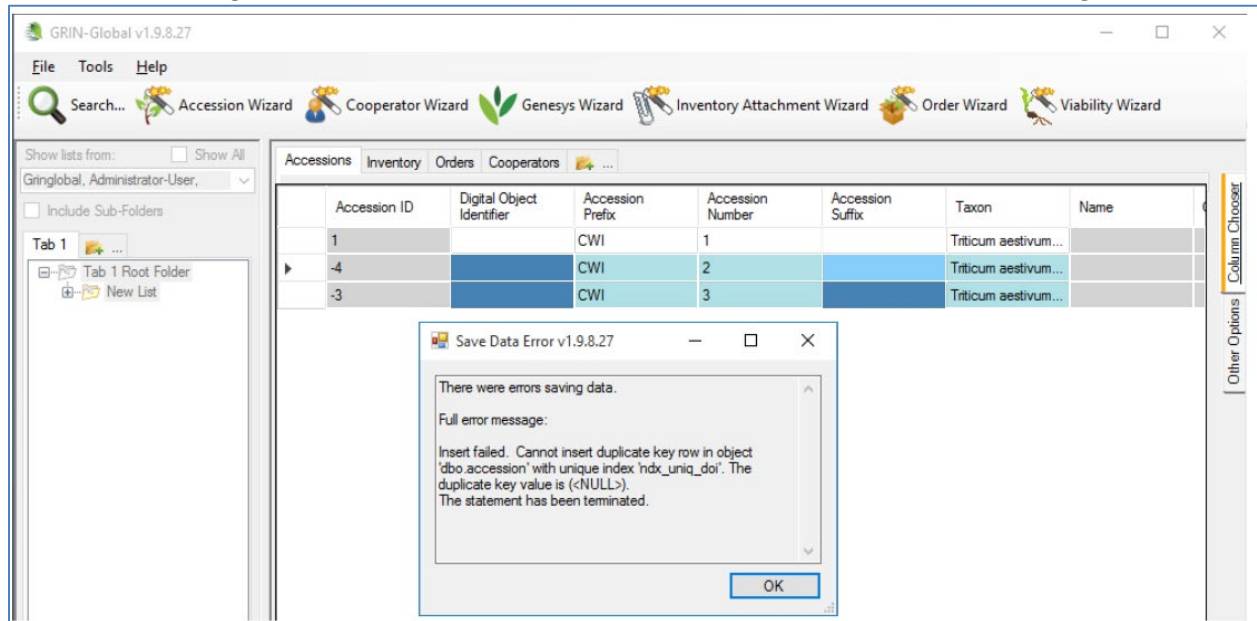
DOI Column Needed on Search Results

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;
```