

# Grouping Accessions and Inventory

---



## Revision Date

October 25, 2023

[Appendix A](#) contains this document's revision notes.

This guide explains five methods which are useful for grouping accessions (and inventory) in GRIN-Global. Click on any link to jump to the respective section. However, consider first reading the [table on page two](#).

- [Name Group](#)
- [Accession Inventory Group](#)
- [Inventory Maintenance Policy](#)
- [Method](#)
- [Core \(a Descriptor Group\)](#)



A major grouping method in GRIN-Global is by Crop. A curator typically designates which species are to be included (“mapped”) to the crop. (Crops can overlap in various ways.) Detailed documentation on Crops within GRIN-Global is online at <https://grin-global.org/userdocs.htm#obs>. One caveat with a crop as a grouping method for accession – until an observation has been made for the accession/inventory, the accession is not visibly included in the crop.

In GG, two “GROUPs” are similar, but each was originally designed for a different purpose and they work very differently. The word “GROUP” is often used interchangeably and can confuse the usage.

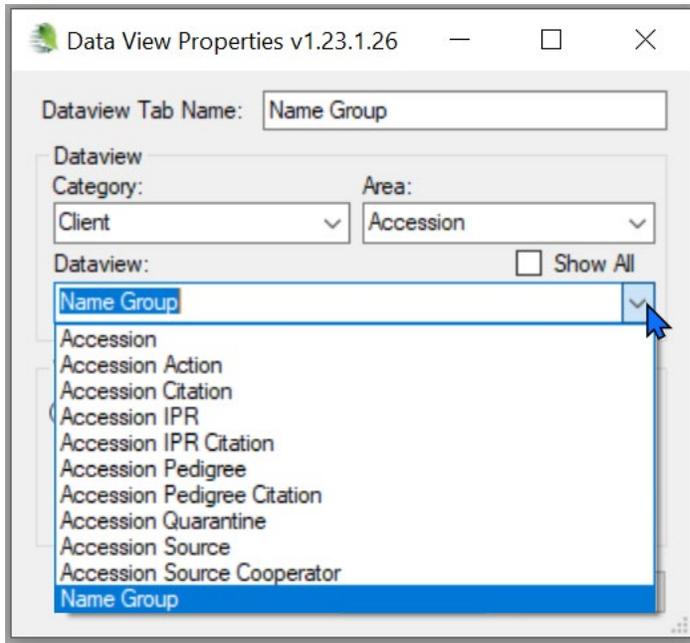
The two groups I am referring to are **get\_accession\_inventory\_group** “Accession Inventory Group” and **get\_name\_group** “Name Group.” The following table compares them:

	Accession Inventory Group	Name Group
Database Area	Accession / Inventory	Accession
Dataview Name	get_accession_inventory_group	get_name_group
Dataview Title	Get Accession Inventory Group	Get Name Group
Group is available for <i>Web</i> Searches	Yes (when the flag is set to “visible”)  using the PW Advanced Search: “ <b>accession group name</b> ” PW “ <b>Accession Group</b> ” PW2	No  but searchable within the ST/CT
Create the group name...	use the <b>get_accession_inventory_group</b> dataview; add records (...indicate if <b>Web Visible</b> or not)	use the <b>name_group</b> dataview; add records
Associate records...	map <b>Inventory</b> records to a group using the <b>accession_inv_group_map</b> table	using <b>Accession_Inv_Name</b> records, complete the <b>Name Group</b> field
Recommended Uses:	<ul style="list-style-type: none"> <li>Establish accession groups which can be found (and ordered) on the PW as a group.</li> <li>Others? Use for printing labels, etc.</li> </ul>	<ul style="list-style-type: none"> <li>A method for organizing accessions for <i>internal</i> purposes</li> <li>Name Group groups plant names. An <b>Accession Inventory Name</b> can belong to just one group; the group usually refers to the source of the name or identifier</li> </ul>

## Name Groups

### Create

Use the **Name Group** dataview from the **Accession** area to create or edit group names:



Only the **Group Name** field is required. The other two fields document the name:

Name Group ID	Group Name	Note	URL	Created Date	Created By	Modified Date
509	JAPAN.US.2004	Collection for fruit in		1/8/2013	Hummer, Kim, US...	
511	SE.CENTRAL.US.2007			1/8/2013	Hummer, Kim, US...	
518	LOWBUSH			3/9/2013	Hummer, Kim, US...	
528	SYNONYM			2/10/2013	Hummer, Kim, US...	
528	BERRY			4/19/2013	Hummer, Kim, US...	
534	CRANBERRY			8/14/2013	Hummer, Kim, US...	
542	BLUEBERRY			4/1/2014	Hummer, Kim, US...	
553	KH16			11/5/2015	Hummer, Kim, US...	
589	LINGONBERRY			3/4/2019 9:38 PM	Hummer, Kim, US...	
593	VIRUS STANDARD	virus standard		10/26/2019 6:53...	Hummer, Kim, US...	10/26/2019 6:...
46				10/25/2023 9:52...	Reisinger, Martin ...	

46 of 46

Find

Next Prev Refresh Data

Data Editing

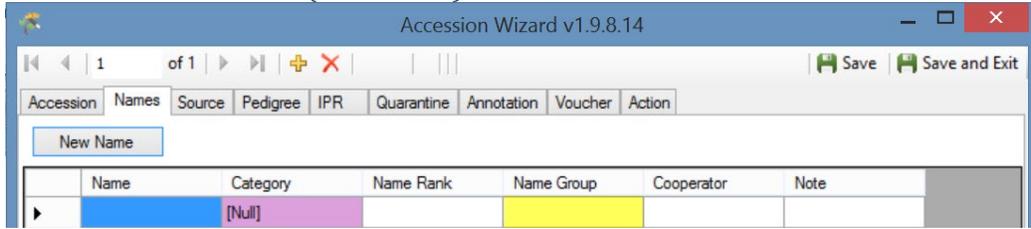
Edit Mode

Hide Non-Error Rows  Hide Copy/Paste Warnings

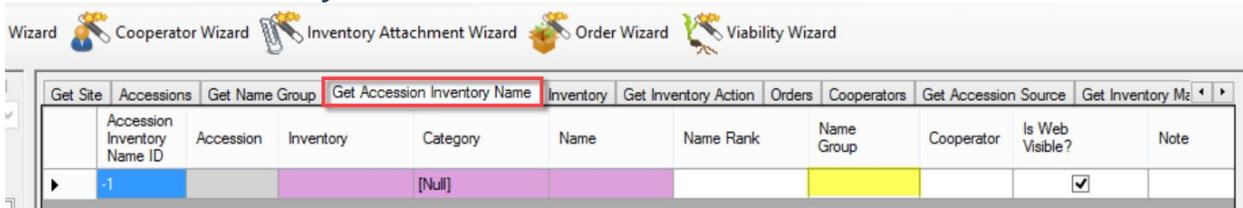
## Apply the Group Name to Records

When naming an inventory record, supply a Name Group:

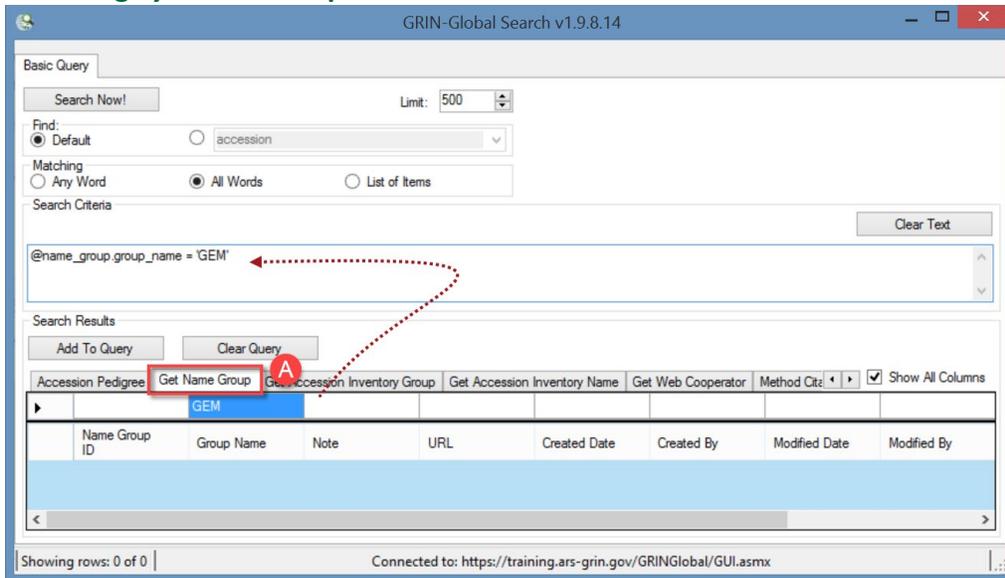
via the *Accession Wizard (Names tab)*:



or the *Accession Inventory Name Dataview*:



## Searching by Name Groups



GRIN-Global Search v1.9.8.14

Basic Query

Search Now! C Limit: 500

Find: Any word All words List of items

Search Criteria

@name\_group.group\_name = 'GEM' Clear Text

Search Results

Add To Query Clear Query

Accession Pedigree Get Name Group Get Accession Inventory Group B Get Accession Inventory Name Web Cooperator Method Cit: Show All Columns

Accession Inventory Name ID	Accession	Inventory	Category	Name	Name Rank	Name Group	Cooperator
1000293	PI 614142	PI 614142 **	Cultivar name	GEMS-0001	10	GEM	Blanco, Mike, U.S.
1094370	PI 632413	PI 632413 **	Cultivar name	GEMS-0002	10	GEM	Blanco, Mike, U.S.

Showing rows: 355 of 355

Connected to: https://training.ars-grin.gov/GRINGlobal/GUI.aspx

GRIN-Global v1.9.8.14

GRIN-Global Search v1.9.8.14

File Tools Help

Search... Accession Wizard

Show lists from: Show All

A. Resinger Resource Group, Inc

Include Sub-Folders

R. occidentalis May (1)

R. occidentalis Root Folder

- acc\_inv\_attach
- accessions
- acc\_inv\_names
- acc\_source
- acc\_pedigree
- acc\_inv\_annotation
- acc\_action
- acc\_inv\_group
- New List

Basic Query

Search Now! Limit: 500

Find: Default accession

Matching: Any word All words List of items

Search Criteria

@name\_group.group\_name = 'GEM'

Search Results

Add To Query Clear Query

Accession Pedigree Get Name Group Get Accession Inventory Group Get Accession Inventory Name Get

GRIN-Global v1.9.8.14

File Tools Help

Search... Accession Wizard Cooperator Wizard Inventory Attachment Wizard Order Wizard Viability Wizard

Show lists from: Show All

A. Resinger Resource Group, Inc

Include Sub-Folders

R. occidentalis May (1)

R. occidentalis Root Folder

- acc\_inv\_attach
- accessions
- acc\_inv\_names
- acc\_source
- acc\_pedigree
- acc\_inv\_annotation
- acc\_action
- acc\_inv\_group
- New List

Get Site Accessions Get Name Group B Get Accession Inventory Name Inventory Get Inventory Action Orders Cooperators Get Accession Source Get Inventory M...

Accession Inventory Name ID	Accession	Inventory	Category	Name	Name Rank	Name Group	Cooperator	Is V	Vis
1098563	PI 639044	PI 639044 **	Cultivar name	GEMS-0013	10	GEM	Blanco, Mike, US...	Y	
1098572	PI 639051	PI 639051 **	Cultivar name	GEMS-0023	10	GEM	Blanco, Mike, US...	Y	
1348713	PI 685800	PI 685800 **	Cultivar name	GEMN-0060	10	GEM	Blanco, Mike, US...	Y	
1915444	PI 685957	PI 685957 **	Cultivar name	GEMS-0264	10	GEM	Gardner, Candice...	N	
1597920	PI 685813	PI 685813 1Inca...	Developer identifier	03GEM00304	1050	GEM	Blanco, Mike, US...	Y	
1098565	PI 639045	PI 639045 **	Cultivar name	GEMS-0015	10	GEM	Blanco, Mike, US...	Y	
1348704	PI 685785	PI 685785 **	Cultivar name	GEMN-0045	10	GEM	Blanco, Mike, US...	Y	
1348717	PI 651537	PI 651537 **	Cultivar name	GEMN-0110	10	GEM	Blanco, Mike, US...	Y	

of 355

Data Editing

Edit Data Save Data Cancel

Refresh Data

Other Options Column Chooser

https://training.ars-grin.gov/GRINGlobal/GUI.aspx

Another Group Name Example to find "like" Accessions

The screenshot shows a software interface with a search window on the right and a data table on the left. The search window is titled 'Basic Query' and contains the following fields:

- Search Now! button
- Find:  Default  accession
- Matching:  Any Word  All Words  List of Items
- Search Criteria: @name\_group.group\_name LIKE 'NC7%'
- Search Results: Add To Query, Clear Query, Limit: 1000
- Buttons: Get Web Cooperator, Get Web Order Request, Get Accession Inventory Group, **Get Name Group**

The data table on the left has the following columns: Accession ID, Digital Object Identifier, Accession Prefix, and Accession Number. The search results table on the right has the following columns: Name Group ID, Group Name, Note, and URL. A red dashed arrow points from the 'NC7.DONR.COLR.IDS' folder in the left sidebar to the row with Name Group ID 147 in the search results table.

Accession ID	Digital Object Identifier	Accession Prefix	Accession Number
1018564	PI	PI	6192
1030635	Ames	Ames	5213
1031963	PI	PI	6496
1040453	PI	PI	6587
1031608	PI	PI	6495
1032272	PI	PI	6742
1018278	Ames	Ames	2108
1018349	Ames	Ames	2119
1032009	PI	PI	6496
1018424	Ames	Ames	2133
1406615	PI	PI	5116
1031800	PI	PI	6495
1031992	PI	PI	6496
1467225	PI	PI	5722
1031554	PI	PI	6495
1031270	Ames	Ames	5348
1031909	PI	PI	6496

Name Group ID	Group Name	Note	URL
144	NC7.CULT_REM	Old NC-7 CULT_REMS not Culivar	
145	NC7.INDIA.GRASS.PROB	Temporary Agrcd until all of this	
146	NC7.ZEA.STANDARD	Id's added by NC7 to standardize sidid	
147	NC7.DONR.COLR.IDS	These are various ID's sent NC-7 for Ames numbers.	
148	NC7.FIBR.LOTS		

## Accession Inventory Groups

Accession Inventory Groups are available for searching via the Public Website by selecting an **accession group name** (the Accession Inventory Group name).

PW:

The screenshot shows the U.S. National Plant Germplasm System search page. At the top, there is a navigation menu with links for 'Accessions', 'Descriptors', 'GRIN Taxonomy', 'View Cart', 'Reports', 'My Profile', and 'About GRIN-Global'. Below the menu, the search area includes a 'Search For:' field, a 'Retrieve:' dropdown set to 'Accessions', and several checkboxes for search filters: 'Include unavailable' (checked), 'Include historic' (checked), 'With images' (unchecked), 'With NCBI link' (unchecked), and 'With genomic data' (unchecked). A 'Return up to 500' dropdown and a 'Search' button are also present. Underneath, there is a section for 'Accession Collecting Site Search Criteria' with a dropdown menu showing options like 'Potato: COG tendri', 'Rubus: albino black raspberries', 'Rubus: arctic raspberries', 'Rubus: black raspberries', and 'Rubus: blackberries'. A 'Choose Criterion 1:' dropdown is set to 'accession group name' with an 'Equal To' operator. 'Add More Criteria' and 'Clear All Criteria' buttons are at the bottom.

PW2:

This detailed view of the search interface includes several numbered callouts:   
1. A green circle highlights the 'Advanced Search' tab in the top navigation bar.   
2. A green circle highlights the 'Accession Group' dropdown menu.   
3. A green circle highlights the 'Rubus: black raspberries' option in the dropdown list.   
The interface also features a search input field with the placeholder text 'e.g., Malus domestica' and a 'Search' button. Below the input field, there are radio buttons for 'Available' and 'All - Including historic (not in the NPGS collections, information only)'. A section titled 'Limit accessions displayed to only those:' contains checkboxes for 'With genomic data' and 'With NCBI link'. A 'Clear All' button is located below these options. At the bottom, there is an 'Add Criteria' button and another 'Search' button.

### Create the Accession Inventory Group Name

Use the `get_accession_inventory_group` dataview (from the Accession / Inventory area); add records (supply a **Group Name**; select **Is Web Visible?** when desired):

Accession Inventory Group ID	Group Name	Is Web Visible?	Note	Created Date	Created By	Modified Date
-1		<input type="checkbox"/>		5/14/2018 3:26 ...	Reisinger, Martin ...	

### Associate Inventory (or Accessions) to an Accession Inventory Group

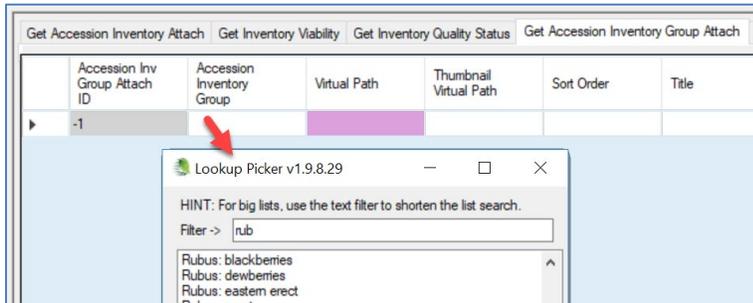
Use the **Accession Inventory Group Map** dataview; add records:

Accession Inventory Group Map ID	Inventory	Accession Inventory Group	Note	Created Date	Created By	Modified Date
1005189	PI 604625 **	Rubus: black raspberries		4/3/2018 9:48 PM	Hummer, Kim, US...	4/4/2018 8:30 PM
1005190	PI 604630 **	Rubus: black raspberries		4/3/2018 9:48 PM	Hummer, Kim, US...	4/4/2018 8:30 PM
1005201	PI 684806 **	Rubus: black raspberries		4/3/2018 9:48 PM	Hummer, Kim, US...	4/4/2018 8:30 PM
1005202	PI 684807 **	Rubus: black raspberries		4/3/2018 9:48 PM	Hummer, Kim, US...	4/4/2018 8:30 PM
1005203	PI 684803 **	Rubus: black raspberries		4/3/2018 9:48 PM	Hummer, Kim, US...	4/4/2018 8:30 PM
1005204	PI 684806 **	Rubus: black raspberries		4/3/2018 9:48 PM	Hummer, Kim, US...	4/4/2018 8:30 PM
-102				5/14/2018 4:18 ...	Reisinger, Martin ...	

Inventory records can be in more than one group.

## Accession Inventory Group Attach Dataview

In server release 1.10.3, the **Accession Inventory Group Attach** dataview was added to allow documents to be attached to a group of accession/inventory records. (Note: in the CT, the Attachment Wizard has not been programmed for this functionality as of December, 2018. It is possible for the DBA to upload the files and then indicate the virtual path.)



## Inventory Maintenance Policy

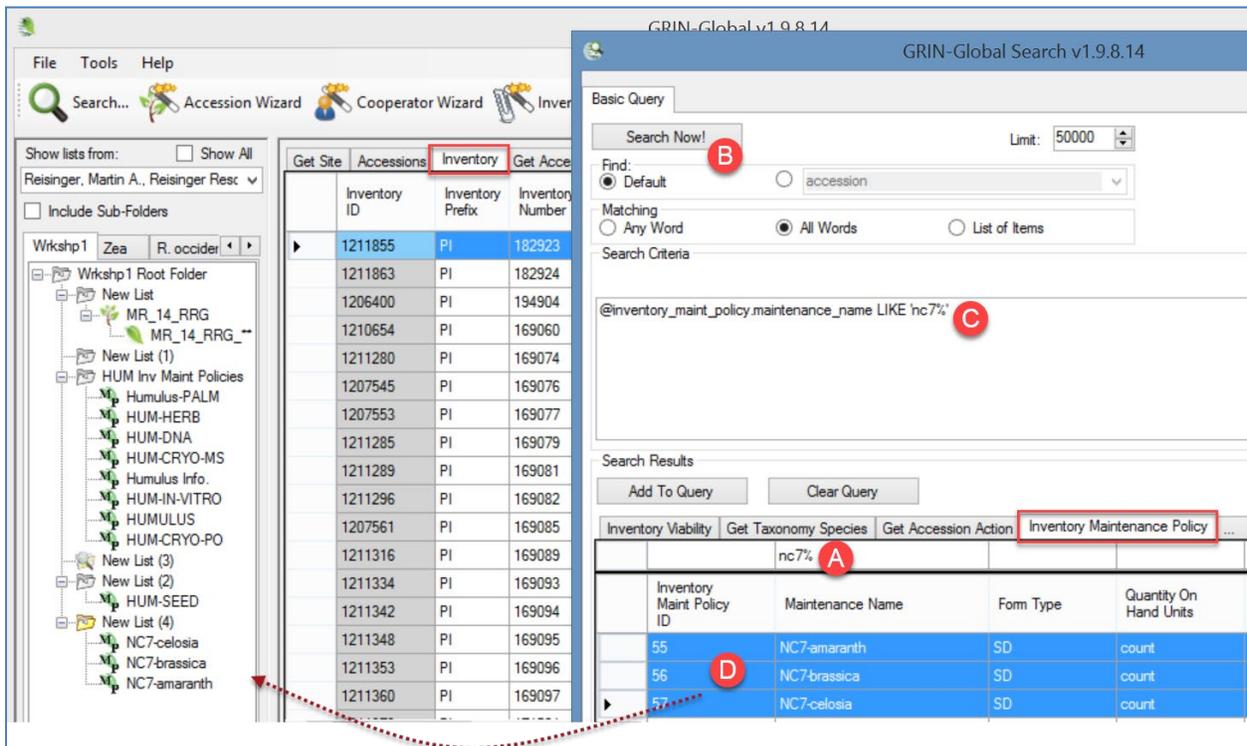


Inventory Maintenance Policies are explained in detail in the online Inventory guide at [https://www.grin-global.org/docs/gg\\_inventory.docx](https://www.grin-global.org/docs/gg_inventory.docx)

In the Curator Tool, use an Inventory Maintenance Policy or Method to filter records. Several different approaches can be used.

## Drag Maintenance Names to a CT Folder

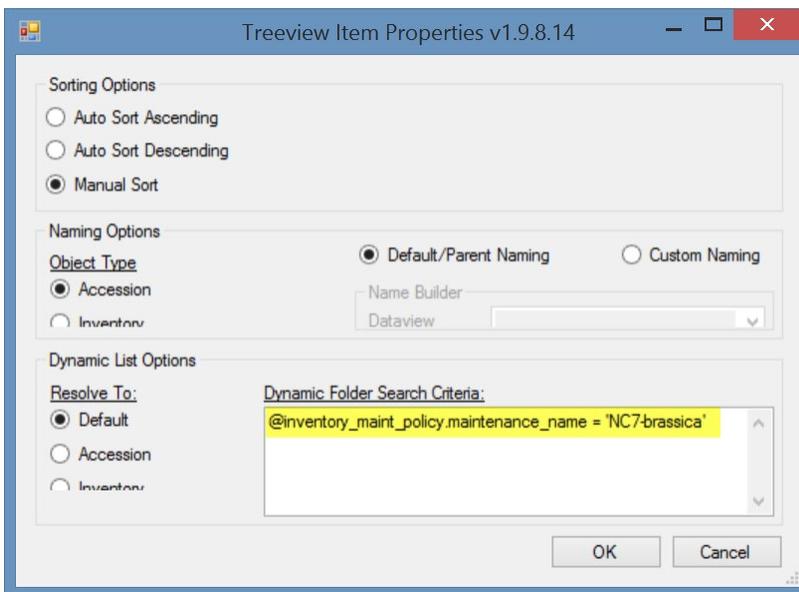
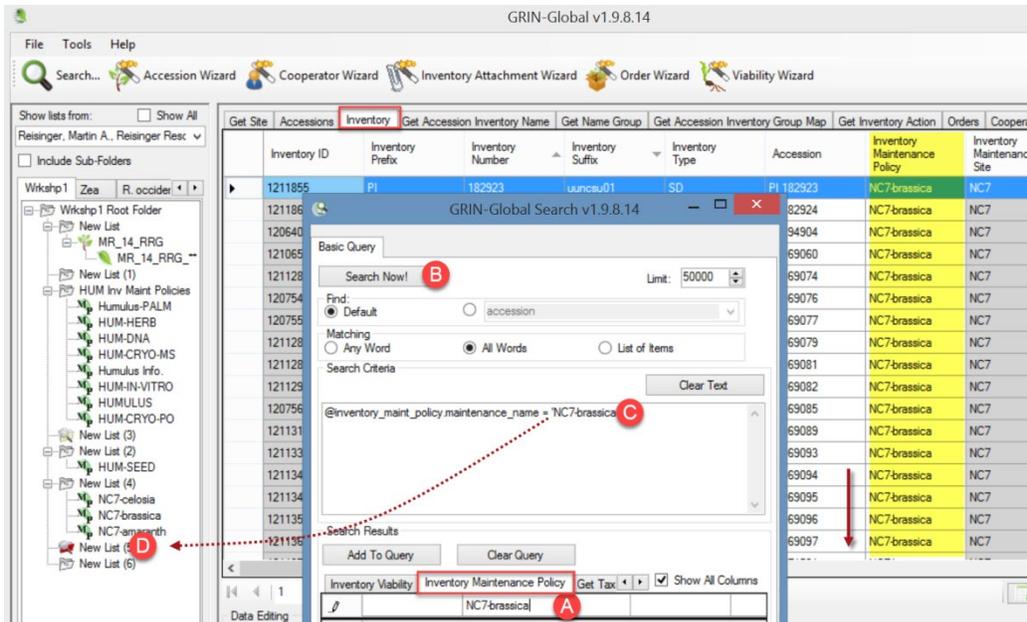
In the Search Tool, find the desired policy name(s) in the **Inventory Maintenance Policy** dataview, and then drag the records to a folder in the Curator Tool:



The List Panel displays the objects for the maintenance names, and in the Curator Tool's datagrid you can switch between dataviews, such as inventory or accessions, to see related records. For example, in this case, the list of inventory records shown in the background all were created with one of the three maintenance names listed under **New List (4)**. (Use a more meaningful list name than this!)

### Drag the Code to Build a Dynamic Folder

You can create a dynamic folder, that uses code based on an Inventory Maintenance Policy name. An advantage of this method is that you can easily edit the properties and replace the policy name as desired. (2<sup>nd</sup> screen below)



## Method

The Method dataview accesses the table of methods and procedures. One example of methods is those used in determining the crop specific attributes of the germplasm. Each environment used in an evaluation should have its own method record.

Method ID	Name	Geography	Material or Method Used	Elevation (meters)	Latitude	Longitude
119	SUNFLOWER.SUN.OIL.WLD.91	United States, N...	Oil concentration of accessions from 1991 exploration. Analyses were performed in 1991 on seeds from the original population. Nuclear Magnetic Resonance (NMR) using 2 ml of dried seeds from wild Helianthus species (cultivated H. annuus uses 40 ml). This methodology is an acceptable			
-2						



A **Method** item in a CT list is an excellent way to filter records:

Accession ID	Accession Prefix	Accession Number	Accession Suffix	Taxon	Name
1080364	PI	586807		Helianthus annuus	ANN 2
1080365	PI	586808		Helianthus annuus	ANN 2
1080370	PI	586809		Helianthus annuus	ANN 2
1080371	PI	586810		Helianthus annuus	ANN 2
1080374	PI	586811		Helianthus annuus	ANN 2
1080375	PI	586812		Helianthus annuus	ANN 2
1080378	PI	586813		Helianthus annuus	ANN 2

Accession ID	Accession Prefix	Accession Number	Accession Suffix	Taxon	Name
1008936	PI	660781		Humulus japonicus	H. japon
1008991	PI	617283		Humulus lupulus ...	KAZ 93-0
1009004	PI	617284		Humulus lupulus ...	KAZ 93-1
1453507	PI	558535		Humulus japonicus	H. japon
1453508	PI	558536		Humulus japonicus	K-21
1454242	PI	559270		Humulus japonicus	Tug Fork
1454243	PI	559271		Humulus japonicus	H. japon
159221	PI	625245		Humulus lupulus	Must F



Public Website users can also search accessions by Method. To do so, the user must select a Crop. The Crop page has a Methods link:

Version: 2.0.3.0   Accessions   Descriptors   Reports   GRIN Taxonomy ▾   GRIN ▾   Help   Contact Us   Your Profile ▾

**APPLE**

Contains characteristic data on Apple (Malus) accessions as proposed by the Apple Crop Germplasm Committee (CGC). For additional information on the evaluations, contact the Plant Genetic Resources Unit, Geneva, NY 14456-0462, 315-787-2390.

[Descriptors](#)  
 [Species](#)  
 [Citations](#)  
 [Methods](#)

**APPLE**

Methods

- 95KAZ
- 97CHINA
- APPLE.CORE
- APPLE.FIREBLIGHT
- APPLE.MORPHOLOGIC.00
- APPLE.MORPHOLOGIC.01
- APPLE.MORPHOLOGIC.02
- APPLE.MORPHOLOGIC.03
- APPLE.MORPHOLOGIC.04

**APPLE.MORPHOLOGIC.04** View for download

Evaluation location: , United States

**Trait(s) evaluated**

CALPERSIST	344 Accessions
CALYXBASIN	344 Accessions
FRTFLSHCOL	343 Accessions
FRTFLSHFLA	330 Accessions
FRTFLSHFRM	330 Accessions
FRTFLSHOXI	343 Accessions
FRTGRNDCOL	344 Accessions
FRTLENGTH	344 Accessions
FRTOVERCOL	342 Accessions
FRTRUSSET	341 Accessions
FRTUSCLOG	330 Accessions

**Accessions evaluated for FRTLENGTH in study APPLE.MORPHOLOGIC.04**

Accessions Dataset for Download

Excel Show 50 rows

Showing 1 to 50 of 348 entries Search:

Accession	Name	Frtlength	Observation details
GMAL 3536 .b	KAZ 93-09-02	37	
GMAL 3544 .n	KAZ 93-13-01	29	
GMAL 3554			

## Core Descriptor Group



Besides the grouping methods described above, GRIN-Global has a capability for grouping accessions by using Descriptors (“Crop Traits”). A curator can decide which accessions would be a representative group of accessions and add them to a CORE group. Under descriptors, a researcher can select that group and get a list of pre-defined group of accessions.

Shown below is the Crop **APPLE** in the NPGS system A CORE Descriptor had been defined.

The screenshot shows the U.S. National Plant Germplasm System interface. The user has selected the crop 'APPLE'. Under the 'Choose descriptor(s):' section, the 'CORE' descriptor is selected under the 'Uncategorized descriptors (OTHER)' category. The 'CORE' checkbox is circled in red.

**Descriptor: CORE SUBSET (CORE)** Download list of accessions evaluated for this trait

<b>Definition:</b>	A flag to indicate the accession is part of the core subset
<b>Crop:</b>	APPLE
<b>Category:</b>	Uncategorized descriptors
<b>Status:</b>	Crop Germplasm Committee approved
<b>Data Type:</b>	Alpha/numeric descriptor
<b>Maximum Length:</b>	1
<b>Responsible site:</b>	Natl. Germplasm Repository - Geneva ( <a href="#">GEN</a> )

**Studies or environments for this trait**

- [APPLE.CORE](#) - (258 Accessions)

**Distribution of Values for CORE SUBSET (CORE)**

Code	Definition	Number of Accessions
Y	Yes, the accession is part of the core collection	<u>258</u>

The recommended way to set up a core group is to create a coded trait for the crop.

Search Results

Add To Query Clear Query

Get Source Descriptor Observation Crop Trait Observation Data Crop Crop Trait Get Crop Trait Code Lang Crop Trait Code Get Crop Att

Crop ID	Crop	Note	Created Date
115	APPLE	Contains characteristic data on Apple (Malus) accessions as proposed by the Apple Crop Germplasm Committee (CGC). For additional information on the evaluations, contact the Plant Genetic Resources Unit, Geneva, NY 14456-0462, 315-787-2390.	8/4/1994 8:0

Search Results

Add To Query Clear Query

Get Source Descriptor Observation Crop Trait Observation Data Crop Crop Trait Get Crop Trait Code Lang Crop Trait Code Get Crop Attach Taxonomi Show All Colu

Crop Trait ID	Crop	Trait Name	Trait Title	Trait Description	Is Peer Reviewed?	Category	Data Type	Is Coded?	Maximum Length
115154	APPLE	CORE	CORE SUBSET	A flag to indicate the accession is part of the core subset	Y	Uncategorized descriptors	Alpha/numeric d...	Y	1

Only one code record is needed:

Inventory Get Cooperator Get Accession Action Get Web Order Request Get Accession Inventory Name Get Crop Trait Get Crop Trait Observation Get Crop Trait Code ... Show

Crop Trait Code ID	Crop	Trait Name	Crop Trait	Trait Description	Trait Code	Code Title	Code Description
8200	APPLE	CORE	CORE SUBSET	A flag to indicate the accession is part of the core subset	Y	Yes, the accession is part of the core collection	Yes, the accession is part of the core collection

To have an accession included in a core group, the curator creates an observation record. In the **Crop Trait Observation** dataview, the curator selects an inventory, the crop, the trait, in this example “**CORE SUBSET**,” and selects the **Coded Value** field from a lookup picker. (Not shown – a Method must also be selected.)

Site Accessions Inventory W6 Site Inventory Orders Order Request Item Accession Source Get Geography Get Crop Trait Get Crop Trait Observation ...

Crop Trait Observation ID	Accession	Inventory	Crop	Crop Trait	Coded Value	Trait Code
-1	PI 613836	PI 613836 .j1 PL	APPLE	CORE SUBSET	Yes, the accession is part of the core collection	

When saved, the new record displays, including the “Y” in the **Trait Code** field:

Site Accessions Inventory W6 Site Inventory Orders Order Request Item Accession Source Get Geography Get Crop Trait Get Crop Trait Observation ...

Crop Trait Observation ID	Accession	Inventory	Crop	Crop Trait	Coded Value	Trait Code	Numerical Value
11444405	PI 613836	PI 613836 .j1 PL	APPLE	CORE SUBSET	Yes, the accession is part of the ...	Y	

The result in the Public Website was shown on the previous page.

You can also use TRAITS with a specific value to act as a filter in the Curator Tool:

Query: @crop.name = 'APPLE'  
AND  
@crop\_trait\_lang.title = 'CORE SUBSET'

Accession ID	Digital Object Identifier	Accession Prefix	Accession Number	Accession Status	Taxon	Name
1001525		PI	588753		Malus mandshurica	GMAL 46
1001660		PI	588757		Malus x hartwigii	GMAL 52
1001766		PI	588761		Malus sargentii	GMAL 56
1002152		PI	588772		Malus domestica	Monroe
1002303		PI	588778		Malus domestica	Virginiagold
1002470		PI	588785		Malus domestica	Esopus Spitze



In the legacy GRIN system, a trigger was set up to create “CORE” observation records whenever the Accession field Is Core? was selected. That is not the case in GRIN-Global, selecting **Is Core?** on the Accession record does not generate a CORE observation record for the accession.

The CORE trait must be manually set up; then the curator must create observation records for the accessions that are to be considered “CORE.”

Accession ID	Origin	Maintenance Site	Is Core?	Is Back Up?
243	Nepal	NC7	N	Y
462	Mexico, Ciudad d...	NC7	N	N
780	Mexico, Morelos	NC7	N	Y
4-W	United States, lo...	NC7	N	Y
491	Mexico, Tlaxcala	NC7	N	Y

Search Results

Add To Query Clear Query Limit: 1000 Page Size: 1000

Get Crop Trait Get Crop Trait Code get\_crop Get Web Cooperator Get Web Order Request Get Accession Inventory Group Get Name Group Show All Colour

Crop Trait ID	Crop	Trait Name	Trait Title	Trait Description	Is Peer Reviewed?	Category
177023	PEA	CORE	Core subset	A flag to indicate the accession is part of the core subset	Y	A subset of a collection



## Appendix A: Document Revision Notes

### – **October 25, 2023**

- examples of the Name Group dataview were modified/added, as this dataview name has changed into table on page 2

### – **August 27, 2020**

- modified intro table on page 2
- added text for **Method** searching in the Public Website
- added screens from PW2
- added note re **Is Core?** not tied to CORE descriptors

### – **March 3, 2020**

- edited text in comparison table of **Accession Inventory Group** and **Name Group**

### – **October 6, 2019**

- edited text on using Method as a filter

### – **December 1, 2018**

- edited text and replaced images in the Core Subset section