

# Inventory

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## Revision Date

April 17, 2024



This guide provides details on the Inventory-related dataviews. The GRIN-Global database has approximately 10 inventory related tables and the Curator Tool has approximately the same number of Inventory dataviews.

The [Appendix](#) contains [change notes](#) pertaining to this document.

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## Comments/Suggestions

Please contact [marty.reisinger@usda.gov](mailto:marty.reisinger@usda.gov) with any suggestions or questions related to this document. This and other GRIN-Global-related [documentation](#) can be downloaded from the GRIN-Global project website.

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# Introduction

Using GRIN-Global (GG), a genebank can manage all accession samples (“lots”) maintained in its active collection. In GG, the physical germplasm for each accession is considered the “inventory.”

Typically, an accession will have multiple lots – different generations, form types (plants, seeds...), germplasm stored at different locations or for backup purposes, etc. Each physical lot should have its own respective GG inventory record.

The physical germplasm (inventory) is related to an accession record via the accession’s identifier. Other data such as the specific inventory data – quantity on hand, its storage location, date of harvest, the parental lot, and other information – this information is inputted into GRIN-Global in the main **Inventory** record via the **Inventory** dataview.



An inventory record must be associated with an accession. However, it is not necessary to input all the accession passport data before the inventory record is added. In fact, to create a new accession record, only a few accession fields are required to be entered.

Clonal sites also maintain inventory. Plants, in-vitro tubes – these are all physical inventory. How they identify their inventory and their “generations,” tends to be genebank specific. In any case, GRIN-Global can handle the management of clonal inventory as well as seeds.

## Inventory Dataviews

Data in GRIN-Global is stored in tables in the database. In the GG Curator Tool, genebank staff use the **Inventory** dataview to review and edit the inventory data.



Remember that a dataview and a table are not equivalent. A dataview may display data from more than one table. In the CT’s edit mode, the **Inventory** dataview will display some fields with a gray color, indicating that these fields cannot be edited in the **Inventory** dataview.

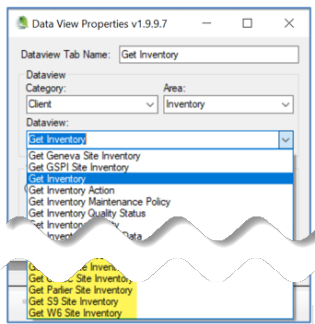


In some GG versions, specific site inventory dataviews requested by National Plant Germplasm System (NPGS) sites were included. The dataviews are recognizable by the word “**Site**” in their name. They serve as good examples, but the primary Inventory table is **Get Inventory**. This is the inventory table that much of GG is centered on.

GG Administrators: dataviews now have a disabled flag to indicate if the dataview is to be displayed or not (to be visible to the CT user). You can remove any of the site inventory dataviews from display and not impact anything in GG.

Also, the system dataview `get_dataview_list` was modified to not pass information on disabled

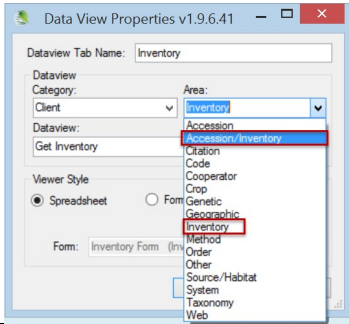
dataviews to the CT (so that disabling the site inventory dataviews effectively hides them).



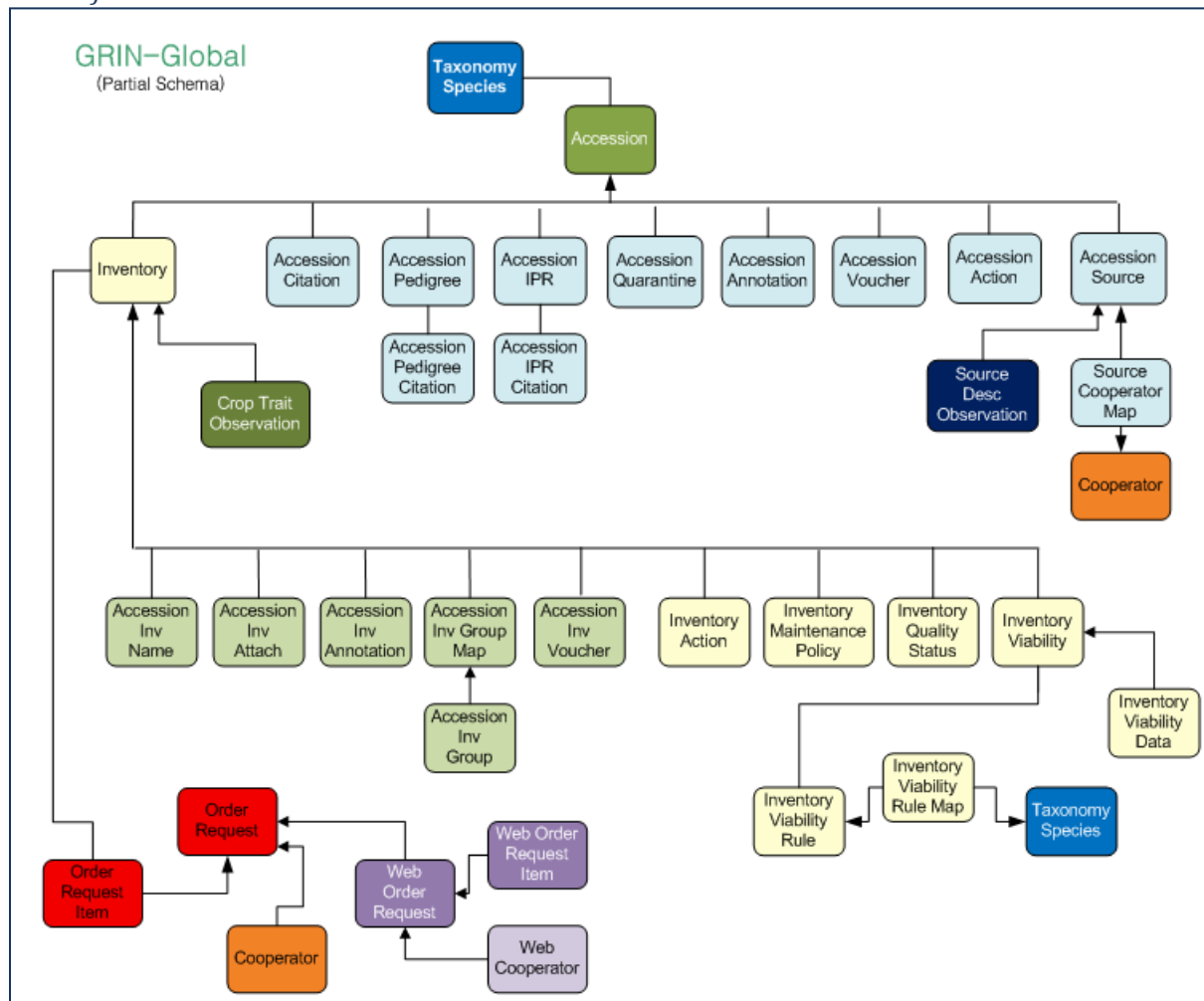
### GRIN-Global System Inventory Records

In GG, when creating a new accession record, a default inventory record, referred to as the System Inventory record, is *always* created. These records cannot be edited. They do not represent physical inventory. Please refer to the section [System Inventory Records](#) for more details.

### Inventory Dataview Areas

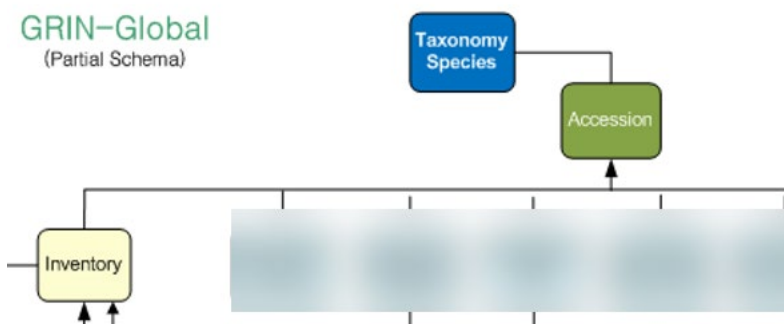
<p>The CT has two areas for inventory related dataviews:</p> 		<p>Why two areas? Because some inventory dataviews pertain strictly to inventory records, such as <b>Inventory Action</b>, whereas others can apply to either inventory <i>or</i> accessions. An example of the latter is “<b>Names</b>,” which can be assigned to an accession in general or to a specific inventory lot.</p>	
<i>Inventory Dataviews</i>	<i>Accession/Inventory Dataviews</i>	<i>Site Specific Inventory Dataviews</i>	
Inventory Inventory Action Inventory Maintenance Policy Inventory Quality Status Inventory Viability Inventory Viability Data Inventory Viability Rule	Accession Inventory Annotation Accession Inventory Attach Accession Inventory Group Accession Inventory Group Map Accession Inventory Name Accession Inventory Voucher	Geneva Site Inventory GSPI Site Inventory NC7 Site Inventory NSSL Site Inventory OPGC Site Inventory Parlier Site Inventory S9 Site Inventory W6 Site Inventory	

## Some of the GRIN-Global Tables



### Each Inventory Record has a Parent Accession Record

Reading from top down, the diagram above is showing dependencies. An inventory record must be associated with an accession record. Note also that the accession record references an accepted taxonomy species.



## Two broad kinds of Inventory Records: System and Physical

In GG, when an accession record is created, GG automatically generates a *system* inventory record. *This software-generated inventory record does not represent physical inventory.*

In GRIN-Global these system-generated inventory records are always denoted with a \*\* for their **Inventory Type** (as contrasted with Seed, In-vitro, etc.). Think of these records as records needed by the GG software. A CT user should never need to edit these records. Physical germplasm will never use the \*\* as their **Inventory Type** indicator. Physical inventory instead will use type codes for seeds, plants, in-vitro, etc.

What is their purpose then? The system inventory records provide flexibility. For example, alternative names may be assigned to the accession in general or to a specific inventory item – more will be explained later.

Search Results										
Add To Query		Clear Query		Limit: 50		Page Size: 1000				
Accession	Get Inventory	Get Accession Inventory Name	Get Cooperator	Get Order Request	Get Web Cooperator	Get Web Order Request	Show All Columns			
	PI			**						
Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Name	Inventory Maintenance Policy	Inventory Maintenance Site	Is In	
4481361	PI	536		**	PI 536	NEH1897	SYSTEM	NSGC	N	
4481362	PI	537		**	PI 537	NEH1897	SYSTEM	W6	N	
4481363	PI	538		**	PI 538	Clav 170	SYSTEM	NSGC	N	
4481374	PI	539		**	PI 539	NEH1897	SYSTEM	W6	N	
4481375	PI	540		**	PI 540	NEH1897	SYSTEM	NSGC	N	

## Recording New Inventory Items

Seed genebanks generally have multiple lots for each accession. Each physical lot should have its own respective GG inventory record.

Two main methods are used for adding new inventory records into the database. One record at a time may be manually added via the Curator Tool's **Inventory** dataview. The alternative is to add many records by dragging them from a spreadsheet into the **Inventory** dataview.

The **Inventory** dataview is used to record the inventory's identifier, its form (is it saved as seeds or is it saved as a plant?), its date of harvest, the quantity on hand, the form that is distributed upon request, where the germplasm resides (on a shelf in a freezer, in the field in a specific row/plant location), etc.



## To Add a New Inventory Record



In the Curator Tool, it is not essential to have the accessions listed when you start adding inventory – but it may be helpful.

Shown: an accession on the left list panel; the **Inventory** dataview in the right grid; the user has clicked the **Add New** button. The colors provide a visual clue: fields that cannot be edited in the current dataview are gray, and fields that allow editing, but which are not required, are white. The pink fields are required. This can be misleading, because most genebanks often require that the **Inventory Number**, **Suffix**, and **Type Code** fields all be filled.

The screenshot shows the GRIN-Global v1.9.6.41 interface. On the left, a tree view shows a folder structure with 'MR\_92315\_REI' selected. The main panel displays the 'Inventory' dataview with the following table:

Accession	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Is Default Inventory?
4927400	MR	92315	REI	**	MR 92315 REI	SYSTEM	DBMU	<input type="checkbox"/>
-2				[Null]			-1	<input type="checkbox"/>

At the bottom, there is a 'Data Editing' section with buttons for 'Edit Data', 'Save Data', and 'Cancel'. A red arrow points from the 'Add New' button (labeled 1) to the 'Inventory' column header (labeled 2). A red circle '3' highlights the 'Add New' button.

Clonal sites will typically create one inventory record for each clone and assign each clone an inventory number. Clonal inventory will have a type that indicates what the material is: TC - Tissue Culture, IV - In-vitro, and CT - Cutting, etc. Managing clonal data is described in a later section, but basically all inventory is managed similarly.

## Inventory Dataview Form

Users can switch to a form when using the Inventory dataview:

The screenshot shows the 'Data View Properties v1.9.6.41' dialog box overlaid on the main application window. The dialog box has the following fields and options:

- Dataview Tab Name:** A text field containing 'Inventory'.
- Dataview Category:** A dropdown menu with 'Client' selected.
- Dataview Area:** A dropdown menu with 'Inventory' selected.
- Dataview:** A dropdown menu with 'Get Inventory' selected.
- Viewer Style:** Three radio buttons: 'Spreadsheet' (unselected), 'Form' (selected and highlighted with a red box), and 'Both' (unselected).
- Form:** A dropdown menu with 'Inventory Form (InventoryForm.dll)' selected.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

The background application window shows the 'Inventory' tab selected in the top menu. The main window contains various input fields for accession information, including 'Accession Name', 'Taxon' (Cedrela odorata), 'Origin' (United States, Ha...), 'Inventory Prefix' (PI), 'Inventory Maintenance Site' (MIA, PI 100377), 'Availability Status' (No lot present), 'Status N...', 'Is Default Inventory?' (checkbox), 'Inventory Maintenance Pol Standard' (SYSTEM, [Null]), 'Standard Distribution Quant' (Unit of D, [Null]), and 'Location Section 1' through 'Location Section 4'.

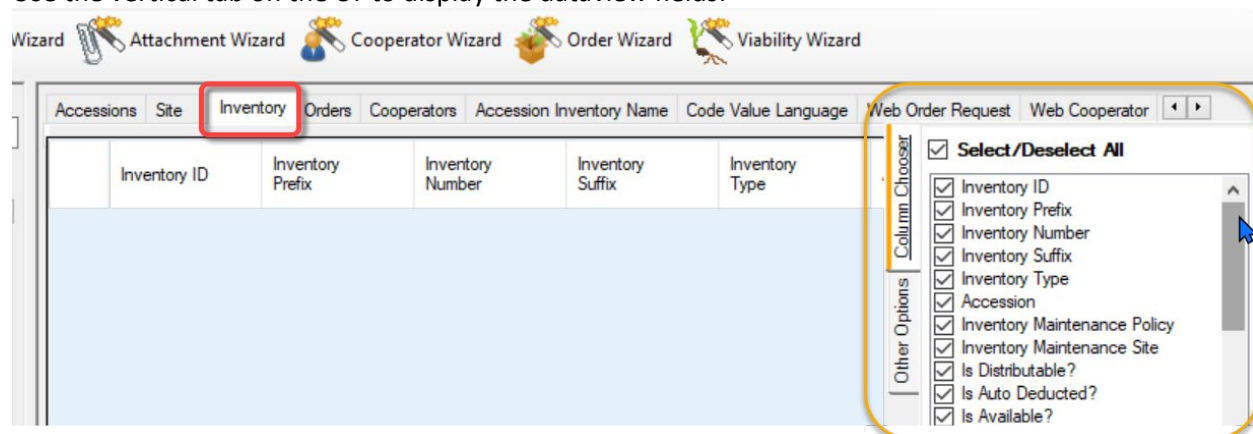


The **Edit** button is on the main CT window – not on the form.

The following graphic shows a list of the fields that comprise the main **Inventory** dataview. Most of the inventory dataview fields are explained in the following sections.

Inventory ID	Location Section 3	Name
Inventory Prefix	Location Section 4	Inventory Name
Inventory Number	Latitude	Taxon
Inventory Suffix	Longitude	Origin
Inventory Type	Rootstock	Percent Viable
Accession	Parent Inventory	Tested Date
Inventory Maintenance Policy	Backup Inventory	Pure Live Seed
Inventory Maintenance Site	Hundred Seed Weight	Inventory
Is Default Inventory?	Pollination Method	Created Date
Is Auto Deducted?	Pollination Vector	Created By
Is Available?	Preservation Method	Modified Date
Availability Status	Regeneration Method	Modified By
Status Note	Plant Sex	Owned Date
Availability Start Date	Propagation Date Format	Owned By
Availability End Date	Propagation Date	
Web Availability Note	Production Location	
Quantity On Hand	Note	
Quantity On Hand Units	Name	
Standard Distribution Form	Inventory Name	
Standard Distribution Quantity	Taxon	
Unit of Distribution	Origin	
Distribution Critical Amount	Percent Viable	
Replenishment Critical Amount	Tested Date	
Pathogen Status	Pure Live Seed	
Location Section 1	Inventory	
Location Section 2		

Use the vertical tab on the CT to display the dataview fields:

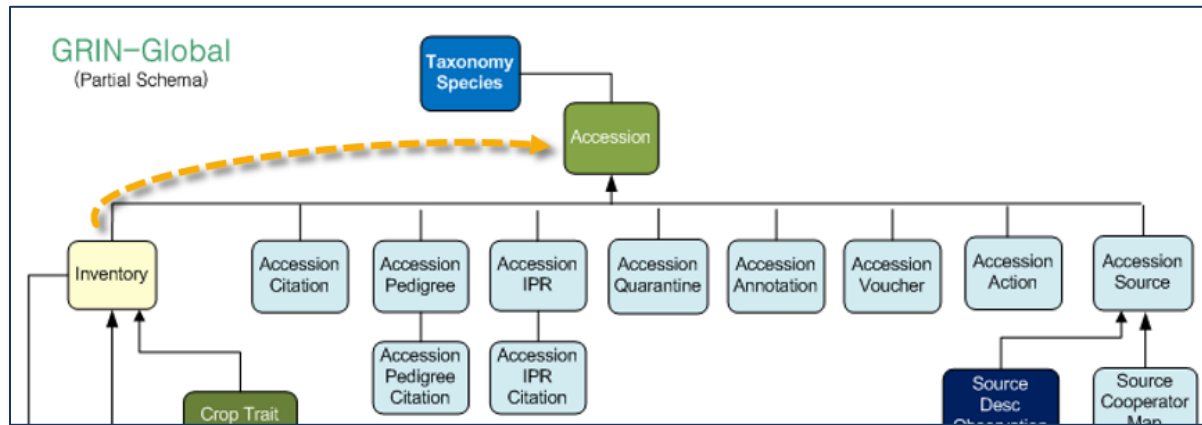


Not all **Inventory** dataview's fields can be edited directly because they are either calculated fields or they are stored in the database in a table other than the **Inventory** table. In Edit mode, these fields are displayed with a gray color.

### Each Inventory Record has a Parent Accession Record

Reading from top down, the diagram above is showing dependencies. An inventory record must be associated with an accession record. (Note also that the accession record references a valid taxonomy

species.)



## Inventory Dataview Field Details

### Prerequisite Fields

Inventory records have five required fields. For example, when creating an inventory record, you must select an accession to which it is related. The five required fields are:

- [accession](#)
- [inventory maintenance policy](#)
- [unique identifier \(its inventory “name”\)](#)
- [inventory type](#)
- [availability status](#) – must be one of the **INVENTORY\_AVAILABILITY\_STATUS** Code Group values in the Code Value table.

### Inventory Maintenance Policy

When creating a new inventory record, the **Inventory Maintenance Policy** field is a mandatory (required) field. In creating a new inventory record, the user selects a name of an IMP from a lookup window. This implies that you must have an existing [Inventory Maintenance Policy](#) record before you can save a new inventory record. For more details, review the [Inventory Maintenance Policy](#) section.



Think of the **Inventory Maintenance Policy** more as a template than a policy – it fills in *some* fields in a *new inventory record*. If you later change the policy, the CT does not adjust any *existing inventory record data*. However, the owner of the IMP is always the owner of the inventory record so a change in ownership of the IMP will affect the ownership of the inventory record. Also, the owner’s site is the Inventory record’s **Maintenance Site**.

## Unique Identifier - Inventory Naming Conventions

Every genebank has its own considerations and typically develops genebank-specific naming conventions for its inventory lots.

In naming inventory, the *Inventory Identifier* consists of four fields:

- inventory-prefix
- inventory-number
- inventory-suffix
- type-code

The combination of the **Inventory -Prefix**, **-Number**, **-Suffix**, and **Inventory Type** must be unique in the database. Note that the Inventory Prefix, Number, and Suffix do not need to match (and often do not match) the Accession's.

### *Type-code*

These types use GG codes. The **GERMPLASM\_FORM** Code Group stores this inventory type data. Many of the common form codes are often abbreviated: BD (Budwood), CT (Cutting), PL (Plant), and SD (Seed). Genebanks can determine what codes to use for their genebank. As with all codes used in GG, the GG administrator manages/updates the codes.

## Naming Examples

Genebanks should develop standards for their inventory naming. Ideally the inventory identifier may provide some information intrinsic with the name. The following examples were created by several USDA genebanks.

### *Examples of Inventory Names (from National Plant Germplasm System (NPGS) Sites*

Accession	Inventory
PI 554670	<b>CVAC 799 .000 SD</b> and <b>CVAC 799.001 PL</b> – two inventory forms for this accession – one is seed (SD) and the other a living plant (PL)
PI 597892	<b>PI 597892 91ncai01 SD</b> – the suffix, <b>91ncai01</b> is used in a very site-specific manner. Refer to the <a href="#">Inventory Suffix</a> section in the Appendix for an elaborate example of using the suffix
GMAL 274	<b>GMAL 274 .a SG</b> – the G is for Geneva, MAL for Malus. The 274 was a number assigned in a numeric order as the new variety came in. Suffixes with an .a or .b were germinated from an original seed lot. ... SG is seedling

## Partial View of the Inventory Dataview

Site	Accessions	Inventory	Orders	Accession Action	Accession Inventory Name	Accession Inventory Group	NES Site Inventory	NC7 Site Inventory	Web Order Request	Inventory Maintenance		
	Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Parent Inventory	Is Default Inventory?	Is Auto Deducted?	Is Available?
	2173244	G	11277	61UO	SD	11277	NESInactiveTomato	NES		N	Y	N
	2175975	G	11277	70GI	SD	11277	NESInactiveTomato	NES	G 11277 61UO SD	N	Y	N
	2169977	G	11277	84AI	SD	11277	NESInactiveTomato	NES		N	Y	N
	2169997	G	1590	54UO1	SD	1590	NESInactiveTomato	NES		N	Y	N
	2169998	G	1590	54UO2	SD	1590	NESInactiveTomato	NES		N	Y	N

## Inventory ID

ID fields are automatically assigned to all new GG records. The ID fields can never be edited or deleted. Basically, as a user, you rarely reference the ID field directly because it has no curatorial meaning.



However, the IDs are important in drag and drop operations where you may be taking data from a spreadsheet and updating existing inventory data in the Curator Tool. In that case, you always include the ID column. When *updating*, the IDs in the spreadsheet rows must match the existing inventory records' IDs. (When *adding* new Inventory records, the spreadsheet cells for IDs are empty.)

## Inventory Prefix, Number, and Suffix

Each genebank should establish their own naming standards. An inventory does not necessarily need all three fields filled, but they usually are. [More information...](#)

## Inventory Type

The **Inventory Type** is a dropdown field that gets its data from the code values stored in the **GERMPLASM\_FORM** code group. You must select one of the entries. This ensures data integrity and prevents typos and other misspellings. (If a form type is needed, contact the genebank's GG administrator can who add that type to the database.)

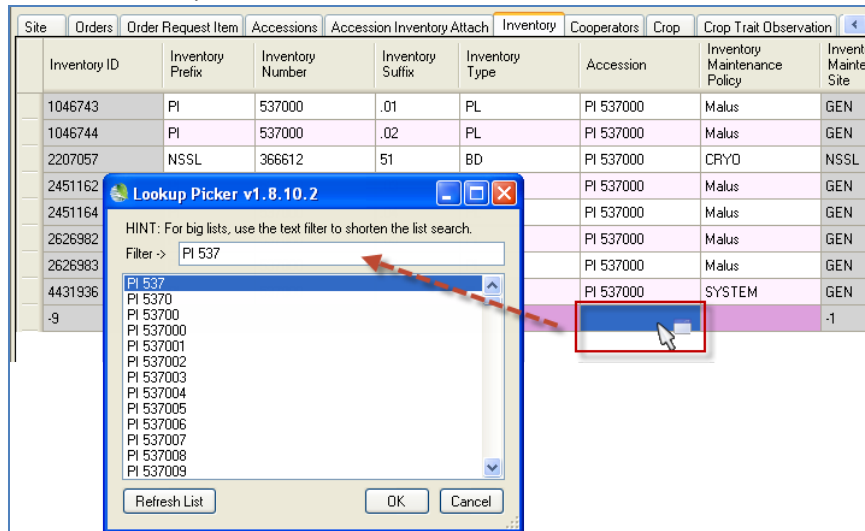
Inventory dataview (partial)							Inventory Type (dropdown)	
Accessions	Inventory	Orders	Accession Action	Accession Inventory Name	Accession Inventory Group			
Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy		
1023067	DACT	41		CT	PI 667908	ARCHIVE		
4001383	PI	667908		**	PI 667908	SYSTEM		
2205458	DACT	41		PL	PI 667908	ARCHIVE		
2266819	DACT	41	0000A	PL	PI 667908	Hardy Kiwifruit		
2266786	DACT	41	0000B	PL	PI 667908	Hardy Kiwifruit		
2266514	DACT	41	0000C	PL	PI 667908	Hardy Kiwifruit		
2593324	DACT	41	0000F	IV	PI 667908	Hardy Kiwifruit		
2226711	DACT	41	0000G	IV	PI 667908	Hardy Kiwifruit		



Using the GG Admin Tool, the GG administrator can add or edit the **GERMPLASM\_FORM** code values to meet the needs of the organization. (The U.S. NPGS used two-letter codes in their GRIN system so the codes as shown here are a carry-over; however, an organization implementing GRIN-Global most likely will use more descriptive codes.)

## Accession ID

Since every inventory record has a parent accession record, an accession ID must be selected from the accession lookup list:



If the accession is not listed, it may be because the *Accession Lookup table is not current*. Maybe the accession was added immediately prior? If you know the accession exists but is not listed, update the Lookup Table. (Lookups are explained in detail: [http://grin-global.org/docs/gg\\_lookups.pdf](http://grin-global.org/docs/gg_lookups.pdf))

## Availability and Visibility Fields



Users sometimes confuse two issues: an accession *being displayed on the Public Website* and *whether the accession will be available* for germplasm requests.

Several fields in the **Accession** and **Inventory** records relate to visibility and availability. Also, it is important to know what version of GRIN-Global your genebank is using, because older versions behaved differently – the idea of what inventory can be available has significantly evolved.

In older GG versions, it was only possible to have one inventory record per accession to be available at any point in time. Two “flag” fields, **is\_default?** and **is\_available?** had to both be set to “Y.” If either field is set to “N,” the accession was listed on the Public Website as “*Not Available*.” Review the [Multiple Inventories Available and Seasonally Available](#) section for details on more recent GG versions.

To indicate that another inventory was available, if some other inventory was considered available, it would need to be noted as unavailable and its record would need to be edited.

Table / Field Name	Field type	Impact / Effect
Acc. / Is Web Visible?	Y / N	Public Website (PW) will display (or not), the accession on the Public Website



Acc. / Status	Coded (Active, Inactive, Backup...)	If the <b>Status Code</b> is neither equal to <b>ACTIVE</b> or <b>INACTIVE</b> , the accession will not be listed in any search results. <b>INACTIVE</b> usually indicates this is a historic record – data exists, but no physical germplasm
Inv. / Availability Status	Coded (Low, Available, Not Available, Dead...)	the value <i>does not determine</i> the availability on the PW. Can be confusing, because some genebanks use “Available” and “Not Available” as possible values. Serves more as documentation to the internal genebank staff.
Inv. / Is Distributable?	Y / N	Would be better titled as “ <b>Is Distributable?</b> ” This flag field can be used to stop distributing for requests, even temporarily. For the inventory to be distributed, this field must be “Y”
Inv. / Is Available?	Y / N	For the inventory to be distributed, this field must be “Y”



The PW examines the Inventory record to see if its two columns, **Is Default?** and **Is Available?** are set to “Y.” An inventory record with a value of **0** for its **Quantity on Hand** would be considered Available and the Cart link would display. This may or may not be the curator’s intent.

### Multiple Inventories Available and Seasonally Available



In server release 1.10.4, released on 2019, March 9, a major change was made to allow more than one inventory lot for the same accession to be viewed as available on the Public Website. Beginning with this release, the inventory trigger allows one inventory lot (record) to be `is_distributable` (**Is Default?** = “Y”) for *each inventory type*.

Example: An accession can have both Seeds and Cuttings displayed as available on the Public Website.

The screenshot shows a web interface for managing inventory. At the top, there's a search bar and a 'Select' dropdown set to 'All'. Below this is a table with the following columns: Plant ID, Plant Name, Taxonomy, Origin, Material, Maintained By, and Availability. A single row is displayed for 'MR 1 RRG' with taxonomy 'Humulus lupulus'. The 'Material' column for this row is 'Cutting Seed', which is circled in purple. The 'Availability' column shows a link 'Add to Cart'. The interface also includes pagination controls showing '1 - 1' of 1 items.



### Shopping Cart (1 item)

Select	ID	Plant Name	Taxonomy	Distribution Amt	Distribution Unit	Form Distributed	Maintained by	
<input type="checkbox"/>	MR 1 RRG	MR 1 RRG	<i>Humulus lupulus</i>	25	count	Cutting	DBMU	Rem
						Cutting		Rem
						Seed		Rem

Search for more accessions

In GRIN-Global server version 2.1.0 (released June 19, 2021), a significant change was made to the Public Website – now users were able to request germplasm either by accession or by inventory. This change was primarily made to accommodate requests for clonal material.

In GRIN-Global server version 2.3.0 (released May 21, 2022), GRIN-Global was enhanced to have accessions *seasonally available*. By including a new table, **Inventory Maint Policy Season**, GG makes it possible to identify start and ending dates when a specific inventory form is available. If the user is using the PW during that period, germplasm inventory is listed as available. Outside of the period, the inventory is listed as unavailable. For more details, refer to the online document, [http://grin-global.org/docs/gg\\_inventory\\_seasonal\\_availability.docx](http://grin-global.org/docs/gg_inventory_seasonal_availability.docx)

#### Is Auto Deducted?

When **Is Auto Deducted?** = “Y” and the **Availability Status** value equals “Available,” a trigger will set the **Availability Status** (availability\_status\_code) value to “Low Inventory” when the qty on hand goes below the critical distribution qty. The GG **AutoDeduct** trigger ignores any other status codes..



When it can, the Order Wizard in the Curator Tool automatically selects an inventory lot to fill the order. As mentioned, the inventory must have both fields (**Is Default Inventory?** and **Is Available?**) set to “Y.” What happens when multiple inventory lots potentially could fill the order? The database software uses its internal rules to highlight one of the possible inventory choices.

The genebank staff person using the Order Wizard can override the default choice and manually select another inventory lot from the list. In the Order Wizard’s Inventory Picker window, the user can select a different row in the grid, or input information in any of the three boxes: (**Accession Number**, **Accession Name**, or **Taxonomy**).

Inventory Picker

Accession Number:

Accession Name:

Taxonomy:

	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Site	Inventory Maintenance Policy	Is Default Inventory?	Is Available?	Availability Status	Status Note
	MAR	102102	rei	SD	DBMU	SYSTEM	N	N	No value specified	
▶	MAR	102102	rei	SD	DBMU	MAR-RIBES	Y	Y	Available	
	MAR	102102	rei2	SD	DBMU	MAR-RIBES	N	N	No value specified	

## Inventory Maintenance Policy

An inventory record has many fields. When creating a new inventory record, the **Inventory Maintenance Policy** field is a required field.

When creating a new inventory record, the user selects a policy from a lookup window:

The policy selected will then serve as a *partial* template for the *new* inventory record. When an inventory record is being created, many of its fields can be left empty and when the record is saved, matching fields from the selected policy fill in the new inventory's corresponding fields.



Think of the Inventory Maintenance Policy as a template – it is used to fill in some of the fields in a *new inventory record*. If you later change the policy, the CT does not adjust any *existing inventory records*. However, the owner of the IMP is also the owner of the inventory record.

An **Inventory Maintenance Policy** record (shown here with the red letters) will fill in the respective fields in the new inventory record when the inventory record is saved.

Records in the new inventory record when the inventory record is saved.

Get SiteAccessionsGet Inventory Maintenance PolicyGet InventoryGet Order RequestGet GeographyGet Accession SourceGet Accession Inventory NameGet Sys Table Field Lang...

Inventory Maint Policy ID	Maintenance Name	Form Type	Quantity On Hand Units	Web Availability Note	Is Auto Deducted?	Distribution Default Form	Standard Distribution Quantity	Unit of Distribution	Distribution Critical Amount	Replenishment Critical Amount	Regeneration Method
1	SYSTEM	**	[Null]		<input type="checkbox"/>	**		[Null]			[Null]
690	Humulus-RRG-SD	SD	count		<input checked="" type="checkbox"/>	SD	25.00000	count	2000.00000	5000.00000	[Null]
691	Humulus-RRG-CT	CT	count	Cuttings are seasonally available.	<input checked="" type="checkbox"/>	CT	5.00000	count	20.00000	50.00000	[Null]
692	Humulus-RRG-IV	IV	count		<input checked="" type="checkbox"/>	IV	3.00000	count	10.00000	20.00000	[Null]

Get SiteAccessionsGet Inventory Maintenance PolicyGet InventoryGet Order RequestGet GeographyGet Accession SourceGet Accession Inventory NameGet Sys Table Field Lang...

Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Is Default Inventory?	Is Auto Deducted?	Is Available?	Availability Status	Status Note	Quantity On Hand	Standard Distribution Quantity	Quantity On Hand Units	Standard Distribution Form	Unit of Distribution	Distribution Critical Amount	Replenishment Critical Amount
1 RRG	SYSTEM	NC7	N	N	N	No value specified								
1 RRG	Humulus-RRG-SD	NC7	N	Y	Y	No value specified		7500.00000	25.00000	count	SD		2000.00000	5000.00000
1 RRG	Humulus-RRG-SD	NC7	Y	Y	Y	No value specified		7500.00000	50.00000	count	SD		2000.00000	5000.00000
1 RRG	Humulus-RRG-SD	NC7	Y	N	Y	Available		8000.00000	25.00000	count	SD	count	2000.00000	5000.00000

(**Web Availability Note** not shown in the second graphic, but that field would be empty in this example since the corresponding policy has an empty **Web Availability Note** field.) Also, the Is Auto Deducted field does not carry over to the new inventory record.



Fields manually entered later in the **Inventory** record, after the new inventory record has been created, overlay the policy's corresponding fields.

After the inventory record has been created, its related **Inventory Maintenance Policy** has no further impact on the inventory record, (but that change might impact the PW display, as explained in the next paragraph). If an existing **Inventory Maintenance Policy** is changed later, any changes made to the **Inventory Maintenance Policy** record do not change related *existing* inventory *records*.

However, in one scenario the maintenance policy can still impact the record's *Public Website display*. When the **Web Availability Note** field in an inventory record is empty (null), the Public Website displays the **Web Availability Note** from the related Maintenance Policy record. If a curator were to delete a web availability note from an inventory record and the related inventory policy record had a web availability note, the policy's note would then display in the PW.

from:

Maintained by: Nor

NPGS received: 30-

Backup location:

Web Availability Note

WebAvail Note in IMP

Inventory Maint Policy ID	Maintenance Name	Form Type	Quantity On Hand Units	Web Availability Note
1	SYSTEM	**		
688	Humulus-MAR	SD	count	WebAvail Note in IMP

This inventory record has its own unique note, so the note from the policy is no longer displayed on the PW.

from:

Maintained by: Nor

NPGS received: 30-

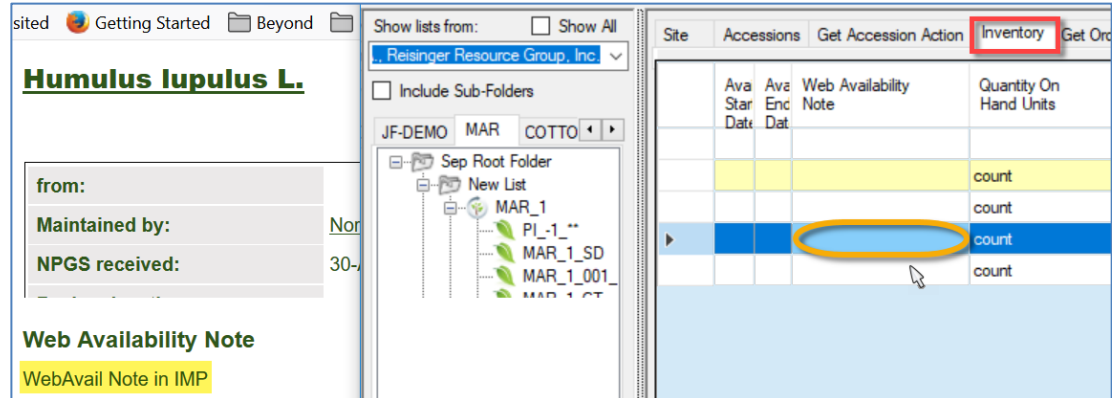
Backup location:

Web Availability Note

Available March 17 only.

Ava Star Date	Ava End Date	Web Availability Note	Quantity On Hand Units	Standard Distribut Quantity
			count	25.00000
			count	25.00000
		Available March 17 only.	count	25.00000
			count	25.00000

If the inventory record is edited and its note removed, the note from the related policy now displays in the PW:



Inventory maintenance policies are created and used by the sites responsible for maintaining the germplasm. A site typically will have many policies, used for applying to various taxa or germplasm types.



Inventory Maintenance Policies can be shared across the organization, but the owner of the **Inventory Maintenance Policy** record determines the owner of the inventory record. Therefore, it is important that a site use appropriate Inventory Maintenance Policies. (When an organization has only one site set up, this is a non-issue.)

Since the creator of an inventory record will not be its owner when the applied policy is owned by someone else, permissions may need to be set up to allow the inventory creator to also be able to update the record. (Refer to the [Curator Tool User Guide](#) Security section for details on changing permissions.)

### Policy Naming Examples

One site uses the following convention:

Policy Name	minimum acceptable germination percentage	qty viable seeds used for regeneration	qty of seeds for the distribution amount
NGB_85_100_10	85	100	10
NGB_85_250_250	85	250	250

The name is automatically added to the generated “picking lists” for the seed lab.

Some consistently begin the policy name with the site code and then the crop, such as:

- NE9-Buckwheat
- NE9-Celery
- NE9-Hemp
- NE9InactiveAsparagus
- NE9InactiveBrassica
- NE9InactiveBuckwheat
- NE9InactiveCelery
- NE9InactiveMisc

### Purpose of the Inventory Maintenance Policies

Basically, an inventory maintenance policy determines how inventory will be processed for incoming germplasm orders that will use that inventory. The policy indicates the germplasm form to be distributed and other parameters, such as the quantity to be distributed. The policy sets defaults for several inventory columns that would be tedious to remember when entering individual inventories:

- the standard amount of germplasm to be distributed (the default units and type – e.g. 50 grams of seed)
- critical replenishment and distribution levels
- the **Web Availability Note** – the maintenance policy will insert this note on every new Inventory record.
- the read-only **Inventory Maintenance Site** field. This field is populated when the inventory record is saved – it is the site of the curator specified by the **Inventory Maintenance Policy**.
- when creating a new Inventory record, the owner of the **Inventory Maintenance Policy** becomes the owner of the **Inventory** record



In the CT, use the **Inventory Maintenance Policy** to filter records. In the Search Tool, find the policy name in the Inventory Maintenance Policy dataview, and then drag that code to a folder in the Curator Tool. Examples of this are shown in the online document [https://www.grin-global.org/docs/gg\\_grouping\\_summary.docx](https://www.grin-global.org/docs/gg_grouping_summary.docx)

The following fields can be defined when creating or editing an **Inventory Maintenance Policy** record:

Maintenance Name	Unit of Distribution
Form Type	Distribution Critical Amount
Unit of Quantity On Hand	Replenishment Critical Amount
Web Availability Note	Regeneration Method
Is Auto Deducted?	Curator
Distribution Default Form	Note
Standard Distribution Quantity	



Several fields in the IMP do not carry over when creating new Inventory records: **Is Auto Deducted?**, **Regeneration Method**, **Curator**, and **Note**.

## Fields common to both Inventory Maintenance Policy and Inventory records

Maintenance Name	Distribution Default Form	Form Type	Quantity On Hand Units	Web Availability Note	Is Auto Deducted?	Standard Distribution Quantity	Unit of Distribution	Distribution Critical Amount	Replenishment Critical Amount	Regeneration Method
MAR-HUM-CT	CT	CT	count	Order many	Y	5.00000	count	50.00000	75.00000	Crowns

### *Maintenance Name*

An **Inventory Maintenance Policy**'s name is selected for all new inventory record's **Inventory Maintenance Policy** field.

### *Form Type*

The default form for the Inventory Maintenance Policy.

### *Quantity On Hand Units*

The units used for the quantity on hand. Must be one of the UNIT\_OF\_QUANTITY Code Group values in the Code Value table. Examples: counts, cuttings, grams, packets.

### *Distribution Default Form*

The default form for distributions of this inventory sample. Must be one of the GERMPASM\_FORM Code Group values in the Code Value table. Examples: Budwood (BD), Cutting (CU), DNA (DN), Seed (SD), Tuber (TU).

### *Standard Distribution Quantity*

The default distribution quantity for this sample. This field may have been populated by the related Inventory Maintenance Policy (if the policy has a default distribution quantity). Otherwise, the field can be manually entered in the Inventory record.

### *Unit of Distribution*

Examples: count, cuttings, grams, packets. The typical (default) unit by which orders are filled. Must be one of the UNIT\_OF\_QUANTITY Code Group values in the Code Value table.

### *Distribution Critical Amount*

The "Quantity On Hand" should be greater than this quantity; if not, the germplasm should not be distributed until inventory is replenished.

### *Replenishment Critical Amount*

If the "Quantity On Hand" is less than the Replenishment Critical Amount, then the accession needs to be regenerated. This inventory record field may be populated by the related Inventory Maintenance Policy or manually entered.

### *Web Availability Note*

Inventory Maint Policy ID	Maintenance Name	Form Type	Quantity On Hand Units	Web Availability Note	Is Auto Deducted
199	Prunus	PL	count	Please note our deadlines for requesting germplasm from our site. Deadline for ordering dormant scion wood is Jan. 10th. The deadline for ordering summer bud wood is July 15th. The order is limited to 25 varieties.	N



Accessions	Inventory	Get Inventory Maintenance Policy	Accession Inventory Name	Get Accession Inventory Group	Accession Inventory Group Map	Accession
Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Web Availability Note	Quantity On Hand
2096265	NSSL	331410	51	BD		5.00000
1991248	PI	592890	.02	PI		1.00000
4507015	PI	592890		**		
5044379	PI	592890	.05007	PL	Cuttings will be sent when we feel like it!	5.00000
5044380	PI	592890	122201	SD	Please note our deadlines for requesting germplasm from our site. Deadline for ordering dormant scion wood is Jan. 10th. The deadline for ordering summer bud wood is July 15th. The order is limited to 25 varieties.	

## Public Website:

File Edit View History Bookmarks Tools Help

GRIN-Global Accession: PI 619212 - GRIN-Gl

https://npgsweb.ars-grin.gov/gringlobal/acce 90%

Cooperator: [Thompson, Dan Agriculture Canada](#)

GPRU 68

Type: Site identifier

**Web Availability Note**

Please note our deadlines for requesting germplasm from our site. Deadline for ordering dormant scion wood is Jan. 10th. The deadline for ordering summer bud wood is July 15th. The order is limited to 25 varieties.

**Source History**

- Accession was donated 11-Sep-1997 British Columbia Canada

### Web Availability Note

The Inventory Maintenance Policy will insert this note on every new inventory record; however, the note can be manually overridden. Use this note to display on the web information about the accession's availability. For example, curators may include seasonal availability information.

This note will display on the Accession's detail page in the Public Website when the default inventory records has the note text in the field; otherwise the Public Website displays the note from the related IMP.

### Inventory Maintenance Policy's Impact on Orders

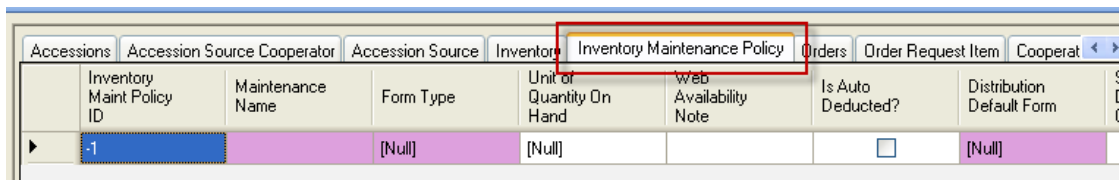
The **Inventory Maintenance Policy** is especially useful when orders are filled. The Order Wizard applies the fields in the policy for the inventory that is assigned to the order. When processing orders, genebank personnel can always override the defaults specified by the policy "rule." For example, a policy can be established to indicate "each order for Maize accessions will receive 50 seeds" or, alternatively by weight ("each order will receive 5 grams of seeds"). If the curator or order filler decides that the order will get 100 seeds or 10 grams, he can override the default.

Also, the Curator specified by the policy will receive an email when a web order has been submitted that is requesting inventory based on that policy.

## Adding Inventory Maintenance Policy Records

**Inventory Maintenance Policy** records are added in the Curator Tool via the Inventory Maintenance Policy dataview.

An organization can create as many maintenance policy rules as needed for its unique situation and assign each inventory maintenance policy a **Maintenance Name** in the **Inventory Maintenance Policy** data view. Sites can copy an existing policy, modify it to suit their specific needs and then save the policy under a new name.



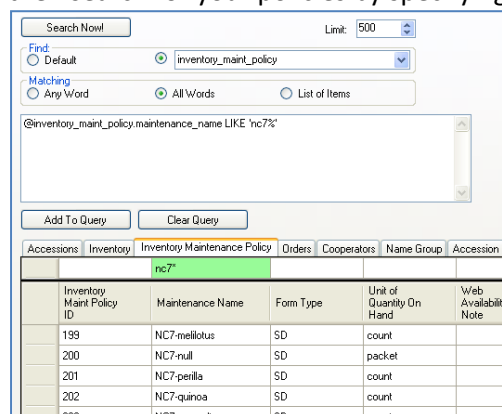
Accessions	Accession Source	Cooperator	Accession Source	Inventory	Inventory Maintenance Policy	Orders	Order Request Item	Cooperator
Inventory Maint Policy ID	Maintenance Name	Form Type	Unit of Quantity On Hand	Web Availability Note	Is Auto Deducted?	Distribution Default Form		
-1		[Null]	[Null]		<input type="checkbox"/>	[Null]		



The **Inventory Maintenance Policy** determines the owner of the Inventory record – the cooperator in the **inventory\_maint\_policy.owned\_by** field becomes the owner of any **Inventory** records that are created with that policy. (This is one reason why each site should establish their own policies.)



When naming your policies, use a consistent naming convention. For example, begin with a prefix, such as your site's code. Examples: NC7-daucus, NC7-portulaca, NC7-quinoa... You can then search for your policies by specifying the prefix in your search criteria:



Search Now! Limit: 500

Find: ☐ Default ☒ inventory\_maint\_policy

Matching: ☐ Any Word ☒ All Words ☐ List of Items

@inventory\_maint\_policy.maintenance\_name LIKE 'nc7%'

Add To Query Clear Query

Accessions	Inventory	Inventory Maintenance Policy	Orders	Cooperators	Name Group	Accession
		nc7*				
Inventory Maint Policy ID	Maintenance Name	Form Type	Unit of Quantity On Hand	Web Availability Note		
199	NC7-mellotus	SD	count			
200	NC7-null	SD	packet			
201	NC7-perilla	SD	count			
202	NC7-quinoa	SD	count			
203	NC7-sun.cults	SD	count			

## Availability Status Trigger



A trigger exists that uses the **Availability Status** field. When the **Is Auto Deducted?** field is set to "Y," and the **Availability Status** is "Available," the trigger will operate when the CT's Order Wizard is used to fill a germplasm request. The inventory record's **Qty on Hand** is reduced by the quantity distributed. If the calculated quantity goes below the **Distribution Critical Quantity**, the status field changes to "Low."



## Availability Status

The **Availability Status** field obtains its values from the **INVENTORY\_AVAILABILITY\_STATUS** Code Group. By searching this field, you can look for specific inventory situations, such as low inventory, young plants not available, etc.

Is Available?	Availability Status	Status Note	Availability Start Date
<input type="checkbox"/>	Removed from collection		
<input type="checkbox"/>	Removed from collection		
<input type="checkbox"/>	Low inventory	BASE	
<input type="checkbox"/>	Removed from collection		
<input type="checkbox"/>	Removed from collection		
<input checked="" type="checkbox"/>	Available		
<input type="checkbox"/>	Removed from collection		
<input type="checkbox"/>	No lot present		
<input type="checkbox"/>	Added to the distribution sample		
	Added to the distribution sample		
	No definition code Avail		
	Available to send		
	In-Vitro backup plant		
	Backup sample BKUP code		
	No definition code CHEC		
	Accession discontinued code CL		
	Accession discontinued code CL		



In the Search Tool, **Availability Status** codes enable searches for a particular group of records, based on a common status.

In the following example, the amount being distributed takes the Inventory level below the **Distribution Critical Amount**:

Fields	Value Before	Action	Value After
		Order is Filled (standard quantity is shipped)	
<b>Quantity on Hand</b>	80		70
<b>Standard Distribution Quantity</b>	10		10
<b>Distribution Critical Quantity</b>	75		75
<b>Is Auto Deducted?</b>	Y		Y
<b>Availability Status</b>	Available		Low
<b>Is Available?</b>	Y		N

### Is Auto Deducted?

This TRUE/FALSE flag indicates whether the **Quantity On Hand** amount is debited when the order item for this sample is shipped. Also, when set to “TRUE,” this field controls the **Is Available?** field (see **Is Available?** below).

### Is Available?

This is a TRUE/FALSE flag indicating whether the inventory is available for distribution. When the **Quantity On Hand** becomes less than the **Critical Amount**, the **Is Available?** field is set by the trigger to “N,” that is, the inventory record’s is marked as unavailable. Also, the **Availability Status** field, if it had been set to “Available,” will be set by the trigger to “Low inventory.”

### Status Note

Use this field to store general remarks and comments on the inventory’s availability status.

### Is Distributable?

This is a TRUE/FALSE flag indicating that this inventory sample is (or is not) the preferred lot for distribution. Genebanks typically use this field to indicate that this inventory should be distributed *first* whenever the accession has multiple inventory lots available for distribution.



GG now has significant differences in the various releases regarding this field. Review the [Multiple Inventories Available and Seasonally Available](#) section.

### Availability Status

The **Availability Status** field is a required field that was described earlier in this document. (See [Availability Status](#).)

### Availability Start and End Date

These fields only serve as comment fields and do not impact anything. A curator may use them as a reminder for when the inventory is typically available. Not used with seed inventories, but more so with cuttings and plants. However, in GG version 2.3.0 (released May 21, 2022), GRIN-Global was enhanced to have accessions seasonally available.

By including a new table, **Inventory Maint Policy Season**, GG makes it possible to identify a start and ending date in a calendar year when a specific inventory form is available. For more details, refer to the online document, [http://grin-global.org/docs/gg\\_inventory\\_seasonal\\_availability.docx](http://grin-global.org/docs/gg_inventory_seasonal_availability.docx)

## Other Inventory Fields

### Inventory Maintenance Site

When adding a new inventory record, the **Inventory Maintenance Site** is read-only (indicated by its gray color). The site is determined by the site of the owner of the **Inventory Maintenance Policy** (IMP) record. If the IMP is changed at a later date, *all existing* inventory records will now be owned by the owner of the IMP record and the **Inventory Maintenance Site** will reflect the owner's assigned site.

### Quantity On Hand

The amount of germplasm on hand for an inventory sample – the total amount of germplasm stored in the genebank. For example, this may be the number of seeds in cold storage or number on in-vitro cultures.

### Pathogen Status

The inventory sample's pathogen status. The value must be one of the PATHOGEN\_STATUS Code Group values in the Code Value table. Examples: FREE, INFECTED, TESTED.



Only the GG administrator can edit or add codes to any of the Code Groups. She uses the GG Admin Tool to do so.

### Locations Section 1...4

Four fields can be used to specify the location of an inventory sample. The four location fields can be used to reference the seed storage location such as [Room] [Row] [Rack] [Storage type]. When storing clonal germplasm, the locations may be used to refer to [Orchard] [Block] [Row] [Tree]. Any of the columns can be used or kept blank.

### Production Location

This field was added in server release 2.3.1 to the Inventory table. It can be used to capture the geography (Country, State, etc.) information about where each specific inventory lot was grown, maintained, or produced. This field simplifies identifying where the inventory lot was grown (or for clonal plants, where they are physically being propagated).

### Latitude and Longitude

Can be used to tag the location of trees in orchards or can also be used for ex-situ samples.

### Rootstock

The grafted rootstock used to propagate the inventory.

### Parent Inventory

The inventory key field linking this current inventory sample to its parent inventory. For a complete description, refer to the [Regenerating Inventory](#) section.

### Backup Inventory

The inventory key field linking this current inventory sample to a backup of the inventory at a secondary site.

### **Hundred Seed Weight**

The weight of 100 seeds from the inventory sample.

### **Pollination Method**

The pollination method used to regenerate the inventory. Must be one of the INVENTORY\_POLLINATION\_METHOD Code Group values in the Code Value table.

### **Pollination Vector**

The pollination vector used during the regeneration of the inventory. Must be one of the INVENTORY\_POLLINATION\_VECTOR Code Group values in the Code Value table.

### **Preservation Method**

This field links to a method in the method table.

### **Regeneration Method**

This field links to a method in the method table.

### **Plant Sex**

Must be one of the INVENTORY\_SEX\_CODE Code Group values in the Code Value table.

### **Propagation Date**

The date you take cuttings (or plant seed if you wish to use it for that purpose).

### **Propagation Date Format**

The date format. Must be one of the DATE\_FORMAT Code Group values in the Code Value table. Examples: MM/DD/YYYY, MM/YYYY, PRE YYYY.

### **Note**

General remarks about the inventory. As with all GG “Note” fields, not displayed on the Public Website, but used primarily for internal comment purposes.

### **Name**

The plant name ("top name") assigned to the accession whose plant\_name\_rank has the lowest value.

### **Taxon**

(Read-only) The internal species identifier which indicates the taxonomy of the accession.

### **Origin**

(Read-only) The geography key field showing where the accession was collected, developed or donated. Links to the accession\_source table.

### **Percent Viable**

(Read-only) This is a calculated field for the latest viability testing record. You can go to the rule in the viability table to find out how it was done when a rule is indicated.

### **Tested Date**

Date of the latest viability test.

## Inventory

(Read-only; calculated field) Combines the four components of the Inventory key field into one field. This is useful for the bulk adding of child records under a parent inventory. For example, when adding accession action records, you need to include the Inventory field (the combined four fields (Inventory –Prefix, –Number, –Suffix, and –Type)).

## Pure Live Seed and Percent Viable

Prior to the release of server release 1.10.6 (January 25, 2020), the get\_inventory dataview was unable to query on calculated fields such as **Pure Live Seed** and **Percent Viable**. This was resolved by creating a database view for inventory-related calculated fields and making use of that for non base table fields in the get\_inventory dataview. Nine fields are now handled differently in the get\_inventory dataview and can be used in searches: site\_id, taxonomy\_species\_id, geography\_id, plant\_name, inv\_name, percent\_viable, tested\_date, pure\_live\_seed, and inventory\_id\_string.

# Inventory Dataviews in the Accession\_Inventory Area

## Names

Since names can be assigned to either individual inventory lots or to the accession in general, the “names” dataview is stored under the **Accession/Inventory** area.

When defining a name, the user associates the name with an inventory record. Notice in the following screen, the Accession field is grayed out and is therefore a read-only field:

Site	Accessions	Accession Inventory Name	Name Group	Order Summary	Inventory	Accession Inventory Group Map	Accession Quarantine	Accession Inventory Group	Order Gra
	Accession Inventory Name ID	Accession	Inventory		Category		Name	Name Rank	Name Group
►	-1				[Null]				

When the Name record points to the system inventory record (the type code is \*\*), then the name is associated with the accession, not a specific inventory lot. In the following example, two names have both been applied at the accession level. In this example, the “PlainV” name (with the lowest **Name Rank** field) is considered the top name:

Site	Accessions	Accession Inventory Name	Name Group	Order Summary	Inventory	Accession Inventory Group Map	Accession Quarantine	Accession Inventory Group
	Accession Inventory Name ID	Accession	Inventory		Category		Name	Name Rank
►	1845939	MR 201531 REI	MR 201531 REI **		Site identifier		MR 201531 REI	1080
	1845940	MR 201531 REI	MR 201531 REI **		CGIAR International Center Identifier		PlainV	1

Refer to the **Accession Names** section in the [Accession and Passport Data](#) guide for a detailed explanation of names, including the topics of “top name” and name ranking.

```
RankCategory.Add("CULTIVAR", 10);
RankCategory.Add("UNVERIFIED", 20);
RankCategory.Add("LOCALNAME", 30);
RankCategory.Add("CGIAR", 35);
RankCategory.Add("INSTITUTE", 40);
RankCategory.Add("DEVELOPER", 50);
RankCategory.Add("DONOR", 60);
RankCategory.Add("COLLECTOR", 70);
```

```

RankCategory.Add("EXPLOREID", 150);
RankCategory.Add("PLOT", 140);
RankCategory.Add("TRANSLATION", 75);
RankCategory.Add("SITE", 80);
RankCategory.Add("QUARANTINE", 90);
RankCategory.Add("OTHER", 100);
RankCategory.Add("DUPLICATE", 110);
RankCategory.Add("MISIDENT", 120);
RankCategory.Add("TRADEMARK", 130);

```

## Name Groups

To create a **Name Group**, use the **get\_name\_group** dataview (currently in the **Accession** area); add records (supply a **Group Name**):

Get Cooperator	Get Accession IPR	Get Geography	Citation	Code Value	Get Name Group	Accession Inventory Group	Accession
Name Group ID	Group Name	Note	URL	Created			
134	MAB	Man and the Biosphere Programme - Unesco		8/10/2007			
-2				8/2/2007			

The only required field is the **Group Name**.

## How to Associate an Accession with a Name Group

Use the Accession Wizard (**Names** tab) or use the **get\_accession\_inv\_name** dataview. (You must use the dataview if the **Name Group** pertains to physical inventory (not the system inventory record).

Accession Wizard v1.9.6.43

1 of 25

PI 204624

Setaria italica subsp. viridis

Save

Save and Exit

Accession

**Names**

Source

Pedigree

IPR

Quarantine

Annotation

Voucher

Action

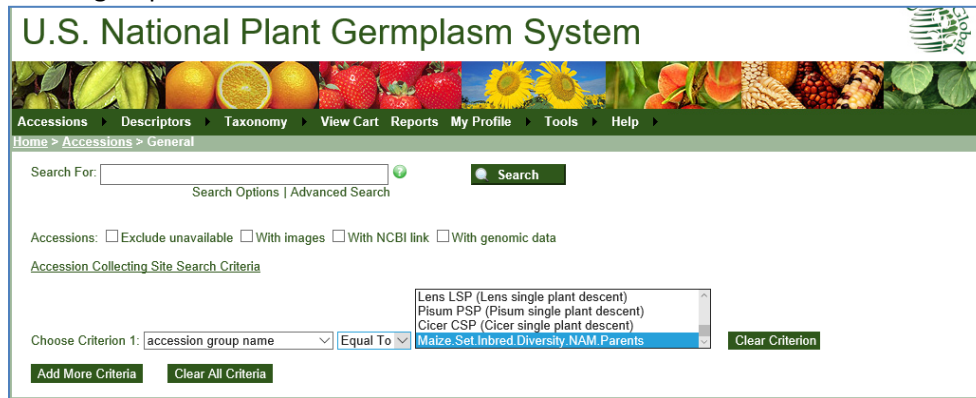
New Name

Name	Category	Name Rank	Name Group	Cooperator	Note
Dekker 1857	Institute identifier	1040	DEKKER	Dekker, Jack, lo...	
	[Null]				

Site	Accessions	Get Accession Inventory Name	Get Accession Inventory Group Map	Inventory	Accession Source Cooperator	Accession Source	Accession Action	Inventory Action	Orders
Accession Inventory Name ID	Accession	Inventory	Category	Name	Name Rank	Name Group	Cooperator	Is Web Visible?	
1811931	PI 216572	PI 216572 **	Institute identifier	Dekker 1868	1040	DEKKER	Dekker, Jack, lo...	<input checked="" type="checkbox"/>	
1811932	PI 221960	PI 221960 **	Institute identifier	Dekker 1852	1040	DEKKER	Dekker, Jack, lo...	<input checked="" type="checkbox"/>	
1811943	PI 408810	PI 408810 **	Institute identifier	Dekker 1859	1040	DEKKER	Dekker, Jack, lo...	<input checked="" type="checkbox"/>	
1811944	PI 442550	PI 442550 **	Institute identifier	Dekker 1864	1040	DEKKER	Dekker, Jack, lo...	<input checked="" type="checkbox"/>	
1811945	PI 442553	PI 442553 **	Institute identifier	Dekker 1875	1040	DEKKER	Dekker, Jack, lo...	<input checked="" type="checkbox"/>	
1811946	PI 464290	PI 464290 **	Institute identifier	Dekker 1874	1040	DEKKER	Dekker, Jack, lo...	<input checked="" type="checkbox"/>	
-26			[Null]					<input checked="" type="checkbox"/>	

## Accession Inventory Groups

Dataview displays the inventory group names used to aggregate accession and inventory records into groups -- optional, but a useful method for searching and working with accessions grouped for a specific purpose. Under Advanced Search, the accession groups can be found on the Public Website by searching for the group.



## Create Accession Inventory Groups

Use the `get_accession_inventory_group` dataview; add records (supply a **Group Name**; indicate if Web Visible or not):

Get Cooperator	Get Accession IPR	Get Geography	Citation	Code Value	Get Name Group	Accession Inventory Group	Accession
	Accession Inventory Group ID	Group Name			Is Web Visible?	Note	
▶	-1				<input type="checkbox"/>		

## Accession Inventory Group Map

Dataview which accesses the GG `accession_inv_group_map` table which makes it possible to have many-to-many relationships between accessions and inventory records with the groups.

### How to Associate Accessions with Accession Inventory Group

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

Get Cooperator	Get Accession IPR	Get Geography	Citation	Code Value	Get Name Group	Accession Inventory Group	Accession Inventory Group Map
	Accession Inventory Group Map ID	Inventory	Accession Inventory Group	Note	Created Date	Created By	
	690724	DVIT 8190 0000A PL	Grapes from FPS 2013 MAR		8/1/2016 8:32 PM	Reisinger, Martin ...	
	690725	DVIT 8190 0000B PL	Grapes from FPS 2013 MAR		8/1/2016 8:32 PM	Reisinger, Martin ...	
	690735	DVIT 8195 0000B PL	Grapes from FPS 2013 MAR		8/1/2016 8:32 PM	Reisinger, Martin ...	
	690736	DVIT 8196 0000A PL	Grapes from FPS 2013 MAR		8/1/2016 8:32 PM	Reisinger, Martin ...	
	690737	DVIT 8196 0000B PL	Grapes from FPS 2013 MAR		8/1/2016 8:32 PM	Reisinger, Martin ...	
	690738	DVIT 8197 0000A PL	Grapes from FPS 2013 MAR		8/1/2016 8:32 PM	Reisinger, Martin ...	
	690739	DVIT 8197 0000B PL	Grapes from FPS 2013 MAR		8/1/2016 8:32 PM	Reisinger, Martin ...	
▶	-393				8/2/2016 11:40 ...	Reisinger, Martin ...	

Uses inventory\_lookup and the accession\_inv\_group\_lookup

As you can see from the above topics on groups, there are two groups:

- **get\_accession\_inventory\_group** “Accession Inventory Group”
- **get\_name\_group** “Name Group.”

The following table compares them:

	Accession Inventory Group	Name Group
Dataview Title	Get Accession Inventory Group	Get Name Group
Dataview Name	get_accession_inventory_group	get_name_group
Database Area	Accession / Inventory	Accession
Create the Name by...	using the <b>get_accession_inventory_group</b> dataview; add records (supply a <b>Group Name</b> ; indicate if Web Visible or not)	using the <b>get_name_group</b> dataview; add records (supply a <b>Group Name</b> )
Associate records by...	using the <b>accession_inv_group_map</b> table	completing the <b>Name Group</b> field in the <b>Accession_Inv Name</b> records;
Group is available for Web Searches	Yes; using the Advanced Search Criterion: “accession group name”	No
Recommended Uses:	<ul style="list-style-type: none"> <li>• set up groups of accessions which can be found on the PW as a group (and ordered)</li> </ul>	<ul style="list-style-type: none"> <li>• Name Group groups plant names. An accession inventory name can belong to just one group, so the group usually refers to the source of the name or identifier</li> </ul>

## Annotations

Dataview displays fields from the **accession\_annotation** table (verifications, official taxonomic name changes, re-identifications and received as) related to the taxonomic names for each accession.

## Attach(ments)

The get\_accession-inventory\_attach dataview links images and/or documents to inventory. A new Inventory Attachment wizard was included with Curator Tool release 1.9.8.14, (released in late 2017), This is fully documented in a separate document. See: <https://www.grin->



[global.org/docs/gg\\_inventory\\_attachment\\_wizard.docx](http://global.org/docs/gg_inventory_attachment_wizard.docx) Documentation for the attachment wizard used in Curator Tool releases prior to ...14 is included in the Curator Tool User Guide.

## Voucher

Dataview accesses the table of herbarium vouchers for accessions or inventory samples. A voucher is a herbarium specimen used to document a taxonomy. The voucher record holds the information on that herbarium specimen -- what accession/lot it applies to, location of the specimen, etc.

(A herbarium is a collection of plant specimens (vouchers) arranged systematically...) A herbarium specimen is used to represent as many parts of the plant as possible including leaves, bark, flowers and fruits (seeds). (A note for NPGS Users: The accession voucher table only holds herbarium samples now so there is no need for a voucher type. The other vouchers in GRIN (images, links) are handled in the inventory attachment table.)

## Inventory Actions

The **inventory\_action** dataview refers to the actions performed on the inventory while it is at a repository (genebank). Actions can be used to indicate the initial receipt of the material, verification, transfer, back-up, regeneration, repackaging, etc. The inventory action records provide a history and a means for tracking any activities regarding the inventory lot. Recording these actions consistently across the genebank is invaluable. You can document workflow and make it easier for all to determine the inventory's current status.

In some cases, the inventory action record may hold partial information about an event before the final results are obtained, such as a germination test or pathogen test. The actions are very helpful in documenting the workflow.

The dataview uses **INVENTORY\_ACTION** codes which the GG administrator can edit or add as needed to meet an organization's practices. The Codes' **Titles** display in the dropdown for the Action Name:

The screenshot shows the 'Get Inventory Action' window. At the top, there are tabs: 'Get Taxonomy Species', 'Get Packing Slip', 'Get Inventory Maintenance Policy', 'Inventory Viability', and 'Get Inventory Action' (which is highlighted with a red box). Below the tabs is a table with columns: 'Inventory Action ID', 'Inventory', 'Action Name', 'Action Date', 'Date Format', and 'Quantity'. The table contains several rows of data. A dropdown menu is open for the 'Action Name' column of the row with 'Inventory Action ID' 3213100. The dropdown list includes: 'Backed Up', 'Balance sample(s) pulled for growing', 'Beginning of harvest', 'Cleared for seed storage', 'Cloned by division', 'Cloned by taking root cuttings', 'Cloned by taking shoot cuttings', and 'Cold treated'. At the bottom of the window, there is a 'Data Editing' section with 'Edit Data' and 'Save Data' buttons, and a 'Refresh Data' button.

Inventory Action ID	Inventory	Action Name	Action Date	Date Format	Quantity
782548	PI 435094 t80i SD	Received	09/01/1979	Complete date	
285878b	PI 435094 01 SD	Date sample placed in -18 C storage.	09/01/1979	Complete date	
3186232	PI 435094 01i SD	Planted	2001	Year only	
3186233	PI 435094 01i SD	Harvested	2001	Year only	
3212364	PI 435094 79o SD	Receive date of a previous NPGS site	09/01/1979	Complete date	
3213100	PI 435094 79o SD	Transferred to our station	04/18/2004	Complete date	18.63730
-18	PI 435094 79o SD	Backed Up		[Null]	

Ideally an organization will review and agree on a set of inventory action codes and edit the default set provided when GRIN-Global is installed. (As with all codes stored in the GG code groups, the GG administrator handles the actual editing and inputting.)

### Examples of Inventory Actions

Inventory	Action Name	Action Date
PI 435094 79o SD	Receive date of a previous NPGS site	09/01/1979
PI 435094 79o SD	Inventory seed counts on this date	03/24/2000
PI 435094 79o SD	Grams on hand at this date	03/24/2000
PI 435094 79o SD	Transferred to our station	04/18/2004

Inventory	Action Name	Action Date
Ames 19293 92ncai01 SD	Harvested	10/8/1992 1:37 AM
Ames 19293 92ncai01 SD	Stored by storage or curatorial staff	9/23/1994 5:05 PM
Ames 19293 92ncai01 SD	Pulled for planting	5/11/1998 4:40 PM
Ames 19293 92ncai01 SD	Image obtained with scanner	5/18/1998 5:45 AM
Ames 19293 92ncai01 SD	Sample bulked with another to a new lot	3/21/2000 1:28 PM

Get Genetic Observation	Accession Source	Inventory	Inventory Maintenance Policy	Inventory Action	Orders	Order Request Item	Cooperators	Crop	Citation	A
Inventory Action ID	Inventory	Action Name	Action Date	Date Format	Quantity	Units	Form			
3361852	PI 503568 08ncal01 SD	Planted	05/16/2008	Complete date	120.00000	count	SD			
3384867	PI 503568 08ncal01 SD	Count of plants in regeneration plot	06/20/2008	Complete date	107.00000	count	PL			
3411962	PI 503568 08ncal01 SD	Count of plants in regeneration plot	07/03/2008	Complete date	91.00000	count	PL			
3423705	PI 503568 08ncal01 SD	Harvested	10/16/2008	Complete date	1.00000	packet	SD			
3558597	PI 503568 08ncal01 SD	Image obtained with scanner	09/02/2009	Complete date	4.00000	count	ER			
3561134	PI 503568 08ncal01 SD	Image obtained with scanner	09/15/2009	Complete date			SD			
3564379	PI 503568 08ncal01 SD	Number sampled in a balanced sample	09/09/2009	Complete date	13.00000	count	ER			
3564380	PI 503568 08ncal01 SD	Number Sampled Unequally	09/11/2009	Complete date	13.00000	count	ER			
3564381	PI 503568 08ncal01 SD	Cleared for seed storage	09/25/2009	Complete date						
3604212	PI 503568 08ncal01 SD	Stored by storage or curatorial staff	12/21/2009	Complete date	1435.00000	count	SD			
3604213	PI 503568 08ncal01 SD	Date lot made available	12/21/2009	Complete date	1435.00000	count	SD			
3605112	PI 503568 08ncal01 SD	Date distribution increase from germ.	12/24/2009	Complete date	1435.00000	count	SD			



Besides the inventory actions dataview, there is also an **accession\_action** dataview which generally displays data pertaining to actions performed on an accession. Accession actions in GRIN (Classic) were created not only for actions done on an accession as a whole, but to keep information on how the accession was being handled, treated, documented, etc.

The **accession\_action** data evolved from the inactivation process where there is a need to document that the accession died, include details, but not display the details to the public. In the NPGS, the use of accessions actions has also been used to document the passport review process which is difficult to do in one sitting, but can be done over time. The actions can be used to indicate what has and has not been reviewed.

## Inventory Actions Fields

### Fields

Inventory Action ID	Units
Inventory	Form
Action Name	Cooperator
Action Date	Method
Date Format	Note
Quantity	

### Required Fields

- Inventory
- Action Name
- Action Date

Get Site	Accessions	Inventory	Inventory Maintenance Policy	Inventory Action	Cooperator	Accession Action	Web Order Request	Web Order Request			
Inventory Action ID	Inventory	Action Name	Action Date	Date Format	Quantity	Units	Form	Cooperator	Method	Note	
-1		[Null]		[Null]		[Null]	[Null]				

Refer to the online [dictionary](#) for complete field definitions.

# Inventory Quality Status

The **Inventory Quality** dataview uses the pathogen tests table which stores the results of pathology tests for an inventory sample. These results can be either individual test results or summary results from a group of tests.

## Fields

Inventory Quality Status ID	Completed Date
Inventory	Completed Date Format
Test Type	Required Replication Count
Contaminant	Started Count
Plant Part Tested	Completed Count
Test Result	Replicate
Test Results Score	Plate Or Assay Number
Test Results Score Type	Method
Started Date	Testing Cooperator
Started Date Format	Note

## Required Fields

- Inventory
- Test Type (uses the **PATHOLOGY\_TEST\_TYPE** Code Group)
- Contaminant (uses the **PATHOLOGY\_TEST** Code Group)

Inventory Action	Cooperator	Accession Action	Inventory Quality Status	Web Order Request	Web Order Request Item	Orders	Order Request Item	Cooperator
	Inventory Quality Status ID	Inventory	Test Type	Contaminant	Plant Part Tested	Test Result	Test Results Score	Test Results Score Type
▶	-1		[Null]	[Null]	[Null]	[Null]		[Null]

There are five dropdowns used by the **Inventory Quality** dataview. These dropdowns use codes stored in the Code Groups (maintained/edited by the GG administrator for the organization):

- PATHOLOGY\_TEST\_TYPE
- PATHOLOGY\_TEST
- GERMPLOSM\_FORM
- PATHOLOGY\_TEST\_RESULT
- PATHOLOGY\_TEST\_SCORE\_TYPE

If any pathology-test related codes are not in the database, contact the GG administrator to include them.

# Viability Testing

## Viability

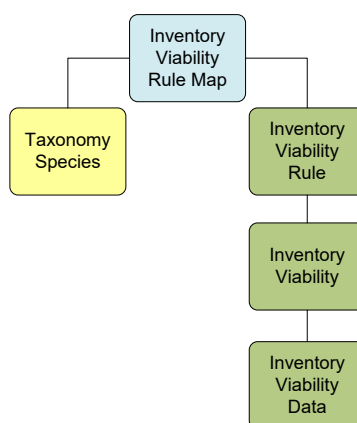
Viability testing is typically done when:

- a new seed sample arrives at a genebank (and the sample has enough seed to be germinated)
- newly regenerated seed samples are being prepared for storage
- periodically to assure viability of seed lots (“maintenance testing”)

## Viability Wizard and the Viability Dataviews

The **Inventory Viability** dataview uses the table of seed germination results and other viability tests. There are three related dataviews in the Curator Tool: **Inventory Viability**, **Viability Rule**, and **Viability Data**.

The GRIN-Global Viability table family has several interrelated tables:



A Viability Wizard was added to the Curator Tool to automate the process of aggregating the raw viability testing data stored in the viability\_data dataview. Refer to the online document for details: [https://www.grin-global.org/docs/gg\\_viability\\_wizard.docx](https://www.grin-global.org/docs/gg_viability_wizard.docx)



This Viability Wizard was not available in the Curator Tool builds up through version 1.9.6.43. Many genebanks opt to track viability using spreadsheets or other external tools. They then bulk add the viability data later into GG.

## Inventory Viability Dataview

Refer to the GG online [dictionary](#) for descriptions of each field (or when viewing the dataview, roll the mouse over the heading to display the column description).

Taxonomy Author	Source Descriptor	Cooperator - List Users at a Site	Order Request Attach	Inventory Viability Rule	Inventory Viability						
Inventory Viability ID	Inventory Viability Rule	Inventory	Test Date Format	Tested Date	Percent Normal	Percent Abnormal	Percent Dormant	Percent Viable	Vigor Rating	Sample Count	
1118258	NC7.GERMS.MAIZ...	Ames 15929 03n...	mm/dd/yyyy	03/03/2004	92	0	0	92		200	
1766132	NC7.GERMS.MAIZ...	Ames 15929 03n...	mm/dd/yyyy	02/08/2012	94	1	0	94		200	

The **Inventory Viability** table aggregates the results of inventory tests. The raw data collected in each viability test replicate is stored in the **Inventory Viability Data** table. The Inventory Viability wizard automates the aggregation of the raw data.

Note: some genebank's using GRIN-Global store their data in the corresponding viability tables, but may opt for a different method of collecting the data, rather than use the GG Viability Wizard. For instance, one Genebank uses a macro driven spreadsheet to collect and store its raw test data.

## Germination Tests

Germination tests are conducted for different purposes such as in preparation for storage after a harvest or ongoing (maintenance).

For storage germination tests, a germination order is prepared when all the lots in a particular crop are ready for storage. This is usually done once a year after the material has been cleaned and is ready for storage (i.e. all the cucumber that were grown in 2014 will be germinated all at the same time – after which they are ready for storage).

For maintenance germination tests, a germination order is usually prepared after reviewing a particular collection (such as maize) and checking which lots need testing (in the case of maize, it is every ten years). See the [Pure Live Seed](#) section.

## Viability Rule Dataview

The **Inventory Viability Rule** describes the germination test conditions including the temperature range, the moisture, lighting, etc. (Note to GRIN users – in GRIN, this was the **Environment** name.)

Inventory Viability Rule ID	Name	Requirements	Temperature Range	Substrate
492358	NC7 GERMS MAIZE STANDARD	200 SEEDS, 4 REPS WITH 50 SEED/REP. PAPER TOWELS AND WATER IN TUBS WITH NO HOLES ON BOTTOM. 20/30C TEMP. 12/12h NIGHT/DAY. COUNTS ON DAYS 7,10 AND 14. THIS EVALUATION DOES NOT COUNT ABNORMALS UNTIL THE VERY LAST COUNT OF THE TEST. BECAUSE OF INBREEDING DEPRESSION MORE RELAXED PARAMATERS WILL BE USED TO CLASSIFY SEEDLINGS AS NORMAL.		
494065	NC7.GERMS.MAIZE INBREDS	Seeds are placed in folded paper towels moistened with tap water - paper towels are 'squeeged' to remove excess water prior to seed placement. The paper towel units are placed in plastic tubs covered with clear plastic wrap to help maintain moisture. These are kept overnight at room temperature and then put in germinators with the temperature set at a constant 25 C with light for 12 hours followed by darkness for 12 hours per 24 hour cycle. Replication and sample size: 4 reps of 50 seed each for a total of 200 seeds. Counts are done 7, 10, and 14 days after start of test. Abnormals are not scored until the last count of the test. Because of inbreeding depression in inbred lines, more relaxed parameters are used to classify seedlings as normal.		
495534				

## Pure Live Seed (Calculating Live Seed by Using Germination Test Rates)

In server release 1.10.3, a calculated field was added to the Inventory dataview. The calculation is derived by multiplying the quantity on hand with the latest germination percentage to get “pure live seed” (the actual number of viable seed propagules).

For example, if you have 1000 seeds and the germination test says 50%, then you only have 500 seeds that are viable.



Get Site	Accessions	Inventory	Inventory Quality Status	Get Accession	Inventory Name	Orders	Cooperators	Get Taxonomy Species	Site S9 IVALL	Get Order Re
	Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Quantity On Hand	Percent Viable	Tested Date	Pure Live Seed
▶	1202915	Ames	2642	83ncao01	SD	Ames 2642	511.00000	4	2/1/1994 8:51 PM	20.440000
	1193715	Ames	5125	90nceo01	SD	Ames 5125	6372.00000	1	7/12/1995 2:47 ...	63.720000
	1197604	Ames	2186	81ncao01	SD	Ames 2186	4112.00000	72	8/1/1984 1:41 PM	2960.640000
	1197702	Ames	5138	86ncao01	SD	Ames 5138	4081.00000	50	7/13/1995 6:10 ...	2040.500000
	1199645	Ames	15302	90ncao01	SD	Ames 15302	11400.00000	26	3/8/2007 5:35 AM	2964.000000
	1201382	Ames	2106	90nceo01	SD	Ames 2106	5585.00000	10	6/27/1995 6:58 ...	558.500000
	1201386	Ames	2107	90nceo01	SD	Ames 2107	4527.00000	14	6/27/1995 6:06 ...	633.780000

In the following example, at first glance it appears that these inventory lots have a **Quantity On Hand** that is sufficient, that is, greater than the **Distribution Critical Amount**:

Accessions													Inventory	Orders	Cooperators	Get Inventory Viability Data	Inventory Viability	Get Inventory Maintenance Policy	Get Inventory Action	Get Inventory Quality Status	C	
	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Is Default Inventory?	Is Available?	Availability Status	Quantity On Hand	Quantity On Hand Units	Distribution Critical Amount										
▶	Ames	33990	17ncao01	SD	Ames 33990	NC7-woody.landsc...	Y	Y	Available	1631.00000	count	1500.00000										
	Ames	31676	12ncao02	SD	Ames 31676	NC7-woody.landsc...	Y	Y	Available	1724.00000	count	1500.00000										
	Ames	30609	10ncao51	SD	Ames 30609	NC7-woody.landsc...	Y	Y	Available	1700.00000	count	1500.00000										
	Ames	34788	19ncwo02	SD	Ames 34788	NC7-woody.landsc...	Y	Y	Available	1667.00000	count	1500.00000										
	Ames	30495	10ncao01	SD	Ames 30495	NC7-ornamentals	Y	Y	Available	8871.00000	count	8000.00000										
	Ames	34794	19ncwo02	SD	Ames 34794	NC7-woody.landsc...	Y	Y	Available	1867.00000	count	1500.00000										
	Ames	31067	11ncao01	SD	Ames 31067	NC7-woody.landsc...	Y	Y	Available	2136.00000	count	2000.00000										

However, looking further (and scrolling to the right), the amount of *viable* seed may be less than the **Distribution Critical Amount**:

Accessions	Inventory	Orders	Cooperators	Get Inventory Viability Data	Inventory Viability	Get Inventory Maintenance Policy	Get Inventory Action	Get Inventory Quality Status	
	Is Default Inventory?	Is Available?	Availability Status	Quantity On Hand	Quantity On Hand Units	Distribution Critical Amount	Replenishment Critical Amount	Percent Viable	Pure Live Seed
▶	Y	Y	Available	1631.00000	count	1500.00000	1500.00000	90	1467.900000
	Y	Y	Available	1724.00000	count	1500.00000	1500.00000	87	1435.680000
	Y	Y	Available	1700.00000	count	1500.00000	1500.00000	85	1445.000000
	Y	Y	Available	1667.00000	count	1500.00000	1500.00000	84	1400.280000
	Y	Y	Available	8871.00000	count	8000.00000	1500.00000	80	7096.800000
	Y	Y	Available	1867.00000	count	1500.00000	1500.00000	80	1493.600000
	Y	Y	Available	2136.00000	count	2000.00000	2000.00000	72	1537.920000
	Y	Y	Available	1981.00000	count	1500.00000	1500.00000	68	1347.080000
	Y	Y	Available	2941.00000	count	2000.00000	1500.00000	68	1999.880000

The inventory lot's most recent viability test had results of 90% viable. The **Pure Live Seed** (the "viable" seed), is a calculated field, and in the two cases circled for illustration, you can see that the **Pure Live Seed** quantity is less than the desired **Distribution Critical Amount**, even though the **Quantity On Hand** is greater.

The following code can be used in the Search Tool to identify lots with viable seeds in quantities less than the **Distribution Critical Amount**:

```

WHERE inventory_number_part1 = 'Ames'
AND quantity_on_hand > regeneration_critical_quantity
AND @inventory.is_distributable = 'y' AND @inventory.is_available = 'y'
AND
@vc_inventory.pure_live_seed < @inventory.distribution_critical_quantity

```

In my example above, I used the Prefix “Ames” to filter from all of the “Ames” inventory records in the database. But other criteria could be included. One useful technique is to filter by a specific **Inventory Maintenance Policy**, such as in the following example:

Basic Query

Search Now!

Find: ☒ Default ☐ accession

Matching: ☐ Any Word ☒ All Words ☐ List of Items

Search Criteria

WHERE @inventory.quantity\_on\_hand > inventory.regeneration\_critical\_quantity  
AND  
@inventory.is\_distributable = 'y' AND @inventory.is\_available = 'y'  
AND  
@vc\_inventory.pure\_live\_seed < @inventory.distribution\_critical\_quantity  
AND  
@inventory\_maint\_policy.maintenance\_name = 'NC7-medicinals'

Search Results

Add To Query Clear Query Limit: 5000 Page Size

Accession Get Inventory Get Cooperator Get Order Request Inventory Maintenance Policy Get Accession Inventory Attach Get Web Order Request Get Code Value Language ...

Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Is Default Inventory?	Is Auto Deducted?	Is Available?	Availability Status	Status
2366821	PI	618712	00ncal01	SD	PI 618712	NC7-medicinals	NC7	Y	Y	Y	Available	
2422255	PI	631252	02ncab01	SD	PI 631252	NC7-medicinals	NC7	Y	Y	Y	Available	
2500302	PI	618688	03ncal01	SD	PI 618688	NC7-medicinals	NC7	Y	Y	Y	Available	

The code above:

```

WHERE @inventory.quantity_on_hand > inventory.regeneration_critical_quantity
AND
@inventory.is_distributable = 'y' AND @inventory.is_available = 'y'
AND
@vc_inventory.pure_live_seed < @inventory.distribution_critical_quantity
AND
@inventory_maint_policy.maintenance_name = 'NC7-medicinals'

```

In the query above, 13 inventory lots were identified as having quantities of viable seeds that were less than the desired distribution quantities.

Search Results

Add To Query Clear Query Limit: 5000 Page Size

Accession Get Inventory Get Cooperator Get Order Request Inventory Maintenance Policy Get Accession Inventory Attach Get Web Order Request Get Code Value Language ...

Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Is Default Inventory?	Is Auto Deducted?	Is Available?	Availability Status	Quantity On Hand	Distribution Critical Amount	Pure Live Seed	Percent Viable	Status Note
12	NC7-medicinals	NC7	Y	Y	Y	Available	4600.00000	1500.00000	1288.000000	28	
52	NC7-medicinals	NC7	Y	Y	Y	Available	1880.00000	1500.00000	1410.000000	75	
88	NC7-medicinals	NC7	Y	Y	Y	Available	1718.00000	1500.00000	1357.220000	79	
53	NC7-medicinals	NC7	Y	Y	Y	Available	18350.00000	1500.00000	0.000000	0	Seed smaller than critical
14	NC7-medicinals	NC7	Y	Y	Y	Available	2090.00000	1500.00000	1065.900000	51	Needs additional seed



## Pathology Testing

The pathology information goes in the **Inventory Quality Status** dataview – the dataview also holds the GEO (Genetically Engineered Organism (“GMO”) data.

Accessions	Accession Inventory Name	Name Group	Order Summary	Inventory	Inventory Quality Status	Accession Inventory Group Map	Accession Quarantine	Accession In	
Inventory Quality Status ID	Inventory	Test Type	Contaminant	Plant Part Tested	Test Result	Started Date	Method	Note	
68674	Ames 15...	Field Observation	Clavibacter michiganensis subsp. nebrask		Negative test result	09/03/2003		Inspection performed by C	
90458	Ames 15...	Field Observation	Cochliobolus heterostrophus(Drechs.)Drec		Negative test result	09/03/2003		Inspection performed by C	
130741	Ames 15...	Field Observation	Wheat streak mosaic virus (WSMV)		Negative test result	09/03/2003		Inspection performed by C	
67166	Ames 15...	Field Observation	Erwinia stewartii		Positive test result	09/03/2003		Approx. 50% plants infect ~15% diseased leaf area. Inspection performed by C	
73403	Ames 15...	Field Observation	Sclerophthora macrospora (Sacc.)Thurmal		Negative test result	09/03/2003		Inspection performed by C	
69586	Ames 15...	Elisa test	Erwinia stewartii		Negative test result	06/29/2004		2 sets of 100 kernels wer	

In the above example, two highlighted records are for the same inventory lot. The first record shows that the field observation was positive for Stewart’s Wilt, but then the ELISA lab test was performed and demonstrated that the lot was clear and suitable for exportation.

## Regenerating Inventory

In planning for seed regeneration, site manager/curators consider population size, method of pollination, compatibility factors, presence of seed-borne pathogens or pests, susceptibility to indigenous pests, and risks of gene flow or other factors that complicate efforts to maintain germplasm true-to-type.

There are multiple steps in GRIN-Global to be followed when a genebank regenerates their inventory. The first step of course is to determine what inventory is low.

### Search for Low Inventory

Search for your inventory maintenance polices and low amounts of germplasm Refer to the [Pure Live Seed](#) section.

## Create Replenishment Orders

### Prioritize Inventory that Need Replenishment

Drag the search results to a spreadsheet. Use whatever criteria you consider necessary and prioritize the inventory which you intend to increase. One way to prioritize is to add a **Priority** column in your spreadsheet and then use a scale to manually rate the priority.

GRIN-Global v1.9.6.19

FileToolsHelp

Search...Accession WizardCooperator WizardOrder Wizard

Show lists from:

Singer, Martin, USDA, ARS

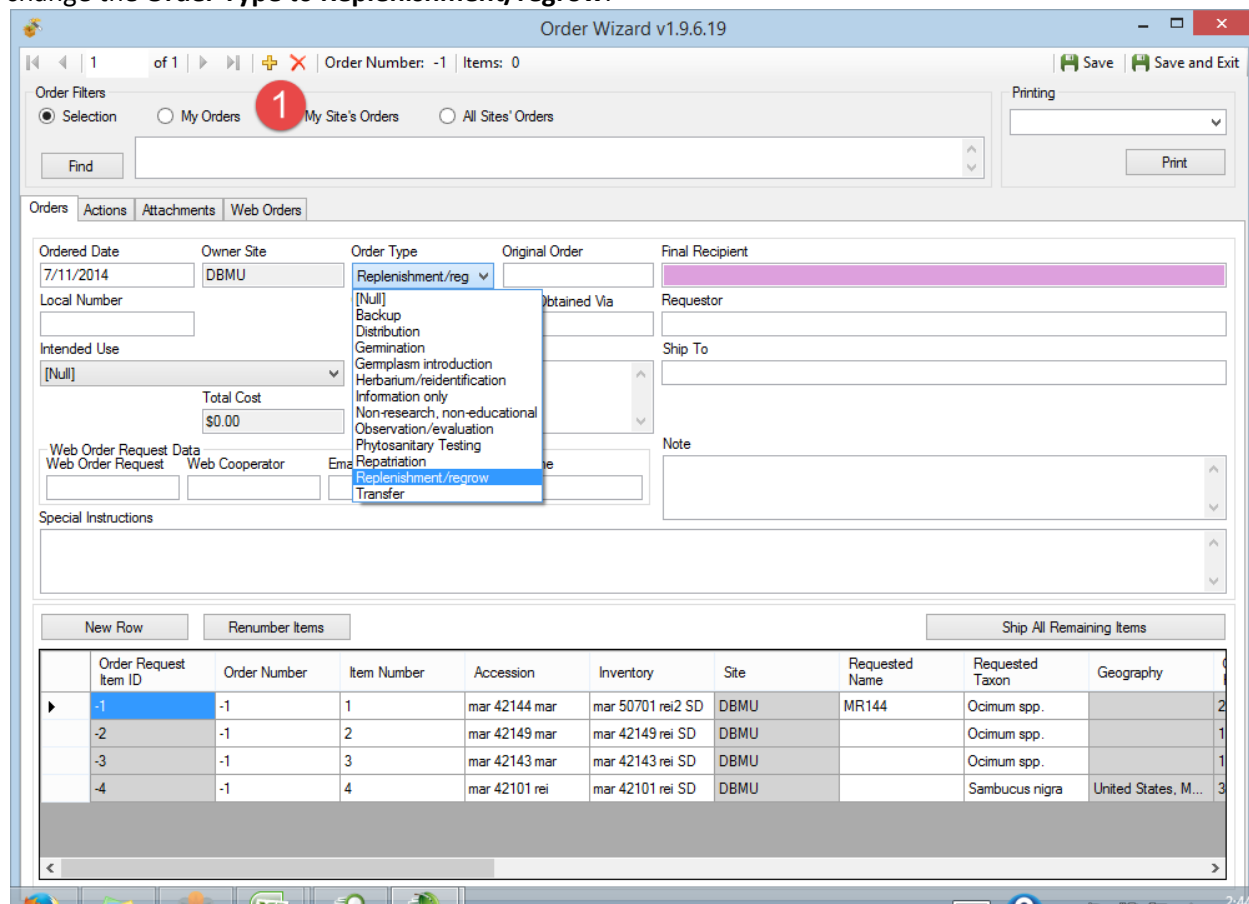
Include Sub-Folders

AlliumInventory-Regen RInventory-Regen RNew List

Site	Accessions	Inventory	Accession Quarantine	Get Accession Action	Accession IPR Citation	Accession Source Cooperator	Name Group	Accession Citation	Orders	Order Request		
	Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Is Distributable?	Is Auto Deducted?	Is Available?	Availability Status
	4922553	mar	42101	rei	SD	mar 42101 rei	MAR-ELDERBE...	DBMU	Y	Y	N	Low inventory
	4917816	mar	42143	rei	SD	mar 42143 mar	MAR-ELDERBE...	DBMU	Y	Y	N	Low inventory
	4917822	mar	42149	rei	SD	mar 42149 mar	MAR-ELDERBE...	DBMU	Y	Y	N	Low inventory
	4920452	mar	50701	rei2	SD	mar 42144 mar	MAR-ELDERBE...	DBMU	Y	Y	N	Low inventory

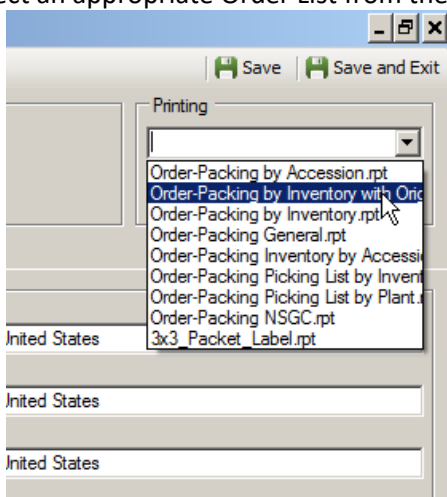
### Add Low Inventory Items to an Order via the Order Wizard

To create a new replenishment order, you can start a new order: drag inventory records from the spreadsheet into the Order Wizard grid; use the New Order (the **+** button); indicate a recipient; and change the **Order Type** to **Replenishment/regrow**:



Order Request Item ID	Order Number	Item Number	Accession	Inventory	Site	Requested Name	Requested Taxon	Geography
-1	-1	1	mar 42144 mar	mar 50701 rei2 SD	DBMU	MR144	Ocimum spp.	
-2	-1	2	mar 42149 mar	mar 42149 rei SD	DBMU		Ocimum spp.	
-3	-1	3	mar 42143 mar	mar 42143 rei SD	DBMU		Ocimum spp.	
-4	-1	4	mar 42101 rei	mar 42101 rei SD	DBMU		Sambucus nigra	United States, M...

Select an appropriate Order List from the **Print** dropdown:



Click the **Shipped All Remaining Items...** button. When prompted, you can add the order to a list in the CT.

## Create New Inventory Records Indicating Their Parents

To plan for the new physical inventory, you will want to create inventory records in GG. After the germplasm has been grown and harvested, you can update these records with the quantity on hand, the storage location, etc.

### Steps:

Drag into Excel the original inventory records that were used to generate the order request Items. Since you are using the old records as the basis for making new records, you will need to clear the **Inventory ID** (otherwise you would be updating the original records).

Also, clear the **Location** and the **Suffix** fields and assign the new inventory a new suffix name corresponding with your site's naming conventions. ([Examples](#)) The **Availability Status** of these new records should be "Planted for regeneration" (if that truly reflects the status).

Delete any columns that you do not intend to drag into the CT (or simply rearrange the spreadsheet columns). Remember that when you drag and drop, the CT matches columns by their mutual headings (Excel and the CT), and does not care about the column order.

Inventory that results from regeneration efforts needs to reflect its parent inventory.



Since you are using the original Inventory records as a basis for creating new inventory records, in Excel rename the **Inventory** field to **Parent Inventory**. (Scroll to the right to see this **Inventory** field.)

AP	AQ	AR	AS	AT	AU	AV	AW	AX
ic Note	Name	Taxon	Origin	Percent Vi	Tested Date	Inventory	Created Da	Created B
	Default As	MAR 1021	Ribes americanum			MAR 102102 rei SD	#####	Reisinger,

⤵

Rename this field  
**Parent  
Inventory**

After successfully adding the new inventory records in the CT, for each accession you should have the original inventory record and a new one modeled after the original.

Get Genetic Observation   Accession Source <b>Inventory</b> Inventory Maintenance Policy   Inventory Action   Orders   Order Request Item   Cooperators   Crop   Citation   A												
Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Is Distributable?	Is Auto Deducted	Is Available	Parent Inventory	
28155...	PI	503568	08ncal01	SD	PI 503568	NC7-maize.pop	NC7	Y	Y	Y	PI 503568 86ncab01 SD	

At this point, you can use these new inventory records to manage and input data such as **Propagation Dates, Regeneration Methods**, etc.

Create Inventory Action records to document your activities and tasks relevant to the handling of the inventory. (Refer to the [Inventory Actions](#) section for details.)

After the regeneration process is completed, update the new inventory records with their respective quantities and so on.

## Appendix: Inventory Naming Conventions

### Inventory Suffix

Organizations will need to create their internal naming standards for naming inventory. (This is also true for naming accessions.) The table below is primarily focused on seeds; below the table is a second example with clonal names.

The example and table below illustrates how one GG site uses the inventory suffix in a sophisticated way to be consistent in naming their inventory.

Example inventory: **AMES 10848 1990ncai01**  
 (prefix) (number) (suffix)

#### Suffix

Character Position	Denotes	Valid Codes	Code Meaning
1 - 4	<b>year the material received or grown or bulk created</b>		
		1990	
5 – 6	<b>abbreviation of the site</b>		
		nc	North Central
7	<b>information about the source of the seed lot</b>		
		a	sample was increased (or bulked) in Ames or the sample is the first sample received when the accession first appeared as an Ames number
		n	sample received from NE-9, Geneva, NY
		s	sample received from S-9, Griffin, GA
		w	sample was received from W-6, Pullman, WA
		f	sample received from NCGRP (formerly NSSL), Fort Collins, CO
		p	sample increased or bulked at the PIO office or any outlying station connected with the Beltsville, MD office
		e	sample was received from somewhere other than one of the above mentioned possibilities (“elsewhere”)
		u	source of the seed is unknown
8	<b>contains information on the type of seed lot</b>		
		o	sample is original for the accession
		i	sample is an increase or material that arrived later

Character Position	Denotes	Valid Codes	Code Meaning
		b	sample is a bulk of similar increases or originals
		x	sample is being grown as a check variety
		u	sample is of unknown origin
9 – 10	in lots maintained as seeds, these two characters denote the lots for that accession for a given year		
	<b>Examples</b>		
	1990ncai01		seed was grown in 1990
	2001ncao01		seed received as original in 2001
	1990ncai01		first increase lot for the year 1990
	1990ncai02		the second lot increased in the year 1990
	1990ncab01		first bulk made for that accession in 1990
	1990ncao01		first original – the accession was received in 1990
	1990ncao02		second original received in 1990
9 – 10	When original samples are split for distribution. For example, the original lot is maintained in the freezer. Characters 9 and 10 will be set to <b>51</b> to denote that split lot.		
	<b>Example</b>		
	1990ncao01		original lot
	1990ncao51		distribution part of original lot 1990ncao01
	1990ncao02		original lot
	1990ncao52		distribution part of original lot 1990ncao02
9	For lots that are not seeds		
		c	sample came in as and must be maintained as clonal material
		m	sample represents a genetically mixed sample
		u	genetic variability of the sample is unknown
	<b>Example</b>		
	1988nceim2		second lot of tubers from the accession received in 1988

### Clonal Example

The following (partial) inventory data illustrates inventory names used for a clonal accession that has multiple inventory records:

Site	Accessions	Accession Inventory Name		Inventory	Accession Inventory Group		NE9 Site Inventory	NC7 Site Inventory	Web Order Request	Inventory	
	Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Parent Inventory		
	1023067	DACT	41		CT	PI 667908	ARCHIVE	DAV			
	4001383	PI	667908		**	PI 667908	SYSTEM	DAV			
	2205458	DACT	41		PL	PI 667908	ARCHIVE	DAV	DACT 41 0000A PL		
	2266819	DACT	41	0000A	PL	PI 667908	Hardy Kwifruit	DAV			
	2266786	DACT	41	0000B	PL	PI 667908	Hardy Kwifruit	DAV	DACT 41 0000A PL		
	2266514	DACT	41	0000C	PL	PI 667908	Hardy Kwifruit	DAV	DACT 41 0000A PL		
	2593324	DACT	41	0000F	IV	PI 667908	Hardy Kwifruit	DAV	DACT 41 0000A PL		
	2729711	DACT	41	0000G	IV	PI 667908	Hardy Kwifruit	DAV	DACT 41 0000A PL		

## Appendix: Frequently Asked Questions (Inventory)

### Question:

What are these Inventory records that have a double asterisk (\*\*) for their type?

### Answer:

See the explanation under [Virtual \(System-Generated\) Inventory](#)

## Appendix: Document Change Notes

### – April 17, 2024

- Wording revisions / screens updated
- Reformatting changes

### – September 29, 2022

- Major editing/revision of the document
- Included recent inventory-related changes to GG

### – October 13, 2021

- Added note and a screen regarding system inventory records

### – July 13, 2021

- Changed references to Pure Live Seed; also minor wording changes

### – June 29, 2021

- Changed references from Taxonomy Use to Taxonomy Regulation

### – September 17, 2020

- Added an additional note about ownership under [Inventory Maintenance Policy](#) bullets

### – August 13, 2020

- Minor wording changes to the regeneration section

### – April 2, 2020

- simplified table regarding available and visible
- revised and annotated the available statuses displayed on the Public Website

### – February 29, 2020

- added text regarding calculated fields
- revamped table explaining available inventory to reflect the capability to have multiple forms available

### – December 6, 2019

- expanded description of the Top Name trigger

### – August 10, 2018

- added INACTIVE status to the table of availability statuses

### – May 23, 2018

- added new section on the Pure Live Seed calculated field
- corrected graphic re maintenance policy – the **autodeduct** field is not carried over to the inventory record



### – May 16, 2018

- tip about using Inventory Maintenance Policies to filter records
- included link to the online Grouping Summary document

### – December 22, 2017

- elaborated on the wording pertaining to inventory maintenance policy
- added images for the Web Availability Note section

### – September 21, 2017

- minor wording change in the system inventory section
- a link was added to the separate Viability Wizard document

### – August 2, 2016

- added more information about accession inventory groups and accession name groups

### – January 22, 2016

- added a note regarding clonals need to have a Qty-on-hand inventory
- edited the table regarding what determines availability

### – November 5, 2015

- added a note regarding changing permissions for creators of inventory records

### – September 28, 2015

- added additional details for adding a new Inventory record

### – September 8, 2015

- added details on the image attachments – specifically the affect of the two Category codes **Image attachment** and **URL link**

### – April 29, 2015

- changed minor wording in the viability dataviews section

### – April 14, 2015

- added note explaining that a change to an Inventory Maintenance Policy will not impact existing inventory records
- added Inventory Maintenance Policy to the Table of Contents
- added complete section on Accession / Inventory Names
- added text for the Viability and Inventory Quality Status sections

### – March 26, 2015

- significant editing of the entire document
- added example of a site's naming convention for the suffix

– **March 13, 2015**

- added additional details on auto deduct

– **November 3, 2014**

- added additional details regarding the **Is Available?** trigger