#### GRIN-Global

"Detailed Structure"

### GRIN-Global Components

Accessions (MCPD)

**Searching** 

**Inventory** 

Requests

Cooperators

Observations

**Attachments** 

**Actions** 

Customization

**Taxonomy** 

<u>Public</u> Website

Wizards

## GG Components

#### Genebank staff use:

- Curator Tool
- Search Tool
- Public Website

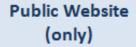
## GG administrators also use:

- Admin Tool
- Updater





## GG Components



No GG software is installed; only requires a browser





Curator Tool (& Search Tool)

CT is installed via its selfinstalling .exe file

GRIN-Global.Client.Installer...exe



GRIN-Global Network Server

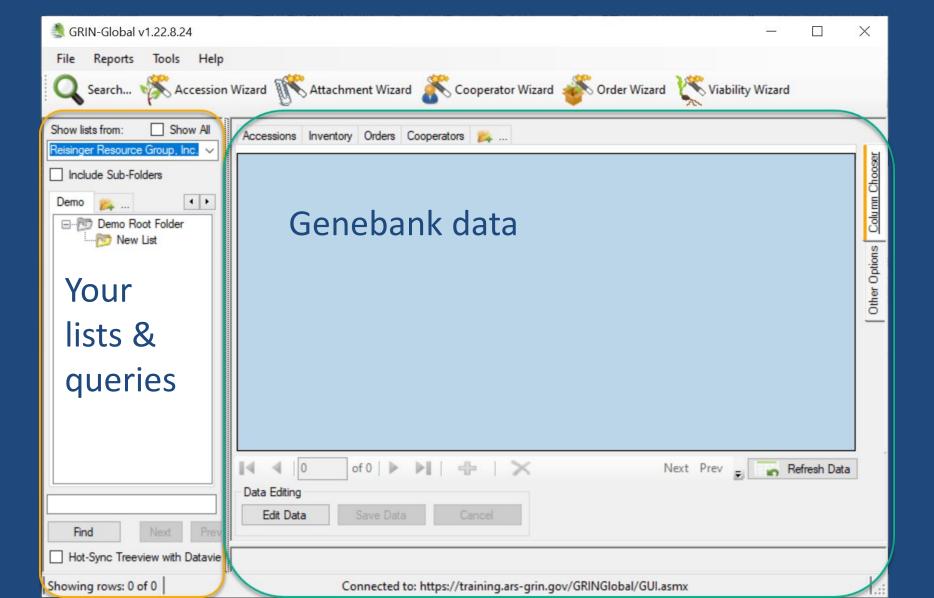
The GG Updater



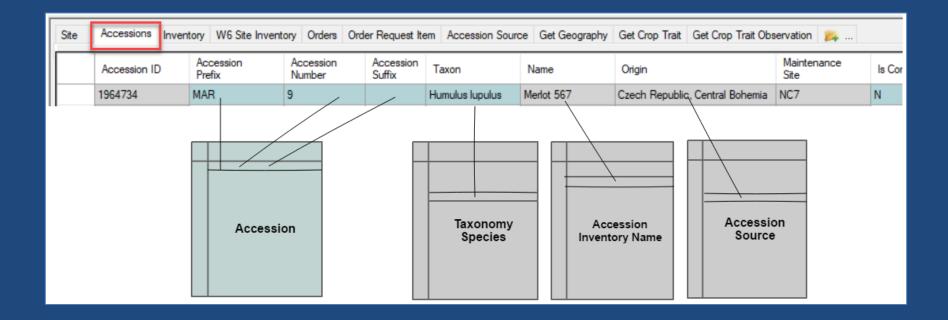
installs the
Server Components
(Admin Tool, Middle Tier,
IIS-Web server, GG website,
Search Engine, Database Engine)



#### CT Interface



#### Dataviews



#### Accessions

- accession records should be created immediately initially, only a few fields are necessary
- an accession's passport data is stored in multiple tables
- the Accession Wizard facilitates data entry
- one required field is the accession's Taxon users select the taxon from a list of accepted species names

#### 3 ways to add / edit accessions

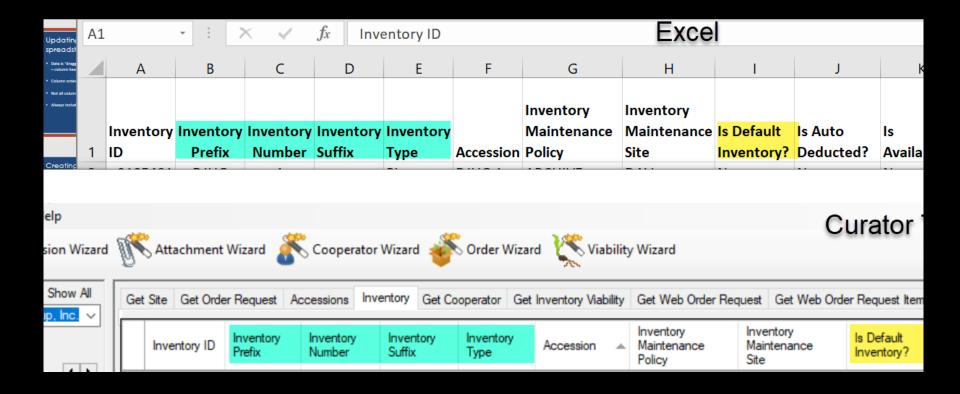
one at a time – in the Accession dataview

- one at a time via the Accession Wizard
  - Recommended

 many at a time – dragging data via a spreadsheet into the Accession dataview

# Updating GG data via spreadsheets

column headings' spelling must match



# Updating GG data via spreadsheets

- Column order does not matter
- Not all columns are needed

## Updating GG Data via spreadsheets

- Always include the ID column heading but, when...
  - adding new records:
     the spreadsheet ID cells are empty
  - updating existing records:
     the ID fields must match existing records' IDs

### Demo

## Searching

## Searching (Public Website)

U.S. National Plant Germplasm
System

Log in New User

New User

Version: 2.3.1 Accessions Descriptors Reports GRIN Taxonomy ▼ GRIN ▼ Help Contact Us Your Profile ▼



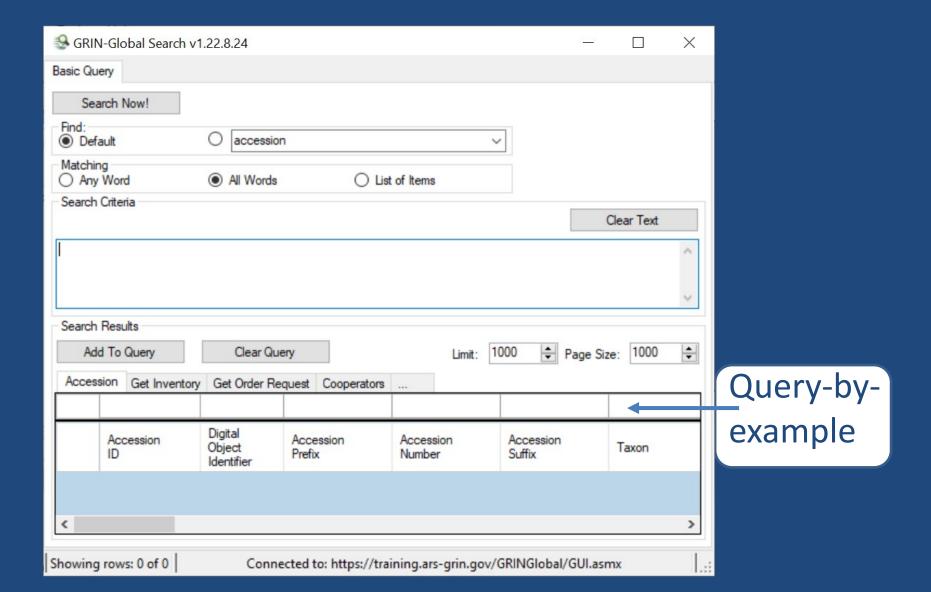
Select the tab for the type of search. Each tab has everything you need to do to perform that type of search.

Return up to 500 V

(Results of more than 500 will not return images.)

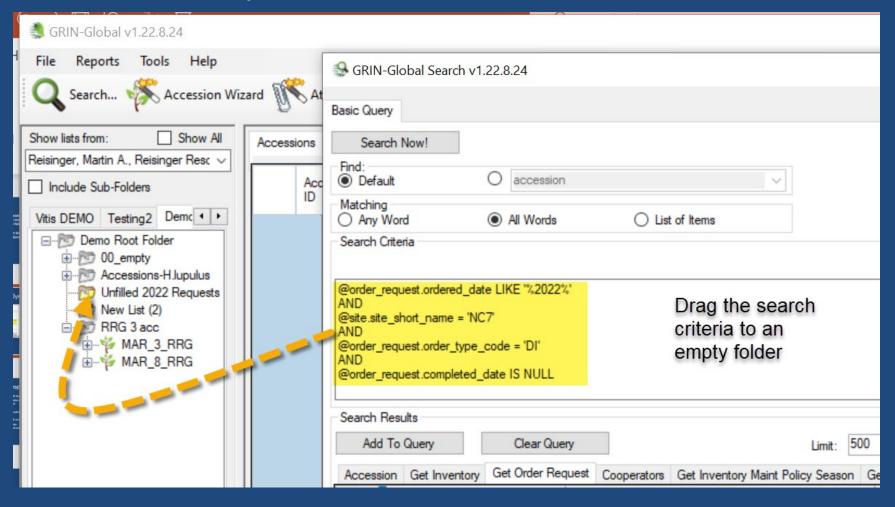
Simple Search List Search Advanced Search Results

#### Search Tool

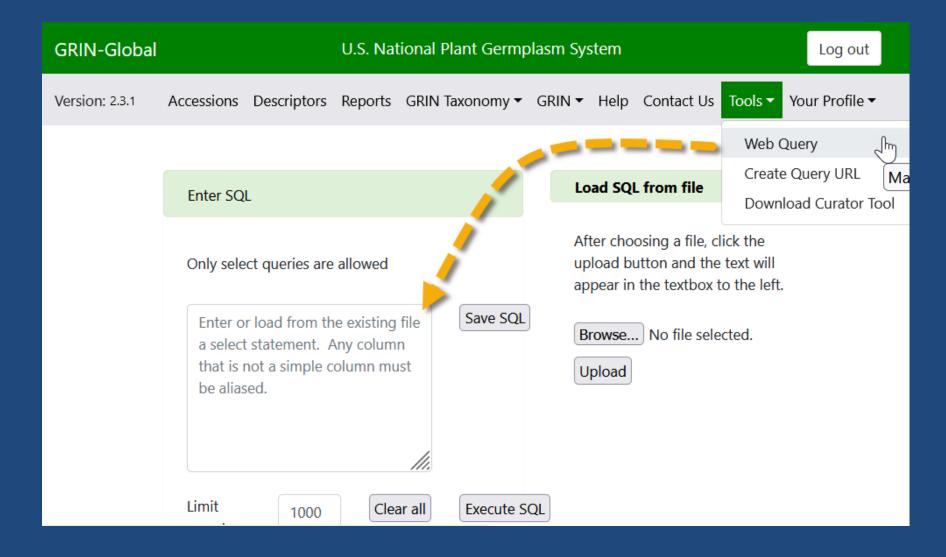


## Searching / Dynamic Folders

#### To create a dynamic folder



## Searching (Public Website)



### Demo

## Inventory

 Physical germplasm for each accession is considered the "inventory"

 Typically, an accession will have multiple lots – different generations, form types (plants, seeds...)

Each physical lot should have its own corresponding inventory record

## System Inventory Records

- When creating a new accession record, a default inventory record is also created
- "System" inventory records should not be edited
- They do not represent physical inventory

4	А	В	С	D	Е	F	G	Н	I	J	K	L	М	N
	Inventory	Inventory	Inventory	Inventory	Inventory		Maintenance	Maintena	Inventory	Deducted	Available	Availability	Status	y Start
1	ID	Prefix	Number	Suffix	Туре	Accession	Policy	nce Site	?	?	?	Status	Note	Date
2	2105481	DJUG	1		PL	DJUG 1	ARCHIVE	DAV	N	N	N	Inventory does not exist		
3	2244790	DJUG	1	0001A	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
4	2244791	DJUG	1	0002A	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
5	2244792	DJUG	1	0003A	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
6	2244793	DJUG	1	0005A	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
7	2244794	DJUG	1	0006A	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
8	2244795	DJUG	1	A8000	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
9	2244796	DJUG	1	0009A	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
10	2244797	DJUG	1	0010A	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
11	2244798	DJUG	1	0011A	PL	DJUG 1	Walnut	DAV	Υ	N	Υ	Available		
12	2244800	DJUG	1	0013A	PL	DJUG 1	Walnut	DAV	N	N	N	Available		
13	2244801	DJUG	1	0014A	PL	DJUG 1	Walnut	DAV	N	N	N	Inventory doe	s not exist	
14	2244802	DJUG	1	0015A	PL	DJUG 1	Walnut	DAV	N	N	N	Inventory doe	s not exist	
15	2244803	DJUG	1	0016A	PL	DJUG 1	Walnut	DAV	N	N	N	Inventory doe	s not exist	
16	2244804	DJUG	1 <sub>PL</sub>	∩∩17∧	DI	UIG 1	Walnut VV d I	DAV	N	N	N	Dead	DEAD	
17	2265935	DJU			D,	001	vvai	iiut		N	N	Not to be dist	Loc unkno	own
18	4000002	DJU	**	**		UG 1	TPVP	YSTEM		N	N	No value specified		
10	2244002	DIII			D3	001	3131	LIVI		M	V	Availabla		

# Inventory Maintenance Policy (IMP)

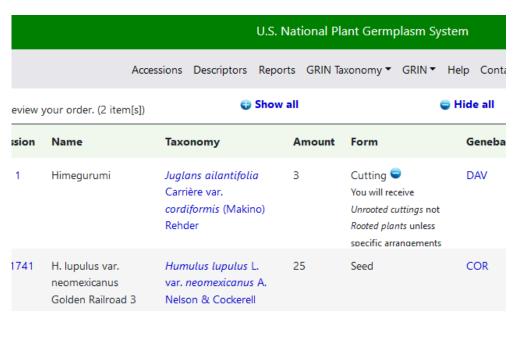
- Think of an IMP as a template it fills in some fields in a new inventory record
- Before creating an inventory record, you must have a relevant IMP record
- If you change the policy later, the data in the existing inventory records does not change (other than owner)
- The owner of the IMP record is always the owner of the inventory record

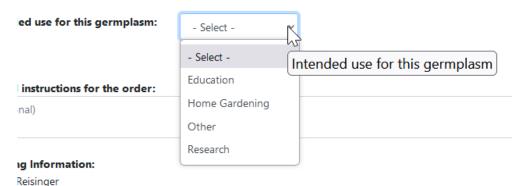
## Visibility and Availability Fields

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 Status Code is neither equal to ACTIVE or INACTIVE, the accession will not be listed in any search results. INACTIVE usually indicates this is a historic record – data exists, but no physical germplasm
Inv. / Availability Status	Coded (Low, Available, Not Available, Dead)	the value does not determine 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 Default?	Y/N	Would be better titled as "Is Distributable?" 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"

## Inventory Demo

#### Requests (Public Website)





lancthon RD

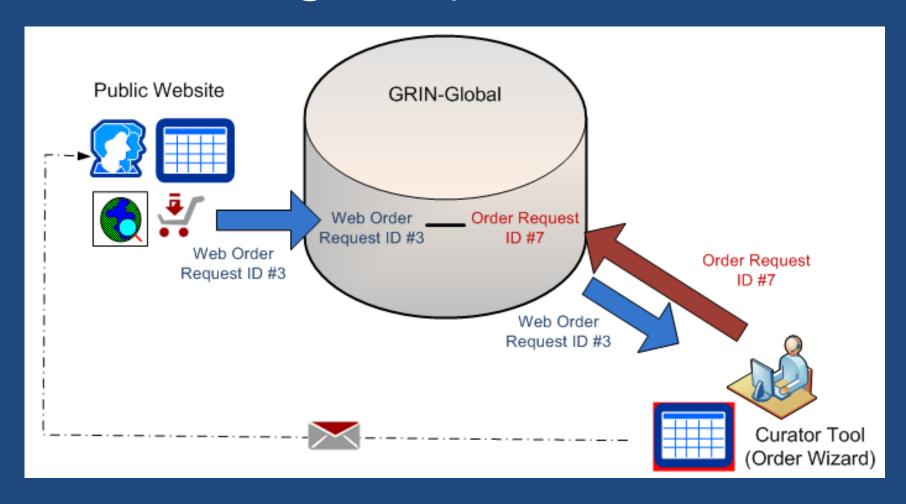
lease ignore State/Zip this is a workaround to submit order, Skåne län 11111 Sweden

### Requests

- Two request tables:
  - Web Order Request (WOR)PW requestors initiate
  - Standard Order Request
     genebank staff manage using the Order Wizard

Emails are sent to the sites where the accessions are maintained

## Processing Requests



#### Order Wizard

Processes incoming WORs & generates the germplasm orders

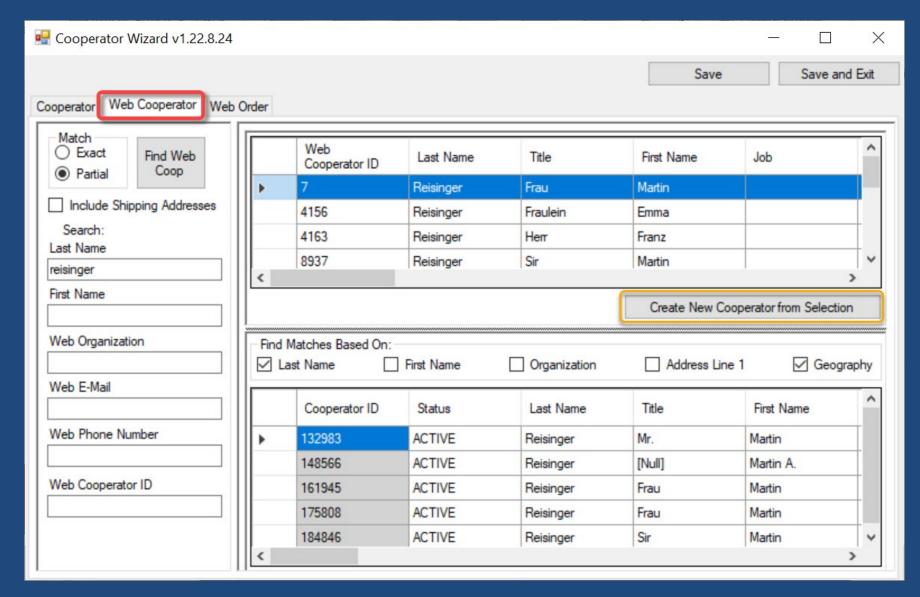
 Invokes the Cooperator Wizard to ensure the web cooperator has standard cooperator records

#### Cooperators

Two types of cooperator records exist in GG:

- "web" cooperators –self enroll on the PW
- "standard"cooperators can be individuals or organizations

## Cooperator Wizard



## Cooperator Records Joined

#### Sites

In GG, genebanks establish Sites for various reasons

- physical locations
   Ex: USDA: "COR" Corvallis, OR; "W6" Pullman, WA...
- special purposes:
   Svalbard used as the backup storage location

## Sites & Cooperators

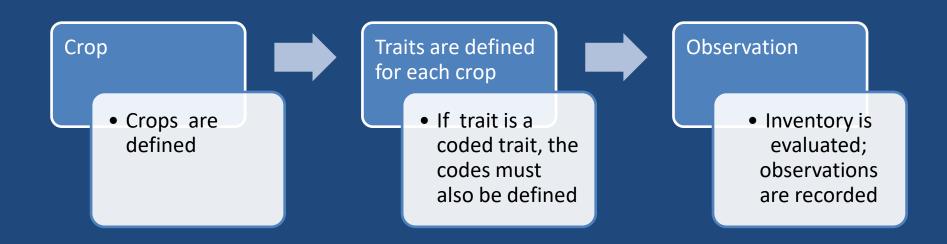
In GG, every CT user is assigned to a site

#### Accessions at a site

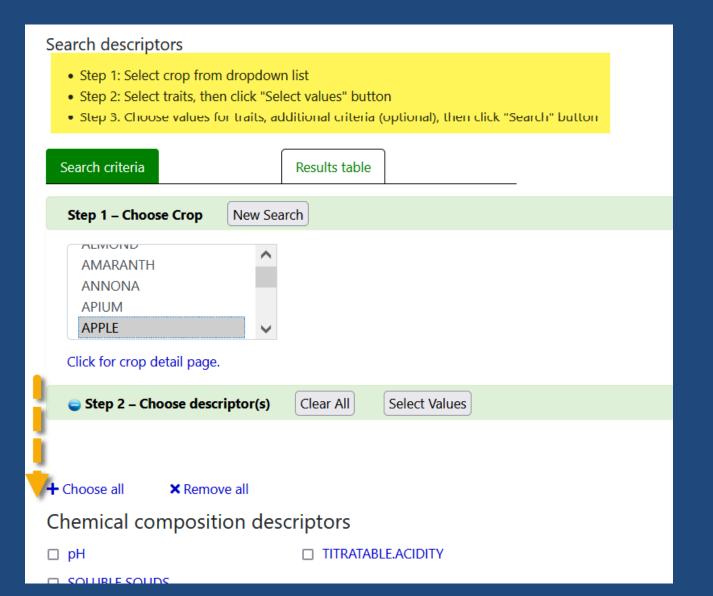


## Requests Demo

#### Observations



#### Observations



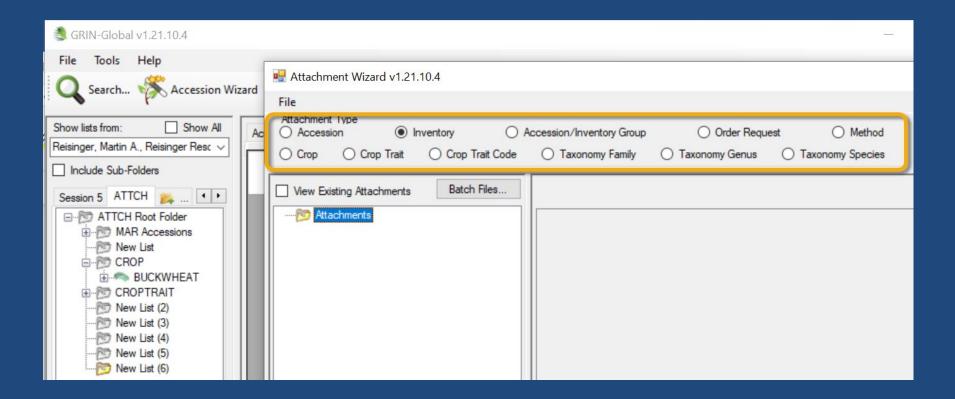
#### Observations Demo

#### Attachments

- Any file type can be considered an attachment
- GG has 10 attachment tables

- Attachment Wizard (recently upgraded)
- Web Requestors can add attachments via the PW; genebank staff process these via the Order Wizard

#### Attachment Wizard



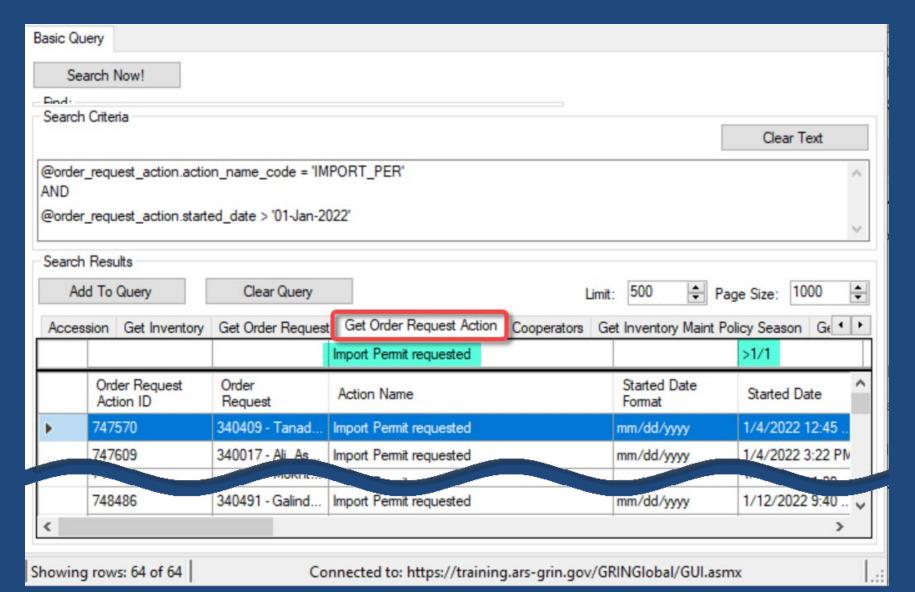
#### Actions

- GRIN-Global has 3 Action tables
  - Accession
  - Inventory
  - Order Requests
- Actions are genebank specific
  - Coded values
  - The genebank's GG IT mgr. can add / modify the codes

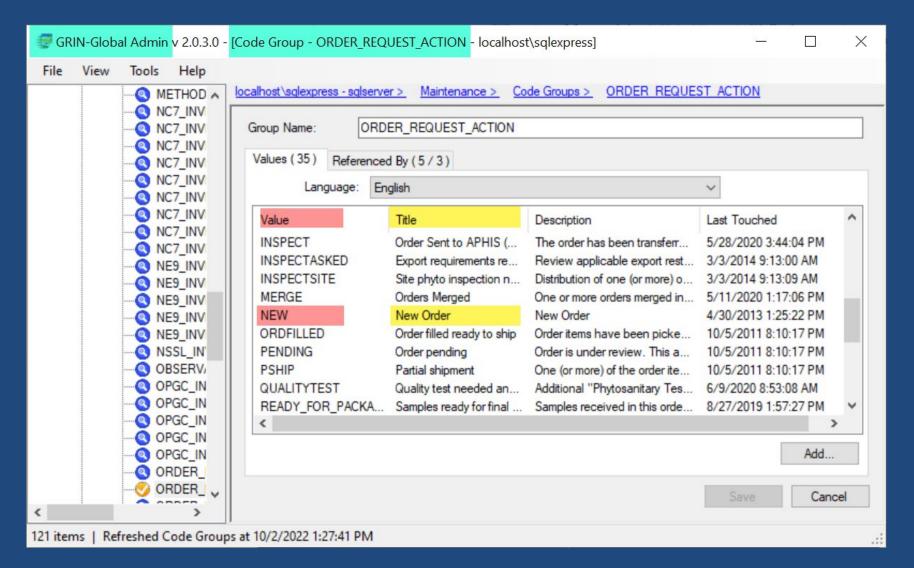
### A Request Order's Actions

Orders	Actions	nments Phyto L	og Web Orders					
New Action Alerted Cleared			NRR	Order Filled				
	Order Request Action ID	Order Request	Action Name	Started Date	Started Date Format	Action Information	Completed Date	Completed Date Form
<b>&gt;</b>	721786	336200	New Order	05/03/2021	mm/dd/yyyy	Send brochure.	05/03/2021	mm/dd/yyy
	721796	336200	Export requirements requested	05/03/2021	mm/dd/yyyy	China Amaranthus. Cucumis sativus.	05/03/2021	mm/dd/yyy
	721801	336200	Alerted about order	05/03/2021	mm/dd/yyyy	Request IP. IP to claim	05/03/2021	mm/dd/yyy
	721823	336200	Alerted about order	05/03/2021	mm/dd/yyyy	Request IP. IP to claim	05/03/2021	mm/dd/yyy
	721853	336200	Import Permit requested	05/03/2021	mm/dd/yyyy	6 mos	12/22/2021 12:0	[Null]
	742832	336200	Completed order	11/17/2021	mm/dd/yyyy		11/17/2021	mm/dd/yyy
	742833	336200	Cancel Order Item(s)	11/17/2021	mm/dd/yyyy	no IP rec'd	11/17/2021	mm/dd/yyy
	746506	336200	Requestor contacted NPGS	12/22/2021	mm/dd/yyyy	Thanks for your previous work for the distribution and plant inspection for	1/4/2022 12:00:	[Null]
	746507	336200	Alerted about order	12/22/2021	mm/dd/yyyy	ship w/o IP?	12/22/2021 12:0	[Null]
	746508	336200	Alerted about order	12/22/2021	mm/dd/yyyy	ship w/o IP?	12/22/2021 12:0	[Null]
	746511	336200	Curator cleared an order	12/22/2021	mm/dd/yyyy	Please proceed with the Cucumis w/o IP.	12/22/2021	mm/dd/yyy
	746518	336200	Curator cleared an order	12/22/2021	mm/dd/yyyy	Proceed without the import permit	12/22/2021	mm/dd/yyy
	747597	336200	Order pending	01/04/2022	mm/dd/yyyy	4 oz	01/04/2022	mm/dd/yyy
	748391	336200	Order filled ready to ship	01/11/2022	mm/dd/yyyy	2: 4 oz	01/11/2022	mm/dd/yyy
	752890	336200	Order Sent to APHIS (Phytosanita	02/11/2022	mm/dd/yyyy	FedEx. 14x14x18. sz2. 17 lbs. Shipped with 336200, 340261, 340265, 340266, 340269, 340269	02/11/2022	mm/dd/yyy
	764617	336200	Completed order	05/11/2022	mm/dd/yyyy	100000000000000000000000000000000000000	05/11/2022	mm/dd/yyy
	764616	336200	Order shipped	05/11/2022	mm/dd/yyyy		05/11/2022	mm/dd/yyy

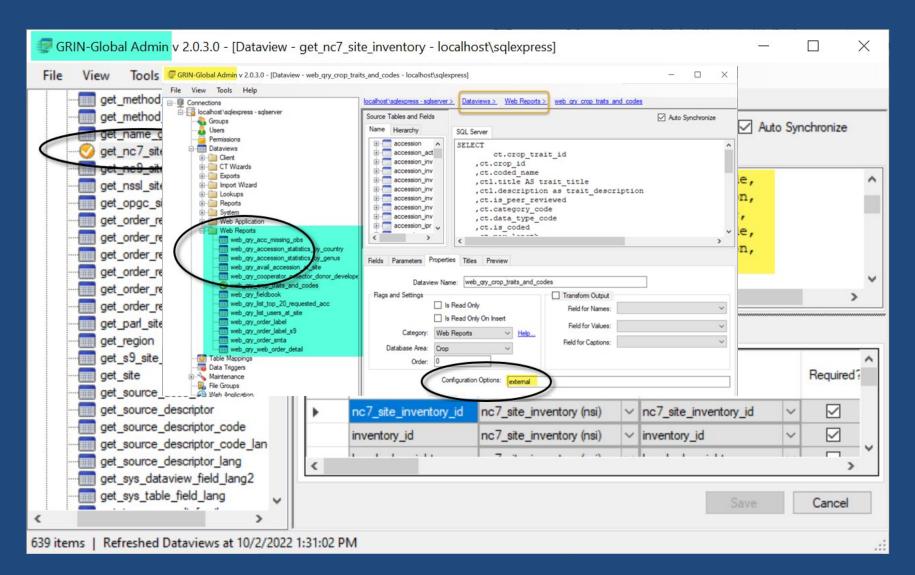
## Actions (Searching)



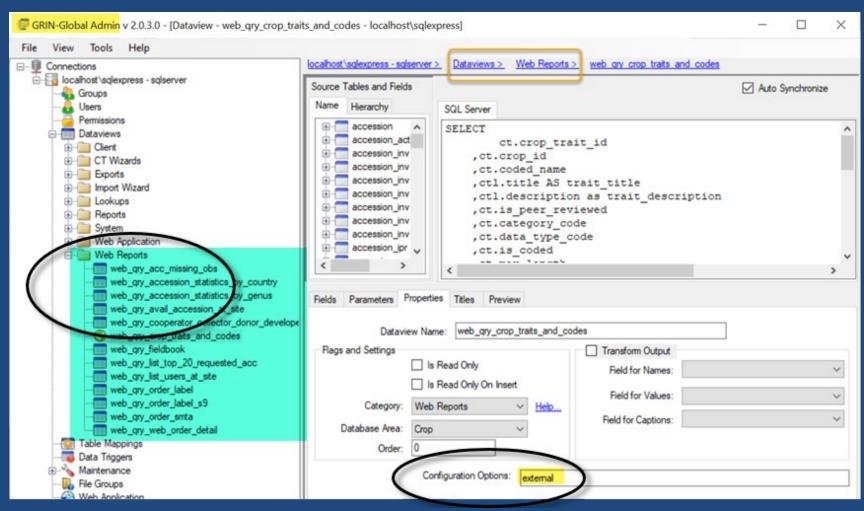
### Customization (Codes)



### Customization (Dataviews)



### Customization (Reports)



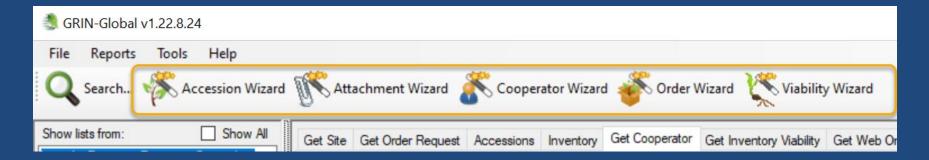
#### U.S. National Plant Germplasm System Accessions Descriptors Reports GRIN Taxonomy ▼ GRIN ▼ Help Contact Us Tools ▼ Your Profile ▼ Select a report using either the list of all reports, or find by category. All Reports Reports by Category Reset Reports Reports by category Select category Select report Accessions Available From a Site Accession Accessions Without a Specific Trait Cooperator Fieldbook in CSV Format Crop Journal of Plant Registrations Inventory Method Statistics Report (Accessions Count) by Country

#### Public Website Reports

- External (the public)
- Internal (genebank staff only)

### Customization (Wizards)

Some are bundled with the CT,



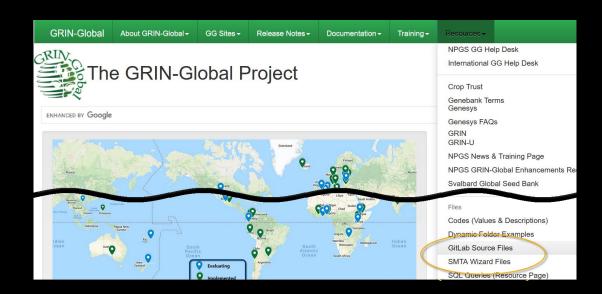
...but others may be added at will...

# Community Wizards

https://gitlab.com/GRIN-Global/Wizards

(also see: https://gitlab.com/GRIN-Global)

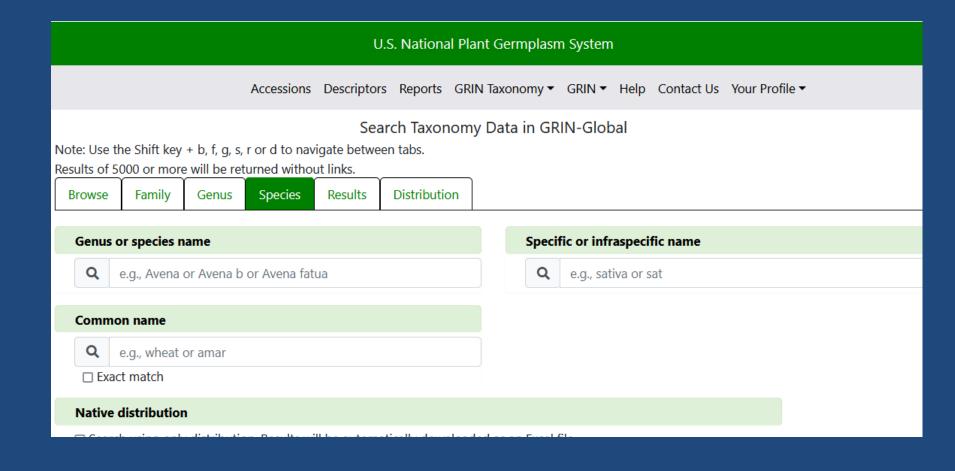
 Easy-SMTA | GG-Genesys | GLIS-DOI | Print...



### Taxonomy

- GG Taxonomy focuses on economically important plants
- Data actively maintained by USDA taxonomists
- Recommended: use the GRIN Taxonomy

### Taxonomy



#### Required

- When registering accessions, Taxon is required
  - user selects the taxon from a list of accepted species names

