

Beans – Adding Accession Names into the Curator Tool

(Updated September 23, 2010)

Exercise 2: Adding Accession Names into the Curator Tool

This is the second in a series of hands-on, step-by-step exercises that walk you through the GRIN-Global Curator Tool. After completing this lesson, you will be able to:

- use a spreadsheet's concatenate function to configure your genbank data to the format required by the Curator Tool
- copy your genbank's accessions' names data from a spreadsheet into the Curator Tool
- copy data from one cell to the cells below, by using the Ctrl-D keyboard shortcut
- describe how to include multiple names for Accessions
- copy data from a spreadsheet into the Curator Tool using the "block copy" method

This exercise illustrates how to import accession names from genbank data already stored in a spreadsheet into the GRIN-Global Curator Tool. As with the importing of any data, the process involves matching your spreadsheet's column headings with the column names used in the Curator Tool. (Note: An administrator for your organization establishes the Curator Tool column names, based on the organization's requirements.)

Overview on the Accession Names Data view

The Curator Tool allows an unlimited number of names to be associated with accessions. However, the Accession dataview (get_accession) only has one column for the principal Accession Name. (Some organizations refer to this as the "top name.")

All accession names associated with an accession are stored in a related dataview, the get_accession_name dataview.

In the example below, in the Accessions data view, the **Accession Name** displayed for Accession Number 536173 is “US 998.”

Accession ID	Accession Prefix	Accession Number	Taxonomy	Accession Name	Is Core?	Life Form
384162	PI	502033	Arachis hypogaea var. fastigiata	SPZ 466-2	N	
413629	PI	531500	Arachis hypogaea eubep. fastigiata	SPANCO	N	Annual
417946	PI	535817	Arachis hypogaea subsp. fastigiata	TxAG-5	N	Annual
418182	PI	536053	Arachis hypogaea var. fastigiata	US 878	N	Annual
418302	PI	536173	Arachis hypogaea var. fastigiata	US 998	N	Annual
418306	PI	536177	Arachis hypogaea var. fastigiata	US 1002	N	Annual

You may now be asking the question “How did the Curator Tool determine what name to display in the Accessions dataview?” The Curator Tool selected the name with the **lowest Name Rank** in the Names dataview; in this case, the lowest **Name Rank** was “60.” Therefore, “US 998” was displayed in the Accessions data view.

Accession Name ID	Accession	Category	Name	Name Rank	Accession Group
472886	PI 501206	COLLECTOR	ZM-2147	1070	
596433	PI 501206	LOCALNAME	Manchepebele	1030	

Accession Names Data View

In the U.S. National Plant Germplasm System (NPGS) GRIN system, **Rank** was determined by the Category. GRIN-Global users are not confined to that system. However, because only one name can display on the Accession data view, when there are multiple names for the Accession, the Curator Tool displays in the Accession dataview the name from the Names dataview with the lowest **Name Rank** data.

Accession Names Data view (partial) Data Dictionary Names

Field	Meaning
Accession ID	the primary key field (system generated)
Accession	the key field that links to the Accessions data view
Category	the type of accession name or identifier used
Name	accession or local name
Name Rank	when there are multiple records in the Accession Names data view for the same Accession, the lowest number determines which Name will be listed in the Accession data view
Accession Group	a name to group alternate identifiers for an accession

Field	Meaning
Cooperator	the person or organization involved. For example, the donor's institution by whom the identifier was assigned.
Life Form	annual, biennial, tree, perennial...
Level of Improvement	clone, cultivar, genetic material, landrace, rootstock, wild material
Reproductive Uniformity	hybrid, mixture, nucellar, population, pureline...

The latest version of the Curator Tool can be downloaded from the webpage:

<http://test.grin-global.org/gringlobal/downloads/default.aspx>

You will also need two spreadsheets with the sample Vicuna Beans data. They may be downloaded from the wiki Training page:

http://www.grin-global.org/index.php/Training#Training_Exercises

Training Exercises

Please complete the following exercises in the order listed. The first exercise provides a comprehensive overview and aligns ten basic Tool "exercises" with the User Guide. The remaining exercises illustrate, with very detailed steps, how to import "typical" genebank in a spreadsheet into the GRIN-Global Curator Tool.

Before starting the exercises, review the videos listed on this page (below).

For some of the exercises, you will also need to download associated spreadsheets with sample data:

Exercise Document	Related Sample Data Files (Download)
10 Exercises to Get Familiar with the Curator Tool	(sample "mini" database is usually installed with Grin-Global during the installation process)
Exercise: Importing New Accessions	Vicuna Beans Sample Data
Exercise: Adding Accession Names	Vicuna Beans Sample Data Copy of Transfer Data

Follow the step-by-step guide below:

Step 1:

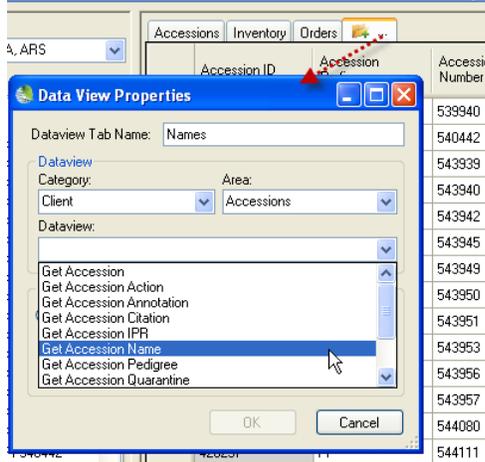
Open the GRIN-Global Curator Tool and a blank spreadsheet (such as an Excel spreadsheet).

Step 2:

In the Curator Tool, ensure that the **Get Accession Name** tab is the active tab.

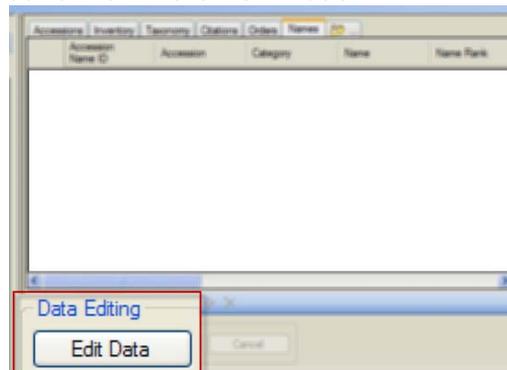
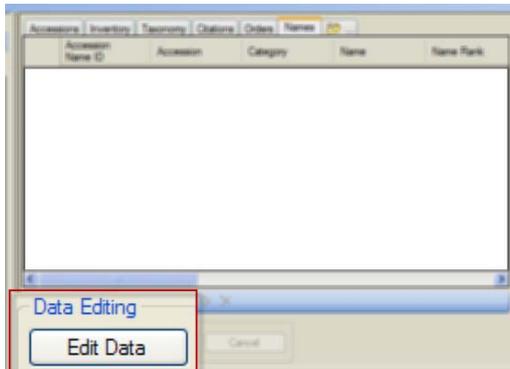
(If necessary, create a new tab by clicking on the New Tab icon and then selecting the **Client**

dataview “Get Accession Name.” Type “Names” for the **Dataview Tab Name.**)



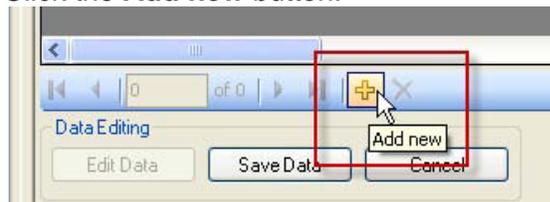
Step 3:

In the **Names** dataview, click the **Edit Data** button to initiate Edit mode:



Step 4:

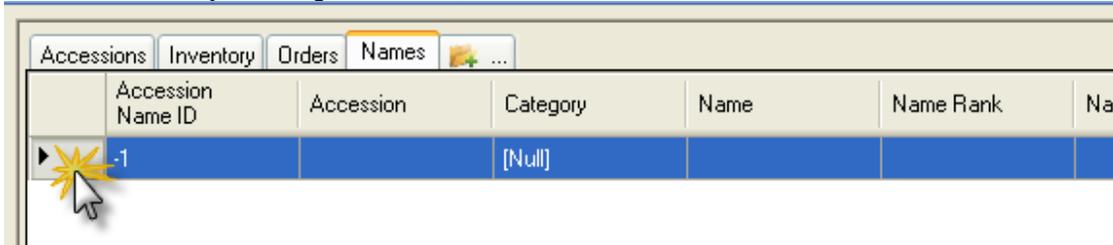
Click the **Add new** button:



Step 5:

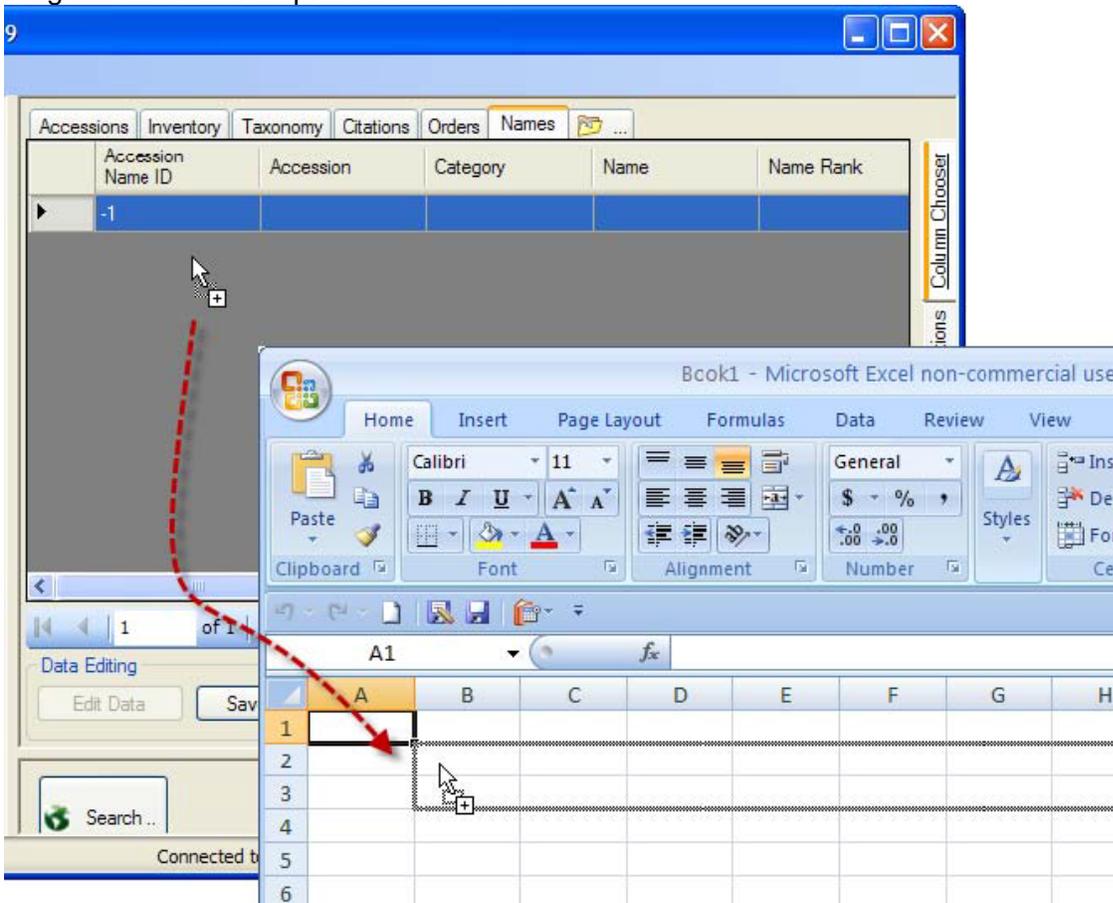
Prepare to drag the row into your spreadsheet (by doing so, you will automatically bring along the column headings, the sole purpose for this step.)

Select the row by clicking in the left, row header cell:



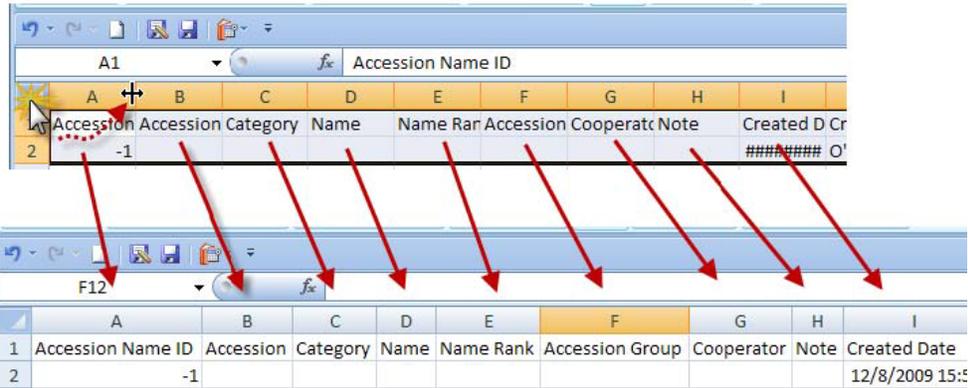
Step 6:

Drag the row into the spreadsheet:



Step 7:

Widen the spreadsheet columns: click the top, left header cell; then double-click the vertical column separator between the column letters (A, B, etc.)



Save and name this spreadsheet (**names_transfer.xls**) – refer to this new spreadsheet as your “names_transfer spreadsheet” to differentiate it from the original spreadsheet that contained your existing source data.)

The **Name** dataview columns, as they are displayed in the Curator Tool:

Accession Name ID	Accession	Category	Name	Name Rank	Name Group	Cooperator	Note
-1		[Null]					

The spreadsheet with its column headings:

	A	B	C	D	E	F	G	H
1	Accession Name ID	Accession	Category	Name	Name Rank	Name Group	Cooperator	Note
2		-1						
3								

Note that the **Accession Name ID** is system generated – you will not supply that data so empty the cell A2.

The Names dataview **Accession** field is the key field that relates the **Names** dataview with the **Accessions** dataview. However, in the Accessions dataview, there isn't just one field that ties back to the Names dataview but rather three fields:

Dataview:	Accession	Accession Names
Equivalent Fields:	Prefix + Number*+ Suffix*	Accession

In order to import data from our original worksheet into the Curator Tool, the data in the original worksheet needs to be combined (concatenated) to create the **Accession** column. (The method is identical to the concatenating of the genus and species data in the importing accessions exercise.)

Step 8:

First, in the names_transfer spreadsheet, insert three new columns. Label them "Prefix" "Number" and "Suffix."

(These columns are temporary, but are necessary for the creation of your Accession)

	A	B	C	D	E	F	G	H	I	
1	Accession Name ID	Accession	Prefix	Number	Suffix	Category	Name	Name Rank	Name Group	Coop
2										
3										

You are going to use the same data that you used in the exercise for adding accessions. On the wiki training page, the file "copy of transfer data" will have the following data:

	A	B	C	D	E	F	G	H	I
1	Accession ID	Accession Prefix	Accession Number	Accession Suffix	Taxonomy	Site	Initial Received Date	Genus	Species
2		VICUÑA_ID	95001		Phaseolus vulgaris	CIAT	2/18/2010	Phaseolus	vulgaris
3		VICUÑA_ID	95005		Phaseolus vulgaris	CIAT	2/18/2010	Phaseolus	vulgaris
4		VICUÑA_ID	95006		Phaseolus vulgaris	CIAT	2/18/2010	Phaseolus	vulgaris
5		VICUÑA_ID	95008		Phaseolus vulgaris	CIAT	2/18/2010	Phaseolus	vulgaris
6		VICUÑA_ID	95009		Phaseolus vulgaris	CIAT	2/18/2010	Phaseolus	vulgaris
7		VICUÑA_ID	95010		Phaseolus vulgaris	CIAT	2/18/2010	Phaseolus	vulgaris
8		VICUÑA_ID	95011		Phaseolus vulgaris	CIAT	2/18/2010	Phaseolus	vulgaris

In the Accessions exercise, we had recommended that you either include your initials as part of the **Prefix**, or use your initials in the **Suffix** fields. Here, you will need to do the same thing in order to match whatever you have in the original Accession records.

You need to create a formula in the Accession cells that combines the data from the **Prefix**, **Number**, and **Suffix** cells. Shown below is one technique for doing this (Excel also has the CONCATENATE function which is similar)

	A	B	C	D	E	F
1	Accession Name ID	Accession	Prefix	Number	Suffix	Category
2		VICUÑA_ID 95001 rei	VICUÑA_ID	95001	rei	
3		VICUÑA_ID 95005 rei	VICUÑA_ID	95005	rei	
4		VICUÑA_ID 95006 rei	VICUÑA_ID	95006	rei	
5		VICUÑA_ID 95008 rei	VICUÑA_ID	95008	rei	
6		VICUÑA_ID 95009 rei	VICUÑA_ID	95009	rei	
7		VICUÑA_ID 95010 rei	VICUÑA_ID	95010	rei	

Since we don't want formulas, but rather text for the **Accession** field, after you have successfully created the formula, you must convert the formulas to text. Highlight all of the data cells under the Accession heading, copy; then **Paste Special | Values** on top of the same data cells. (In Excel 2007, use the alternative **Paste Values**.)

A	B	C	D	E	F	N
Accession Name ID	Accession	Prefix	Number	Suffix	Category	
	VICUÑA_ID 95001 rei	VICUÑA_ID	95001	rei		
	VICUÑA_ID 95005 rei	VICUÑA_ID	95005	rei		
	VICUÑA_ID 95006 rei	VICUÑA_ID	95006	rei		
	VICUÑA_ID 95008 rei	VICUÑA_ID	95008	rei		
	VICUÑA_ID 95009 rei	VICUÑA_ID	95009	rei		

Step 9:

Prepare the **Category** and **Name Rank** fields.

Category

The **Category** column is a required field. The text in it must match the text that has been set up by the system administrator. For our test database, some of the possible entries are shown below:

Category
Collector identifier
Quarantine identifier
CGIAR International Center Identifier
CGIAR International Center Identifier
Collector identifier
Cultivar name
Developer identifier
Donor identifier
Institute identifier
Local name
Misidentified cultivar name

Your transfer spreadsheet must have text that matches one of these entries. For this exercise, use **“Cultivar name”**

Name Rank

Input arbitrary numbers in the **Name Rank** field. (Omit **Name Rank** for two or three records to see what happens later after you drag the data into the Curator Tool.)

Your transfer spreadsheet should look similar to the following:

	A	B	C	D	E	F	G	H
	Accession Name ID	Accession	Prefix	Number	Suffix	Category	Name	Name Rank
1		VICUÑA_ID 95001 rei	VICUÑA_ID	95001	rei	Cultivar name	Merval	1
2		VICUÑA_ID 95005 rei	VICUÑA_ID	95005	rei	Cultivar name	Merva	1
3		VICUÑA_ID 95006 rei	VICUÑA_ID	95006	rei	Cultivar name	Alva	1
4		VICUÑA_ID 95008 rei	VICUÑA_ID	95008	rei	Cultivar name	Qwerty	1
5		VICUÑA_ID 95009 rei	VICUÑA_ID	95009	rei	Cultivar name	Sweet simpson	1
6		VICUÑA_ID 95010 rei	VICUÑA_ID	95010	rei	Cultivar name	Redding	1
7		VICUÑA_ID 95011 rei	VICUÑA_ID	95011	rei	Cultivar name	Otis	1
8		VICUÑA_ID 95012 rei	VICUÑA_ID	95012	rei	Cultivar name	Wilson	1
9		VICUÑA_ID 95017 rei	VICUÑA_ID	95017	rei	Cultivar name	Herman23	1
10		VICUÑA_ID 95020 rei	VICUÑA_ID	95020	rei	Cultivar name	23456	1
11		VICUÑA_ID 95021 rei	VICUÑA_ID	95021	rei	Cultivar name	YellowBud	1
12		VICUÑA_ID 95023 rei	VICUÑA_ID	95023	rei	Cultivar name	Fortuna	1

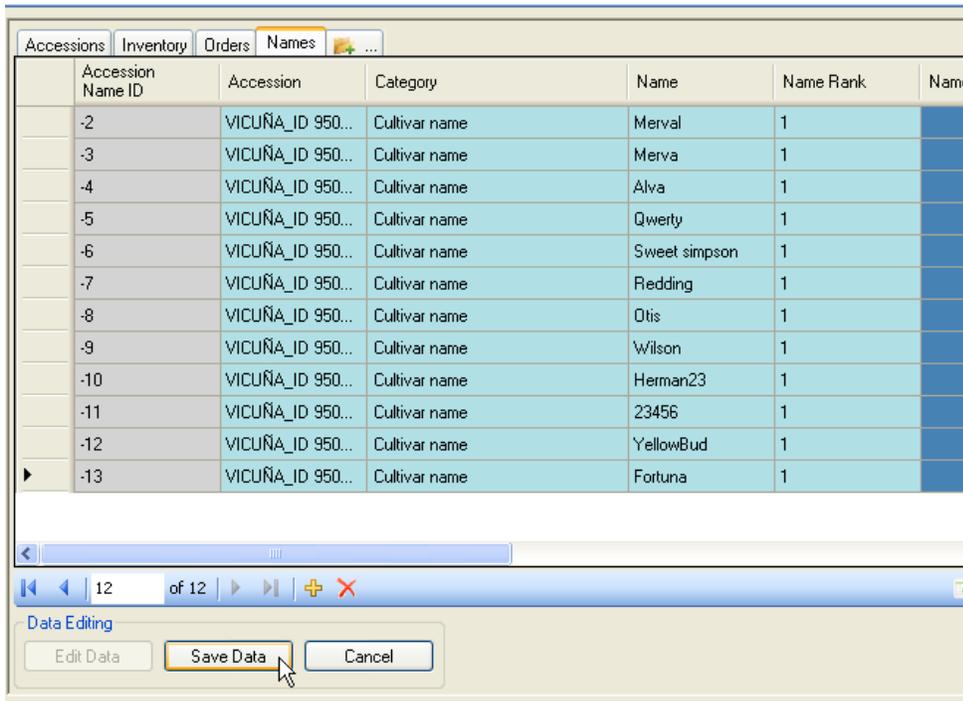
Step 10:

Copy the data into the Curator Tool.

Highlight your data in the spreadsheet, cells A1 thru H13, if you have been adhering to these directions.

At this point you have the minimum data required for the **Names** dataview. So let's import this from your names_transfer spreadsheet into the Curator Tool.

- Ensure that the Curator Tool is in Edit mode
- Select spreadsheet cells A1:H13, drag and drop or cut and paste
- In the Curator Tool, click the **Save Data** button



If you were successful with all of this, when you switch back to the Accession dataview, you should see for each matching accession record the corresponding name that you just imported:



Several Concluding Notes

Records in the **Get Accession Name** (Names) dataview relate to the Accession dataview when the records whose Accession field in the Names data equals the combined Prefix + Number + Suffix fields in the Accession dataview.

When mass adding Names dataview records, you must ensure that the Accession name properly matches the three Accession fields; one way to achieve this is to use the spreadsheet's concatenate function for combining text fields.

Accession records may have multiple corresponding Name records. When this happens, the Accession data view displays the name from a matching Name record whose **Name Rank** field contains the lowest numeric value.

In this lesson you also saw how to “block copy” data from a spreadsheet into the Curator Tool. It's relatively simple if you think of it as dragging or copying a rectangle of data from the spreadsheet to the Curator Tool.