

GRIN-Global Project

the global plant genebank
information management system



“What is GRIN-Global?”

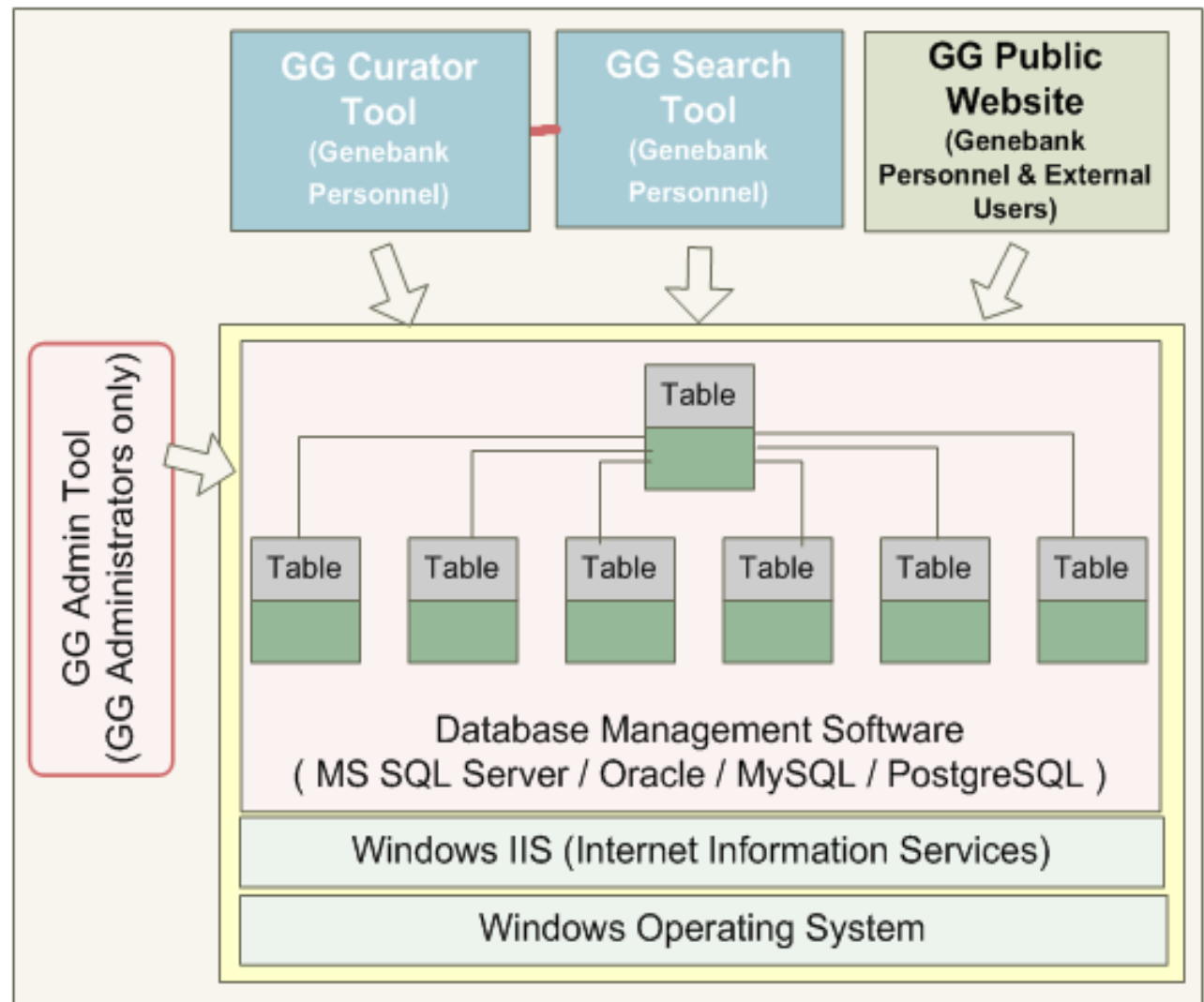
GRIN-Global (GG) is a database application that enables genebanks to store and manage information associated with plant genetic resources (germplasm) and deliver that information globally.



Accessions	Get Accession IPR	Inventory	Orders	Get Genetic Marker	Get Order Request Item	Get Inventory Viability	Taxonomy Crop Map	Crop	Crop Trait	
Accession ID	Accession Prefix	Accession Number	Accession Suffix	Taxon	Name	Origin	Maintenance Site			
1094260	Q	27154		Ipomoea batatas ...	CN 1517-139	Taiwan	S9			
1094261	MIA	27155		Ipomoea batatas ...		Brazil	S9			
1094262	Q	27155		Ipomoea batatas ...	CN 1216-10	Taiwan	S9			
1094265	Q	27156		Ipomoea batatas ...	CN 1219-1	Taiwan	S9			
1094266	Q	27157		Ipomoea batatas ...	CN 1232-9	Taiwan	S9			
1094272	Q	27159		Ipomoea batatas ...	CN 1367-2	Taiwan	S9			
1094279	Q	27163		Ipomoea batatas ...	CN 1448-59	Taiwan	S9			
1094285	Q	27166		Ipomoea batatas ...	CN 1510-25	Taiwan	S9			
1094302	PI	585101		Ipomoea batatas ...	C 20169	Mexico	S9			
1094421	PI	595866		Ipomoea batatas ...	SPV-52	Puerto Rico	S9			
1094424	Q	27223		Ipomoea batatas ...	SPV-60	Puerto Rico	S9			
1094427	Q	27224		Ipomoea batatas ...	SPV-7	Puerto Rico	S9			
1094429	Q	27225		Ipomoea batatas ...	SPV-83	Puerto Rico	S9			
1094432	Q	27226		Ipomoea batatas ...	SPV-87	Puerto Rico	S9			
1094433	PI	595867		Ipomoea batatas ...	SPV-95	Puerto Rico	S9			
1095417	Q	27754		Ipomoea batatas ...	SATSUMAHIKARI	Japan	S9			
1095418	PI	585087		Ipomoea batatas ...	KYUKEI 97	Japan	S9			
1095459	PI	585088		Ipomoea batatas ...	TAINUNG 66	Taiwan	S9			
1095460	Q	27700		Ipomoea batatas ...	CN 1245-9	Taiwan	S9			

GRIN- Global Environment

The GG database
consists of many
inter-related tables



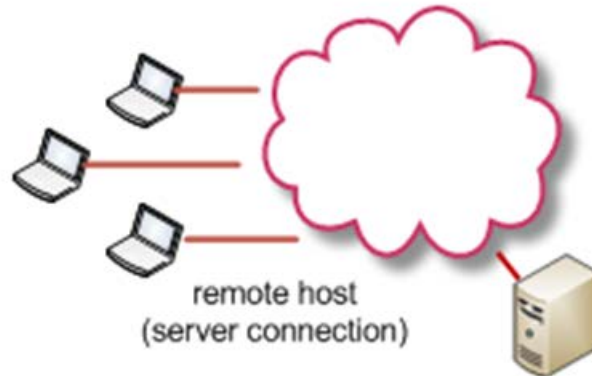
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Alternative GG Configurations

Typically set up in a networked environment, GG can also run stand-alone on a single PC

Alternative 1: Networked

**Client apps installed on each PC;
server apps on the remote server**



Alternative 2: Stand-alone PC

**The entire GG suite of apps
installed on one PC**



GRIN-Global – Open Source

Because GRIN-Global has been developed with open source software and its source code is available, Genebanks can tailor GRIN-Global to meet their specific requirements.



“What is GRIN-Global?”

GRIN-Global (GG) is comprised of a suite of programs:



Curator Tool



SearchTool



GG Updater



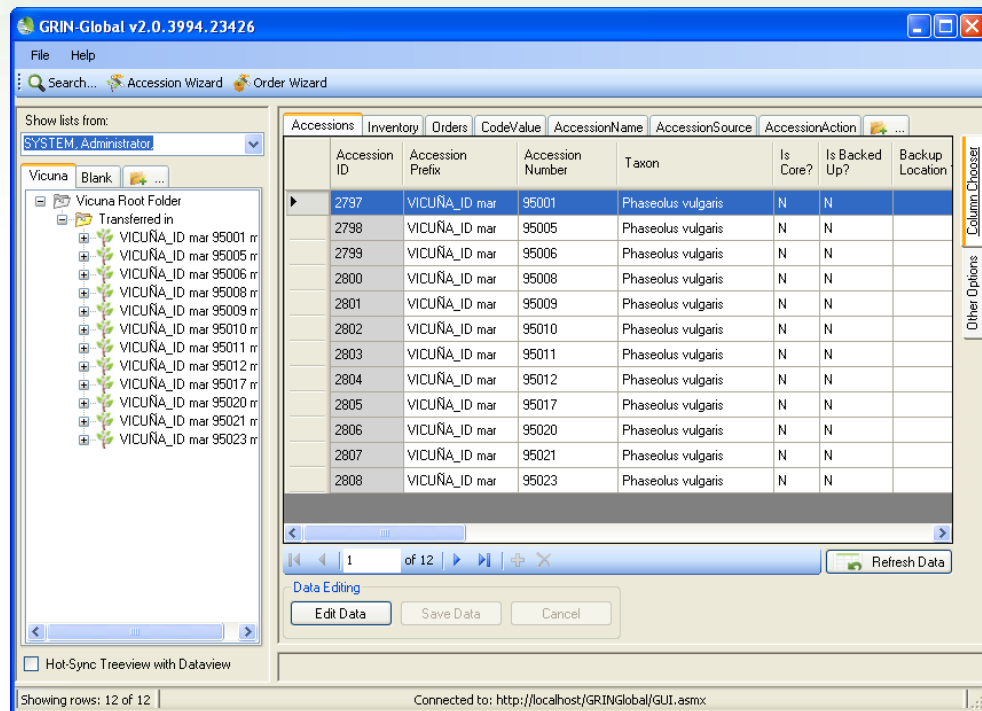
Admin Tool



Public Website with
Shopping Cart

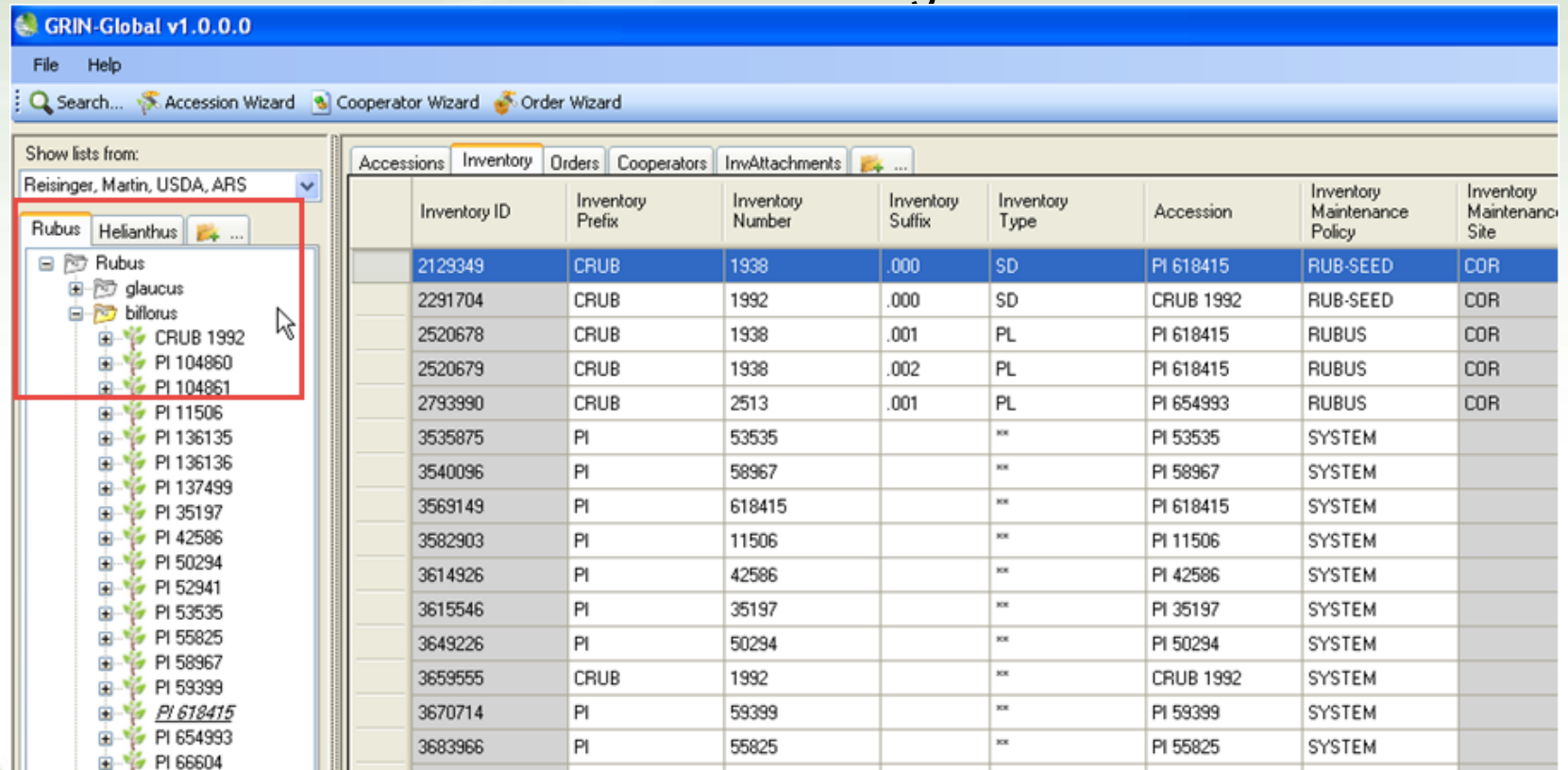
Curator Tool

GRIN-Global application designed primarily for curators and genebank workers who will create and manage their genebank's data



Lists for Managing Your Work

Users create lists as desired to organize database records



The screenshot displays the GRIN-Global v1.0.0.0 application window. The title bar reads "GRIN-Global v1.0.0.0". The menu bar includes "File" and "Help". Below the menu bar is a toolbar with icons for "Search...", "Accession Wizard", "Cooperator Wizard", and "Order Wizard".

On the left side, there is a sidebar titled "Show lists from:" with a dropdown menu set to "Reisinger, Martin, USDA, ARS". Below this is a tree view showing a hierarchy of taxonomic categories: "Rubus", "Helianthus", and a folder icon. The "Rubus" category is expanded, showing a list of accessions: "CRUB 1992", "PI 104860", "PI 104861", "PI 11506", "PI 136135", "PI 136136", "PI 137499", "PI 35197", "PI 42586", "PI 50294", "PI 52941", "PI 53535", "PI 55825", "PI 58967", "PI 59399", "PI 618415", "PI 654993", and "PI 66604". A red box highlights the "Rubus" category and its sub-items.

The main area of the application displays a table of inventory records. The table has the following columns: "Inventory ID", "Inventory Prefix", "Inventory Number", "Inventory Suffix", "Inventory Type", "Accession", "Inventory Maintenance Policy", and "Inventory Maintenance Site". The table contains 18 rows of data.

Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site
2129349	CRUB	1938	.000	SD	PI 618415	RUB-SEED	COR
2291704	CRUB	1992	.000	SD	CRUB 1992	RUB-SEED	COR
2520678	CRUB	1938	.001	PL	PI 618415	RUBUS	COR
2520679	CRUB	1938	.002	PL	PI 618415	RUBUS	COR
2793990	CRUB	2513	.001	PL	PI 654993	RUBUS	COR
3535875	PI	53535		XX	PI 53535	SYSTEM	
3540096	PI	58967		XX	PI 58967	SYSTEM	
3569149	PI	618415		XX	PI 618415	SYSTEM	
3582903	PI	11506		XX	PI 11506	SYSTEM	
3614926	PI	42586		XX	PI 42586	SYSTEM	
3615546	PI	35197		XX	PI 35197	SYSTEM	
3649226	PI	50294		XX	PI 50294	SYSTEM	
3659555	CRUB	1992		XX	CRUB 1992	SYSTEM	
3670714	PI	59399		XX	PI 59399	SYSTEM	
3683966	PI	55825		XX	PI 55825	SYSTEM	

Search Tool

The Search Tool (which can be launched from the Curator Tool) locates & lists the GG database records

GRIN-Global v1.0.0.0

File Help

Search... Accession Wizard Cooperator Wizard Order Wizard

Show lists from:
Reisinger, Martin, USDA, ARS

Rubus Helianthus ...

Rubus
+ glaucus
+ biflorus
+ CRUB 1992
+ PI 104860
+ PI 104861
+ PI 11506
+ PI 136135
+ PI 136136
+ PI 137499
+ PI 35197
+ PI 42586
+ PI 50294
+ PI 52941
+ PI 53535
+ PI 55825
+ PI 58967
+ PI 59399
+ PI 618415
+ PI 654993
+ PI 66604

Inventory ID	Inventory Prefix	Inventory Number	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site
2129349	CRUB	1938	.000	SD	PI 618415	RUB-SEED	COR
2291704	CRUB	1992	.000	SD	CRUB 1992	RUB-SEED	COR
2520678	CRUB	1938	.001	PL	PI 618415	RUBUS	COR
2520679	CRUB	1938	.002	PL	PI 618415	RUBUS	COR
2793990	CRUB	2513	.001	PL	PI 654993	RUBUS	COR
3535875	PI	53535		XX	PI 53535	SYSTEM	
3540096	PI	58967		XX	PI 58967	SYSTEM	
3569149	PI	618415		XX	PI 618415	SYSTEM	
3582903	PI	11506		XX	PI 11506	SYSTEM	
3614926	PI	42586		XX	PI 42586	SYSTEM	
3615546	PI	35197		XX	PI 35197	SYSTEM	
3649226	PI	50294		XX	PI 50294	SYSTEM	
3659555	CRUB	1992		XX	CRUB 1992	SYSTEM	
3670714	PI	59399		XX	PI 59399	SYSTEM	
3683966	PI	55825		XX	PI 55825	SYSTEM	

Order Fulfillment & Processing

The CT has an Order Wizard to fulfill & manage germplasm orders

Order Wizard v1.9.6.41

Order Number: 266385 | Items: 2

Order Filters: ☒ Selection ☐ My Orders ☐ My Site's Orders ☐ All Sites' Orders

Find: 266385

Printing: [Dropdown] [Print]

Orders | Actions | Attachments | Web Orders

Ordered Date: 6/9/2015 Owner Site: DBMU Order Type: Replenishment/reg Original Order: 266385 - Reisinger, Mart Final Recipient: Reisinger, Martin, USDA, ARS, N [Edit]

Local Number: [Empty] Completed Date: 6/9/2015 Order Obtained Via: [Empty] Requestor: Reisinger, Martin, USDA, ARS, N [Edit]

Intended Use: [Null] Intended Use Note: [Empty] Ship To: Reisinger, Martin, USDA, ARS, N [Edit]

Total Cost: \$0.00

Web Order Request Data: Web Order Request: [Empty] Web Cooperator: [Empty] Email: [Empty] Primary Phone: [Empty]

Note: [Empty]

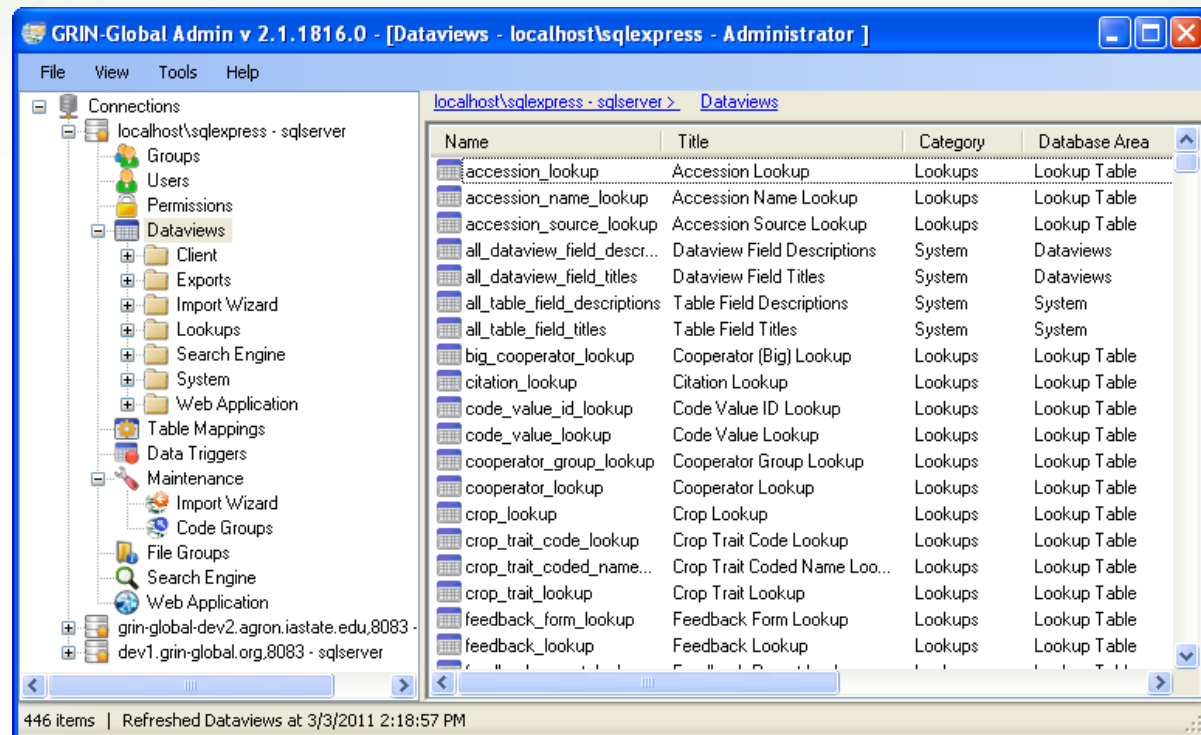
Special Instructions: [Empty]

New Row | Renumber Items | *** Order Contains Items with Alerts *** | Ship All Remaining Items

	Order Request Item ID	Order Number	Item Number	Accession	Inventory	Site	Requested Name
▶	8258835	266385 - Reising...	2	MR 201502 REI	MR 201502 REI ...	DBMU	
	8258834	266385 - Reising...	1	MR 201531 REI	MR 201531 REI ...	DBMU	PlainV

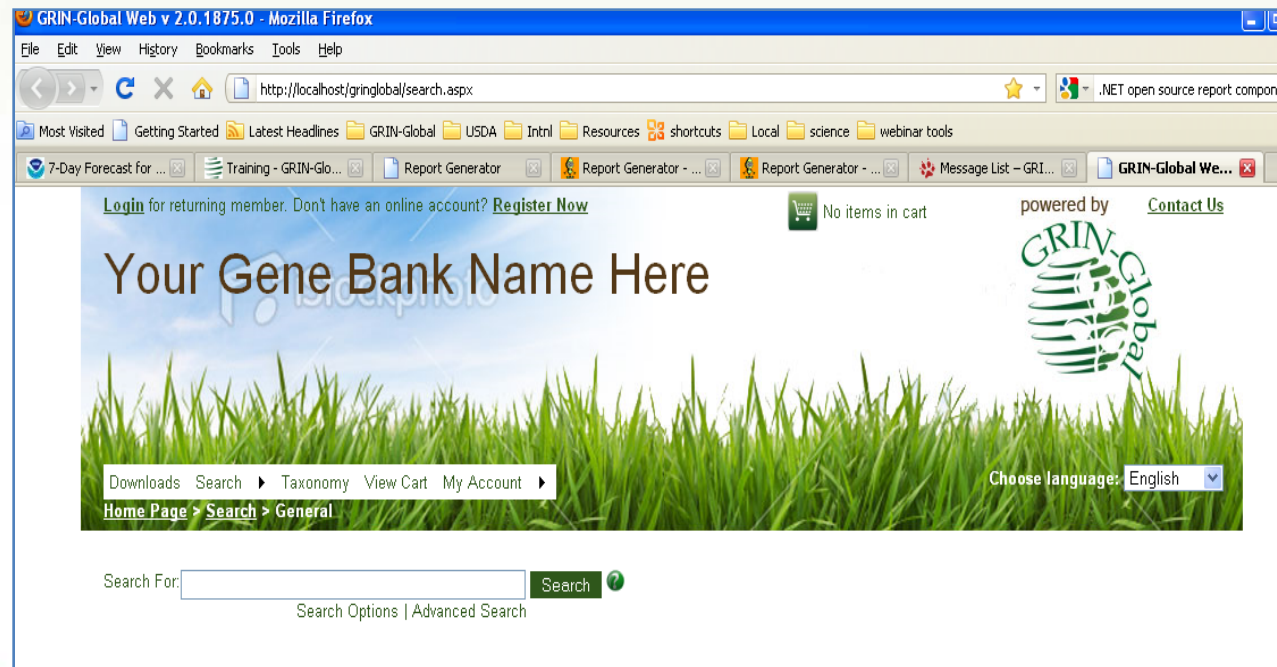
Admin Tool

... handles diverse functions including managing user accounts and permissions; importing data; and creating and editing dataviews used by the Curator Tool and the GG Public Website



Public Website

Through the Public Website, researchers can access germplasm information; search the entire GG database; and order germplasm from the genebank through a “shopping cart facility”




Public Website Accession Details Page

PI 547243

Helianthus tuberosus L.

Collected from:	Indiana United States
Maintained by:	North Central Regional PI Station
NPGS received:	25-Sep-1989
PI assigned:	1989
Inventory volume:	4055
Backup location:	National Center for Genetic Resources Preservation
Life form:	PERENNIAL
Pedigree:	
Improvement status:	WILD
Reproductive uniformity:	
Form received:	Seed

Status: Available
Amt Distributed: 100

 Remove from Favorites

 Add to Order



Accession names and identifiers

TUB-2069

Type: COLLECTOR

Ames 13071

Type: SITE

Group: AMES

Comment: NC-7

Cooperator: USDA ARS NCRRIS

Tracks Accession Observations

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Observations for accession PI 547243

Characterization and Evaluation Data:

Descriptor	Value	Study/Environment
CHEMICAL Descriptors		
LINOLEIC	67	SUNFLOWER.SUN.FATTYACID.WLD.89
OLEIC	19	SUNFLOWER.SUN.FATTYACID.WLD.89
PALMITIC	6	SUNFLOWER.SUN.FATTYACID.WLD.89
PEROIL	22	SUNFLOWER.SUN.OIL.WLD.89
STEARIC	3	SUNFLOWER.SUN.FATTYACID.WLD.89
MORPHOLOGY Descriptors		
SDMOTTLING	1 - ABSENT	SUNFLOWER.AMES.SUN.INC.05P
SDMOTTLING	1 - ABSENT	SUNFLOWER.AMES.SUN.INC.08H
SDMOTTLING	1 - ABSENT	SUNFLOWER.AMES.SUN.INC.09H
SDMOTTLING	9 - PRESENT	SUNFLOWER.AMES.SUN.INC.05P
SDMOTTLING	9 - PRESENT	SUNFLOWER.AMES.SUN.INC.07P
SDMOTTLING	9 - PRESENT	SUNFLOWER.AMES.SUN.INC.08H
SDMOTTLING	9 - PRESENT	SUNFLOWER.AMES.SUN.INC.09H
SDMOTTLING	9 - PRESENT	SUNFLOWER.AMES.SUN.INC.10H
SDPIGANTH	1 - ABSENT	SUNFLOWER.AMES.SUN.INC.05P
SDPIGANTH	1 - ABSENT	SUNFLOWER.AMES.SUN.INC.07P
SDPIGANTH	1 - ABSENT	SUNFLOWER.AMES.SUN.INC.08H
SDPIGANTH	1 - ABSENT	SUNFLOWER.AMES.SUN.INC.09H
SDPIGANTH	1 - ABSENT	SUNFLOWER.AMES.SUN.INC.10H
SDSTRPCOL	3 - BROWN	SUNFLOWER.AMES.SUN.INC.08H

Manages Stored Images

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 5 items in cart

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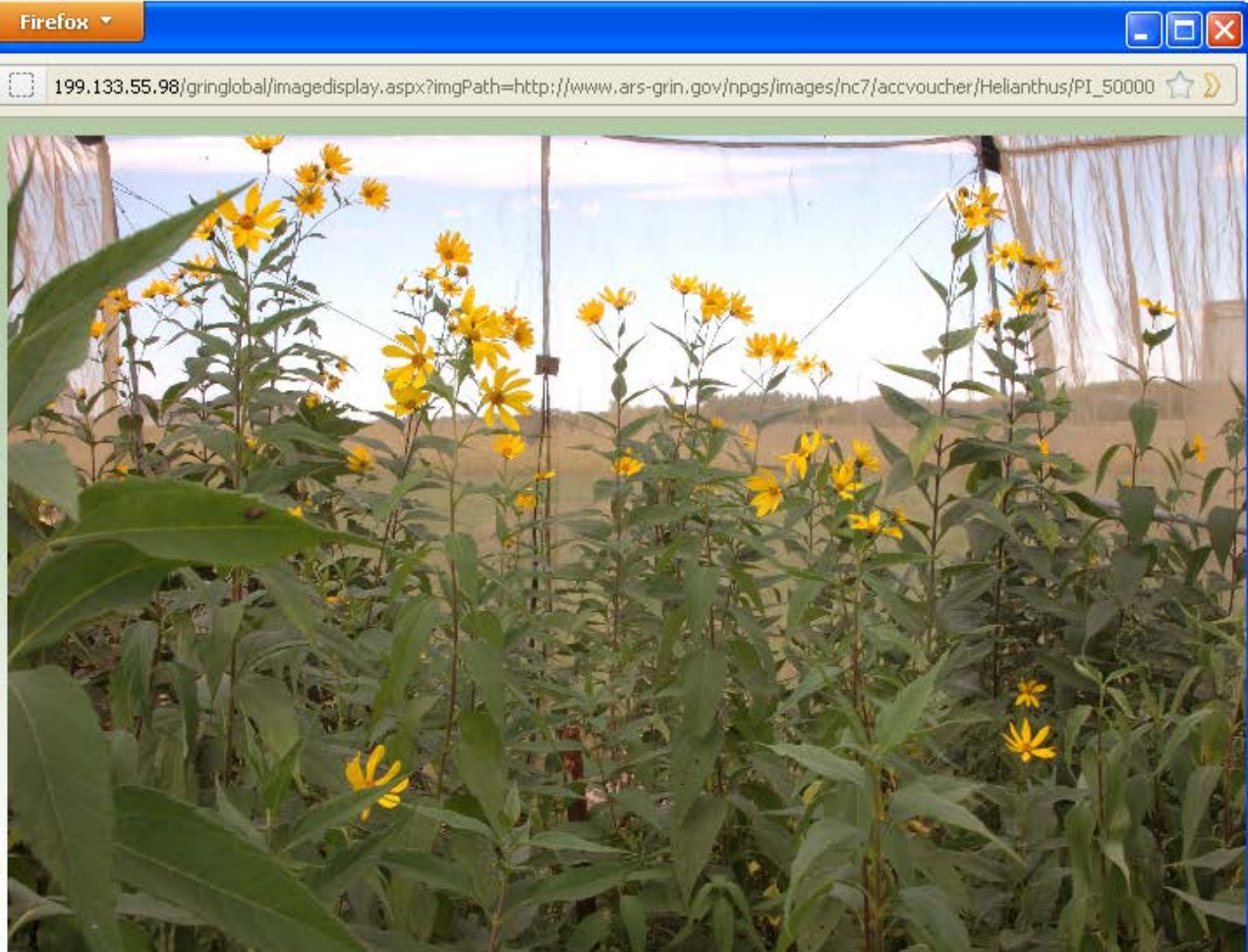


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PI 547243

Helianthus tuberosus L.

Collected from:	Ind
Maintained by:	No
NPGS received:	25-
PI assigned:	198
Inventory volume:	405
Backup location:	Na
Life form:	PE
Pedigree:	
Improvement status:	WI
Reproductive uniformity:	
Form received:	Se





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Export Feature


Users can search for records from the Public Website and then easily download the information

[Login](#) for returning member. Don't have an online account? [Register Now](#)  4 items in cart [Contact Us](#) 

GRIN-Global Release 1.0

[Search](#) [Taxonomy](#) [View Cart](#) [My Account](#) [Choose language](#) English

[Home Page](#) > [Search](#) > General

Search For: [Search](#) 

[Search option](#) | [Advanced Search](#)

[Actions...](#)

Select: All, None, Inverse, Highlighted Options: Show [All](#) items << 1-26 of 26 >> [Export...](#)

<input type="checkbox"/>	Group By: Plant ID	Plant Name	Taxonomy	Material	Maintained By	Availability
<input type="checkbox"/>	PI 597912	ANN x ARG-409	Helianthus hybr	d	NC7	Add to Cart
<input type="checkbox"/>	Ames 6361	ARG x ANN-402	Helianthus hybr	d	NC7	Add to Cart
<input type="checkbox"/>	PI 613755	ANN x PAR-456	Helianthus hybr	d	NC7	Add to Cart
<input type="checkbox"/>	PI 649903	ANN x PET-504	Helianthus hybr	nt	NC7	Add to Cart
<input type="checkbox"/>	PI 649904	ARG x ANN-1318	Helianthus hybr	nt	NC7	Add to Cart
<input type="checkbox"/>	PI 597913	PRA x ANN-1326	Helianthus hybrid	Seed	NC7	Add to Cart
<input type="checkbox"/>	PI 613756	ANN x PET-1378	Helianthus hybrid	Seed	NC7	Add to Cart
<input type="checkbox"/>	Ames 7152	PET x ANN-1068	Helianthus hybrid	Seed	SYS	Not Available
<input type="checkbox"/>	Ames 7157	PET x ANN-1074	Helianthus hybrid	Seed	SYS	Not Available
<input type="checkbox"/>	Ames 22007	Ames 22007	Helianthus hybrid	Plant	SYS	Not Available
<input type="checkbox"/>	Ames 22008	Ames 22008	Helianthus hybrid	Plant	SYS	Not Available
<input type="checkbox"/>	Ames 22009	Ames 22009	Helianthus hybrid	Plant	SYS	Not Available
<input type="checkbox"/>	PI 274517		Helianthus hybrid	Seed	SYS	Not Available

All Rows
Comma Separated (csv)
26 rows to export
Export Data
Drag to spreadsheet...
Done

Shopping Cart Feature

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[Home Page](#) > [View Cart](#)

Shopping Cart

Select	ID	Plant Name	Taxonomy	Distribution Amt
<input type="checkbox"/>	PI 107298		Medicago sativa subsp. sativa	200
<input type="checkbox"/>	PI 162459	SALADINA-SELECTION	Medicago sativa subsp. sativa	200
<input type="checkbox"/>	PI 170534	No. 1602	Medicago sativa subsp. sativa	200
<input type="checkbox"/>	PI 170543	No. 2623	Medicago sativa subsp. sativa	200
<input type="checkbox"/>	PI 547243	TUB-2069	Helianthus tuberosus	100

Status: Available
Amt Distributed: 100

Remove from Favorites

Add to Order



count	Seed	NC7	Remove
			Remove Selected
			Remove All

Search for more accessions

Back to previous page

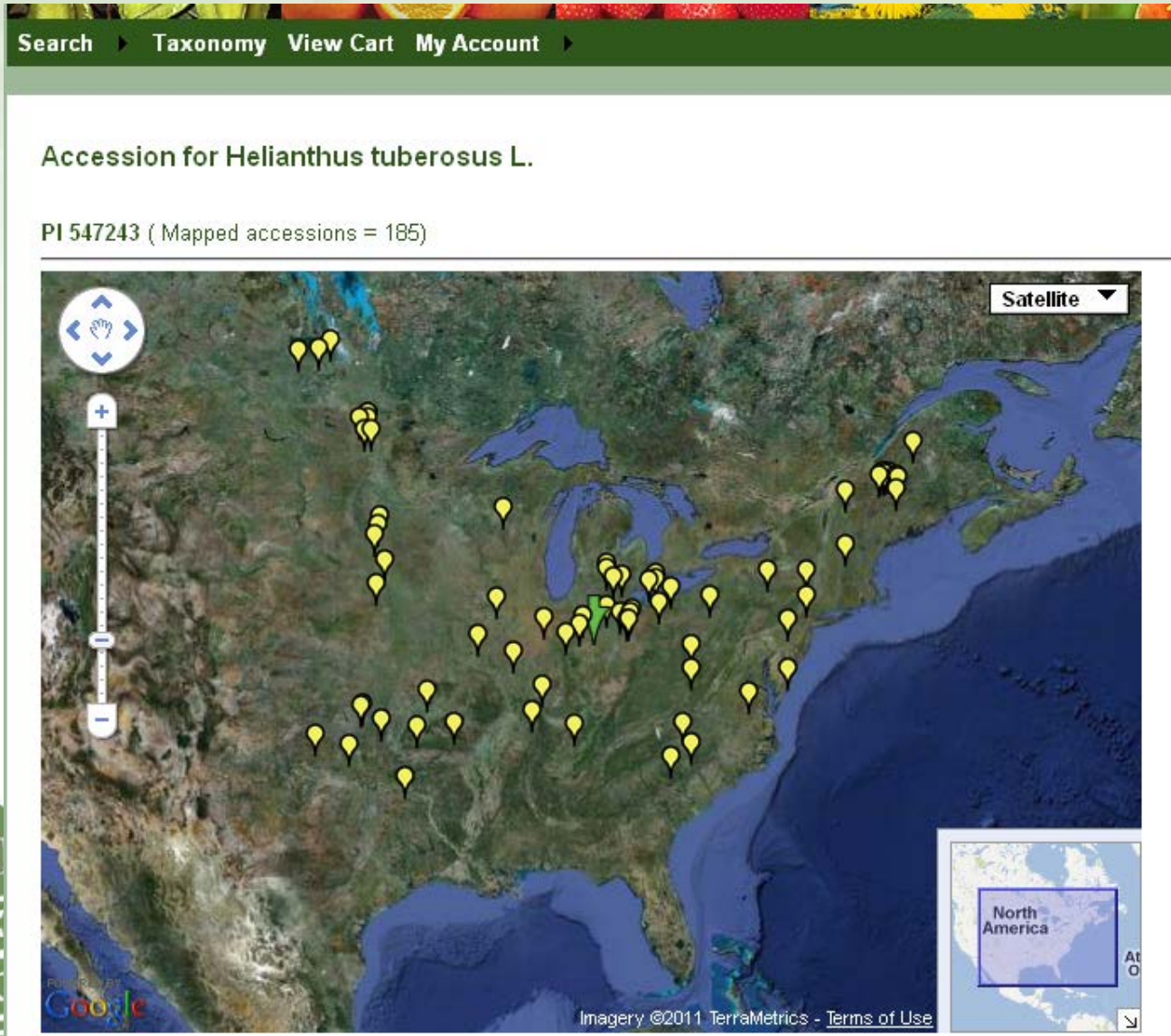
Checkout

5 items in cart

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Associates Data w/ Google Maps



For additional information, please visit:

- www.grin-global.org (project background)
- <http://www.ars-grin.gov/npgs/gringlobal/ggwiki/sb/home.html>
- (training and documentation references including user guides, videos, exercises, and presentations)

