

Germplasm Browser User's Manual

The Germplasm Browser is a tool that allows you to search for germplasm records in the Integrated Breeding Database (IBDB) central or local instances. It displays information related to a specific germplasm like its basic information, attributes, names, generation history and its pedigree tree.

Main Screen

1. **Search Form** – In the Search Form the user is given an option to search either by GID or by Name. Searching by name will retrieve records from both local and central databases. The search will be based on original format, standardized equivalent, and non-space version of the search string. Wildcard search can also be done with the use of '%' character, but no space removal and name standardization is done on wildcard searches.
2. **Germplasm Search Results Table** – The Germplasm Search Results Table displays the results of the search. It presents the GID, Names, Method of creation and Location of creation of the germplasms included in the results of a search.
3. **Germplasm Details Tab** – The Germplasm Details Tab displays information for a specific germplasm entry. It is displayed after the user has selected a specific Germplasm to view from the Germplasm Results Table or a search by GID with exact match has been performed. The details section is divided in several sections: Characteristics, Names, Attributes, Generation History, Pedigree Tree, Lists, Group Relatives, Management Neighbors, Derivative Neighborhood, Inventory Information and Study Information.
4. **Save to List and Close All Tabs** - There is an option to save an existing selection of germplasms into a list. This can be done by clicking the **Save to List** button. There is also an option to clear the selection of germplasms by clicking the **Close All Tabs** button.

The screenshot displays the Germplasm Browser 1.1.2.1 interface. At the top, there is a navigation bar with tabs: "Welcome to the Germplasm and Study Browser", "Germplasm Browser", "Germplasm List Browser", "Study Browser", and "Retrieve Germplasms By Phenotypic Data". Below this, the "Germplasm Browser 1.1.2.1" title is shown. The main area is divided into three sections: 1. Search Form: A search bar with a "Search for" label, a radio button for "GID (ID) Names", a text input field containing "IR 64", and a "Search" button. 2. Germplasm Search Result Table: A table with two columns, "GID" and "NAMES". It lists 14 germplasm entries, with the first row highlighted in blue. 3. Germplasm Details Tab: A tab labeled "202580 x" with a "Basic Details" section showing "GID: 202580" and "Preferred Name: IR 64". Below the table, there are two buttons: "Save to List" and "Close All Tabs".

GID	NAMES
110	IR 64,IR 64-CROSS,IRIS 10-110
50533	IR 18348-36-3-3,IR 64,IRTP 12158,OM 89,KSBB 199,OMCS 95-3,COTTONDORA SANNALU,OM 1270,OM 997-6,COTTONDORA SANNALU,DONG 256,OM 987-1,PSB RC 7 (BANAHAW),AS 996,MR 185,OM 1271,P 4,KSBB 140-5
202580	IR 64
432785	IR 64,IRIS 3-3632
432786	IR 64,IET 9671,IRIS 3-3633
433635	IR 64,IRIS 3-5816
510553	IR 64,PI 497682,IR 18348-36-3-3
522594	IR 64,Q 35020,BE 7120
569052	IR 64,IRIS 10-569052
569736	IR 64,PB 64,IRIS 1-4120
180514	WC 32,IR 18348-36-3-3,IR 64,BCF 1251,INIAP 11
679643	IET 9091,IR 64,IRIS 10-679643
679644	IET 9478,IR 64,IRIS 10-679644
679645	OM 89,IR 64,IRIS 10-679645
763777	IR 64,IRIS 40-1752

Searching Germplasms by GID

- To search for Germplasms by GID, click the **GID** radio button.
- Type the GID in the Search text box and click the **Search** button.

Welcome to the Germplasm and Study Browser Germplasm Browser Germplasm List Browser Study Browser Retrieve Germplasms By Phenotypic Data

Germplasm Browser 1.1.2.1

Search for
☒ GID ☐ Names 50533

Germplasm Search Result: 1

GID	NAMES
50533	IR 18348-36-3-3,IR 64,IRTP 12158,OM 89,KSB 199,OMCS 95-3,COTTONDORA SANNALU,OM 1270,OM 997-6,COTTONDORA SANNALU,DONG 256,OM 987-1,PSB RC 7 (BANAHAW),AS 996,MR 185,OM 1271,P 4,KSB 140-5

50533 x

Basic Details

GID	50533
Preferred Name	IR 64

Note: Providing a negative input value will automatically perform the search on the Local database. Positive input values will cause the search to be performed on the Central database.

- Search results will be displayed on the Germplasm Search Results Table. In the above figure, the germplasm detail tab is automatically shown since the search returned an exact match result.

Searching for Germplasms By Name

- To search for Germplasms by Name, click the **Names** radio button. The search performed is based on the given input, the standardized version and the non-space equivalent.
- Type the search string in the Search text box then click the **Search** Button.

Welcome to the Germplasm and Study Browser Germplasm Browser Germplasm List Browser Study Browser Retrieve Germplasms By Phenotypic Data

Germplasm Browser 1.1.2.1

Search for
☐ GID ☒ Names IR 64

Germplasm Search Result: 94

GID	NAMES
110	IR 64,IR 64-CROSS,IRIS 10-110
50533	IR 18348-36-3-3,IR 64,IRTP 12158,OM 89,KSB 199,OMCS 95-3,COTTONDORA SANNALU,OM 1270,OM 997-6,COTTONDORA SANNALU,DONG 256,OM 987-1,PSB RC 7 (BANAHAW),AS 996,MR 185,OM 1271,P 4,KSB 140-5
202580	IR 64
432785	IR 64,IRIS 3-3632
432786	IR 64,IET 9671,IRIS 3-3633
433635	IR 64,IRIS 3-5816
510553	IR 64,PI 497682,IR 18348-36-3-3
522594	IR 64,Q 35020,BE 7120
569052	IR 64,IRIS 10-569052
569736	IR 64,PB 64,IRIS 1-4120
180514	WC 32,IR 18348-36-3-3,IR 64,BCF 1251,INIAP 11
679643	IET 9091,IR 64,IRIS 10-679643
679644	IET 9478,IR 64,IRIS 10-679644
679645	OM 89,IR 64,IRIS 10-679645
763777	IR 64,IRIS 40-1752

202580 x

Basic Details

GID	202580
Preferred Name	IR 64

Note: The user can add wildcard character '%' on the search string. For example 'IR 64%' perform a search on

all germplasm whose names start with “IR 64”.

- Search results will be displayed on the Germplasm Search Results Table.

Displaying the Germplasm Details Tab

- After a search is executed, the results are displayed on the Germplasm Search Results Table. The user can select the row of the Germplasm to be viewed by clicking on it to open the Germplasm Details Tab. When searching by GID, the Germplasm Details Tab for the germplasm identified by the given id will automatically be opened.
- By default, the **Characteristics** tab is shown. It shows the GID, Preferred Name, Location, Germplasm Method, Creation Date and Reference.

50533 x	
Basic Details	
GID	50533
Preferred Name	IR 64
Location	International Rice Testing Program, IRRI
Creation Method	Single plant selection
Creation Date	0
Reference	PARENTAGE OF IRRI CROSSES IR 1-IR 50000
Names	
Attributes	
Generation History	
Pedigree Tree	
Lists	
Group Relatives	
Management Neighbors	
Derivative Neighborhood	
Inventory Information	
Study Information	

- Click on the **Names** Tab to view the names of the Germplasm. Type, Name, Date, Location and Type Description are shown.
- Click on the **Attributes** Tab to view the attributes of the Germplasm. Type, Name, Date, Location and Type Description are shown.
- Click on the **Generation History** Tab to view the generation history of the Germplasm. GID and PrefName are shown.
- Click on the **Pedigree Tree** tab to view the pedigree of the Germplasm. Click on the arrows beside the nodes to expand them and navigate the tree. Clicking on a node will open the Germplasm Details Tab of the selected germplasm.

50533 x	
Basic Details	
Names	
Attributes	
Generation History	
Pedigree Tree	
▼ IR 64(50533)	
▼ IR 18348-36-3(50532)	
▼ IR 18348-36(50531)	
▼ IR 18348(24489)	
▼ IR 5657-33-2-1(24486)	
▼ IR 5657-33-2(24453)	
▼ IR 5657-33(24452)	
▼ IR 5657(8709)	
► IR 5236(8180)	
► IR 5338(8307)	
▼ IR 2061-465-1-5-5(11072)	
▼ IR 2061-465-1-5(11071)	
► IR 2061-465-1(8300)	
► IR 2061-465(8299)	
Lists	
Group Relatives	
Management Neighbors	
Derivative Neighborhood	
Inventory Information	
Study Information	

- Click on the **Lists** Tab to view the Germplasm Lists the selected germplasm belongs to. List Name, Date and

Description are shown.

- Click on the **Group Relatives** tab to view the germplasms which belong to the same group as the selected germplasm and they were also created via a derivative or maintenance breeding method. GID and Preferred Name are shown.
- Click on the **Management Neighbors** tab to view the germplasms which belong to the same management group as the selected germplasm. GID and Preferred Name are shown.
- Click on the **Derivative Neighborhood** tab to view the germplasms which belong to the derivative neighborhood of the selected germplasm.
 - By default the derivative neighborhood tree initially displayed shows germplasms which is 2 steps backward and 3 steps forward from the selected germplasm.
 - The number of steps backward and forward can be changed and then the **Display** button should be clicked to display the desired derivative neighborhood.
 - Clicking on a node will open the details tab for that germplasm.

The screenshot shows the 'Derivative Neighborhood' tab for germplasm IR 64(50533). At the top, there is a tab header '50533 x'. Below it is a sidebar with tabs: Basic Details, Names, Attributes, Generation History, Pedigree Tree, Lists, Group Relatives, Management Neighbors, and Derivative Neighborhood (which is selected). The main content area shows a tree structure of germplasms. At the top of the tree are two input fields: 'Number of Steps Backward' with a dropdown set to '2' and 'Number of Steps Forward' with a dropdown set to '3', followed by a 'Display' button. The tree structure is as follows:

- ▼ IR 18348-36(50531)
 - ▼ IR 18348-36-3(50532)
 - ▼ IR 64(50533)
 - ▼ IR 64 R(83106)
 - ▼ IR 66707 B(764554)
 - ▼ IR 64 (TUNGRO R)(87404)
 - ▼ IR 64 (NH)(94413)
 - ▼ IR 64(432785)
 - ▼ IR 64(432786)
 - ▼ IR 64(433635)
 - ▼ IR 18348-36-3-3(510553)
 - ▼ IR 64(522594)
 - ▼ IR 64(569052)
 - ▼ PB 64(569736)
 - ▼ IR 64(675472)
 - ▼ IRGC 66970:1986WS(1721992)
 - ▼ IRGC 66970:2000DS(1790747)
 - ▼ IRGC 66970:1989WS(1721993)
 - ▼ IR 64(2874129)
 - ▼ IR 64(2874408)

- Click on the **Inventory Information** tab to view data on seed stocks available for the selected germplasm. Actual Lot Balance, Location Name, Scale Name and Lot Comment are shown.
- Click on the **Study Information** tab to view the list of studies where the selected germplasm was involved in. Study Name, Description and Number of Rows are shown.
- Click on the (x) beside the Tab Caption to close the Germplasm Detail Tab selected.

