

## PABRA DATABASE

<http://database.pabra-africa.org/?location=help>

Home | Breeding | Seed Systems | ICH | Capacity Building | Nutrition | Socio Economics | Marketing | Others | About us

Help

# USER GUIDE

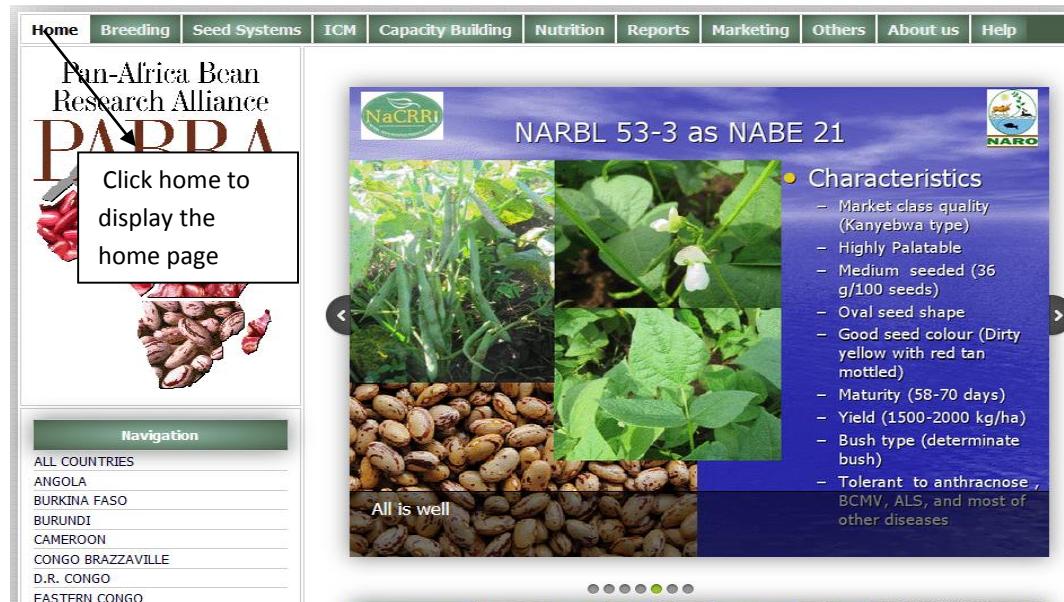
For further help visit

<http://database.pabra-africa.org/?location=contact>

## 1. Introduction

This manual provides a step by step approach to the features and use of the web site for relevant information retrieval. We assume that the user has the Link “<http://database.pabra-africa.org>” so when the user opens the website the following window appears, with sub menu buttons which give access to all routines in the site and these are divided into several sections which include:

Home, Breeding, Seed Systems, Integrated Crop Management (ICM), Capacity Building, Nutrition, Reports, Marketing, Others (admin and contact), about us and Help. (*Below is the displayed image of the home page*)



**Figure 1:** Home page of the PA BRA database

**Displayed image of the home page:** The displayed perpetual/flicking image on the home page center can be replaced with other images by authorized individuals with the proper administrative access to the online database where information are stored.

### 1.1 Structure of this manual

This manual has been structured according to the key thematic areas of Breeding, Seed Systems, Integrated Crop Management (ICM), Capacity Building, Nutrition, and marketing, other important tabs include Reports and Others (admin and contact).

In each of these sections, the manual will highlight how the user can be able to access, views, query and populate information resident in the database. Some sections will have links to external sites that provide additional information to what we have in the database.

### 1.2 General Layout of database

The database has been structures into 2 distinct layouts, the back end that is restricted to authorized users and the front end that this manual explains and illustrates. The table below gives a summary of the major layout features of the database (Front end).

(Please make reference to Figure 1)

#	Section	Description	Summary functions
1	Left Navigation Panel	This section contains country specific navigation options. It also PABRA regional groupings (ECA BREN, SA BREN and WECA BREN)	This allows a user to be able to navigate for information based on a country of interest as opposed to the general. General data/ information is got by clicking the home tab.
2	Top Menu	Is arranged according to the thematic areas, it also includes the other, help and reports tabs	Clicking on each of the menu links will give you a specific page that displays information related to that (See section <i>Breeding, Capacity Building, ICM, Seed Systems Nutrition/Products and Markets Inner page general layout</i> ) for more details
3	Maps	For each of the pages accessed using the links on the left navigation, a map is displayed to show the geographical location	
4	Footer	Contains copyright ownership and visitor counter to help know the number of users that have accessed the database as of data.	

Table 1: *Summary of user end layout and functionality*

### 1.3 Breeding, Capacity Building, ICM, Seed Systems, Nutrition/ Products and Markets Inner page general layout

The pages listed above have the same layout though with subject specific data/ information, using the tabs in the menu, one can be able to access respective pages. The illustrations below identify and explain some of the salient features of the general layout. The figure 2 below is that of the products page that will be used to explain the layout as it applies to all pages.

Search **Total count: 34**

Product Name:	Year Of Developed From:	Year Of Developed To:
<input type="text"/>	<input type="text"/> Select year	<input type="text"/> Select year
Product Type:	Variety Official Name:	Variety Local Name:
<input type="text"/> Select option	<input type="text"/>	<input type="text"/>
Partner Name:	Product Location:	
<input type="text"/>	<input type="text"/>	

**SEARCH**

Summary count of  
all the theme  
specific records in  
the database

List of parameters  
that can be used to  
refine search the  
database

Param 1	Select Parameter	Param 2	Select Parameter
Param 3	Select Parameter	Param 4	Select Parameter
	Param 5	Select Parameter	

TABULATE ▾

5 way tabulation, user can select parameters (Min 3) and on clicking tabulate the option to excel or PDF

Product Name:	Bean Based Bites	Product Type:	Snack
Year of			
<strong>Product Details</strong>			
Product	Variety Official Name:	Variety Local Name:	
Year of	IZO201245	INAMUNIHIRE	
Product	Location Name:	RUHORORO	Country Name: BURUNDI
Year of	Dissemination Method:	Training and Demonstrations	Number of Beneficiaries: N/A

Detailed results after clicking the button search are shown as here, clicking on the yellow highlighted sections gives a pop up with more details

**Figure 3:** *Summary layout of pages*

## 1.4 Summary of General and page layout(s)

The interfaces shows a list of African countries in the network to the extreme left and some search parameter boxes next to the African continent's map. The search parameters allows users to filter their search based on criteria's chosen/ specified in the search boxes. And should you choose to select a Country in the left pane, the displayed information is limited to that Country alone. Equally so, the total count will change to another value specific to the country of choice.

## 2. Navigating through the database

This section provides a detailed explanation how a user can access each of the pages and be able to navigate the database for data as well as exporting data for further manipulation.

### 2.1 Breeding

Under the breeding, the user can see several fields which include total count, official name, local name, Source name, year of release (from), year of release (to), Altitude, Temperature, rainfall, plant type days to maturity, 100 seed category color, coat pattern, shape, size, Constraint Stress label Gene pool and purpose of release among others. These values are shown the search section as shown in the example figure 3 above and therefore can be used to search.

The Breeding interface provides a database of nationally registered or released breeding materials and their properties. The total count will vary from time to time as population of the database is a continuous process. The following are the major user functionalities when accessing the breeding page:

- a) Using the url (<http://database.pabra-africa.org/>) one can be able to access the database if an internet connection is available
- b) Click the breeding tab on the top menu to access the breeding information page, the breeding page with a generic layout as explained in figure 3 will be displayed with summary information.
- c) To search for specific information, select the desired parameters and click on the search button, the results of your search will be populated and displayed in the result section (see figure 4 for example). To search based on a specific country, select the desired country on the left panel and results will be specific to that country.
- d) Tabulation: this allows a user to be able to search for specific information and export it to either excel or PDF. Note: To be able to use this a user must be able to provide a minimum of 3 parameters/ selections. The Figure 5 illustrated some of the functionality explained below
  - *Select at least 3 parameters from the list provided*
  - *click the button tabulate, this will run your search query and*
  - *provide an option to either export to excel or PDF*
  - *Options of either open or save will be given on the pop up, the option open will open the file using the either excel or PDF choice you made and save will prompt the user to select a location they want the files to be saved to*

Home Breeding Seed Systems ICM Capacity Building Nutrition Reports Marketing Others About us Help

**Search** Total count: 31

Official Name: PAN	Local Name:	Variety Source:
Year of Release (from): Select year	Year of Release (to): Select year	Altitude: Select
Temperature: Select	Rainfall: Select	Growth Habit: Select
Day To Maturity (from): Select	Day To Maturity (to): Select	100 Seed Category: Select
Seed Color: Select	Coat Pattern: Select	Seed Shape: Select
Seed Size: Select	Constraint: Select	Stress Label: Select
Gene Pool: Select	Purpose Of Release: Select	

**SEARCH**

Param 1 Official Name Param 2 Shape  
Param 3 Size Param 4 Select Parameter  
Param 5 Select Parameter

**TABULATE**

Altitude: High (>1500 m.a.s)	Temperature: Moderate (15 to 24 Degrees Celcius)
Rainfall: 500 to 800 mm	Plant Type: TypeIIb (Bush indeterminate erect branches)
Days to Maturity: 110	Size: Large
100 Seed Category: More than 40grams	Colour: Cream/Biege
100 Seed Weight: N/A	Shape: Kidney
Source Name: Private	Coat Pattern: Speckled

**Seed Details**

Local Name: PAN148  
Year Of Release: 1950

Local Name: PAN 127  
Year Of Release: 1990

Local Name: EMELENI  
Year Of Release: 1990

Figure 4: Summary of breeding search functionality

Breeding search section, a user can enter more than 1 parameter eg *Year of release (from)* to *Year of release (to)*. On clicking search the result will be returned as shown below and the count will change

Part of the variety results after searching for specific parameter as explained above

5 way tabulation parameter options

Param 1 Official Name Param 2 Shape  
 Param 3 Size Param 4 Select Parameter  
 Param 5 Select Parameter

TABULATE ▾

Select Parameter  
 100 Seed Category  
 Altitude  
 Coat Pattern  
 Color  
 Constraints1  
 Constraints2  
 Constraints3  
 Constraints4  
 Constraints5  
 County  
 Day To Maturity  
 Gene Pool  
 Local Name  
 Official Name  
 Plant Type  
 Purpose Of Release  
 Rainfall  
 Shape  
 Size

Parameter Values used in tabulation

<b>Official Name:</b> PAN148	<b>Local Name:</b>
<b>Country:</b> ZIMBABWE	<b>Year Of:</b>
<b>Official Name:</b> PAN 127	<b>Local Name:</b>
<b>Country:</b> ZIMBABWE	<b>Year Of:</b>
<b>Official Name:</b> PAN 181	<b>Local Name:</b>
<b>Country:</b> SOUTH AFRICA	<b>Year Of:</b>
<b>Official Name:</b> PAN 182	<b>Local Name:</b>
<b>Country:</b> SOUTH AFRICA	<b>Year Of Release:</b> 1990
<b>Official Name:</b> PAN 148	<b>Local Name:</b> N/A
<b>Country:</b> SOUTH AFRICA	<b>Year Of Release:</b> 1994
<b>Official Name:</b> PAN 128	<b>Local Name:</b> MONATI
<b>Country:</b> SOUTH AFRICA	<b>Year Of Release:</b> 1995

**Figure 5:** Breeding tabulation example

## 2.2 Seed Systems

The Seed systems interface provides database on seed production and supply. It provides comprehensive information about the Variety official name, seed class, partners involved in the distribution, partner type, quantity supplied and produced, year of supply and production, the beneficiaries, bag sizes and other relevant information. The seed systems interface resembles the breeding one in that the Search, Tabulation and parameter selection operate the same way.

References and examples to this section will be drawn from illustrations provided in the breeding section above, only instances of seed system unique operations will be fully explained/ illustrated in this section.

- a) Using the url (<http://database.pabra-africa.org/>) one can be able to access the database if an internet connection is available.
- b) Click the seed system tab on the top menu to access the seed system information page, the seed system page with a generic layout as explained in figure 3 will be displayed with summary information. The figure 6 below shows a summary of the seed system page.
- c) To search for specific information, select the desired parameters and click on the search button, the results of your search will be populated and displayed in the result section (see figure 4 for example). To search based on a specific country, select the desired country on the left panel and results will be specific to that country.
- d) Tabulation: this allows a user to be able to search for specific information and export it to either excel or PDF. Note: To be able to use this a user must be able to provide a minimum of 3 parameters/ selections. The Figure 5 illustrated some of the functionality explained below
  - *Select at least 3 parameters from the list provided*
  - *click the button tabulate, this will run your search query and*
  - *provide an option to either export to excel or PDF*
  - *Options of either open or save will be given on the pop up, the option open will open the file using the either excel or PDF choice you made and save will prompt the user to select a location they want the files to be saved to*

Search Total count: 351

Variety Official Name: Variety Local Name: Source Name:

Year Of Supply From: Year Of Supply To: Quantity Produced (kg):

Select year Select year

Partner Name: Partner Type: Seed Class:

Select Parameter Select Parameter

Select Parameter Select Parameter

Select Parameter Select Parameter

Select Parameter Select Parameter

SEARCH

Param 1 Param 2 Param 3 Param 4 Param 5

TABULATE

Excel Pdf

**Official Name:** A410 ! **Country:** BURUNDI **Year Of Supply:** 2011 **Seed Class:** Pre-basic

**Official Name:** AND10 **Country:** BURUNDI **Year Of Supply:** 2009 **Seed Class:** Pre-basic

**Official Name:** AND10 **Country:** BURUNDI **Year Of Supply:** 2009 **Seed Class:** Pre-basic

**Figure 6:** Seed system page, results specific to country Burundi

### 2.3 Integrated Crop Management (ICM)

The Integrated Crop management (ICM) interface provides a database of pest, disease and soil fertility crop management technologies that are promoted alongside bean seed in order to improve the performance of the bean crop. These technologies are collectively referred to as ICM. The specific fields includes: Name of the technology, Technology type, purpose of the technology, Years of dissemination (From what year to what Year), the partners involved and dissemination locations among others.

- Using the url (<http://database.pabra-africa.org/>) one can be able to access the database if an internet connection is available.
- Click the ICM tab on the top menu to access the ICM information page, the ICM page with a generic layout as explained in figure 3 will be displayed with summary information. The figure 7 below shows a summary of the ICM page.
- To search for specific information, select the desired parameters and click on the search button, the results of your search will be populated and displayed in the result section (see figure 4 for example). To search based on a specific country, select the desired country on the left panel and results will be specific to that country.
- Tabulation: this allows a user to be able to search for specific information and export it to either excel or PDF. Note: To be able to use this a user must be able to provide a minimum of 3 parameters/ selections. The Figure 5 illustrated some of the functionality explained below
  - Select at least 3 parameters from the list provided
  - click the button tabulate, this will run your search query and

- provide an option to either export to excel or PDF
- Options of either open or save will be given on the pop up, the option open will open the file using the either excel or PDF choice you made and save will prompt the user to select a location they want the files to be saved to

The screenshot shows the ICM page layout with the following annotated components:

- ICM Menu:** A box pointing to the 'ICM' link in the top navigation bar.
- Current ICM record count:** A box pointing to the 'Total count: 4582' label.
- ICM search parameter options:** A box pointing to the search form fields: Technology, Technology Type, Purpose, Dissemination Year (from), Dissemination Year (to), Dissemination Method, Partner Name, Partner Type, and Dissemination Location.
- Tabulation parameter options:** A box pointing to the dropdown menu for Param 5, which includes options like Select Parameter, Dissemination, Location, Partner, Partner Type, Purpose, Technology, Technology Type, and Year. The 'Partner Type' option is highlighted.
- Search results:** A box pointing to the results table, which displays a single row for ISFM (Intregrated Soil Fertility Management) with a Year of 1972.
- ICM Details:** A section containing Dissemination (Trials), Partner (GITEGA), and Location/Country (GITEGA).
- Technology:** NPK mineral fertilizers (14-15-20) kg/ha
- Purpose:** Optimisation of P level in Kaolisol
- Technology Type:** ISFM (Intregrated Soil Fertility Management)
- Year:** 1972

**Figure 7:** ICM page layout

## 2.4 Capacity Building

Capacity Building database presents data on meetings, workshops, training (short and long term i.e one or two weeks to the duration for an Msc/Ph.d trainings). These activities are classified by type, description, Location, Participant and Participant Role, Start date and End date and participants nationality. These classification constitutes the parameters that can be used to filter and search for specific information and they can also be selected pairwise to get tabulations on any desired pair.

- a) Using the url (<http://database.pabra-africa.org/>) one can be able to access the database if an internet connection is available.
- b) Click the Capacity Building tab on the top menu to access Capacity Building information page, the capacity building page with a generic layout as explained in figure 3 will be displayed with summary information. The figure 8 below shows a summary of the capacity building page.
- c) To search for specific information, select the desired parameters and click on the search button, the results of your search will be populated and displayed in the result section (see figure 4 for example). To search based on a specific country, select the desired country on the left panel and results will be specific to that country.
- d) Tabulation: this allows a user to be able to search for specific information and export it to either excel or PDF. Note: To be able to use this a user must be able to provide a minimum of 3 parameters/ selections. The Figure 5 illustrated some of the functionality explained below
  - *Select at least 3 parameters from the list provided*
  - *click the button tabulate, this will run your search query and*
  - *provide an option to either export to excel or PDF*
  - *Options of either open or save will be given on the pop up, the option open will open the file using the either excel or PDF choice you made and save will prompt the user to select a location they want the files to be saved to*

**Search** Total count: 1503

Activity:	Activity Type:	Location:
<input style="width: 100%; height: 25px; border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;" type="text"/>	<input style="width: 100%; height: 25px; border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;" type="text"/>	<input style="width: 100%; height: 25px; border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;" type="text"/>
Participant:	Start Date:	End Date:
<input style="width: 100%; height: 25px; border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;" type="text"/>	<input style="width: 100px; height: 25px; border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;" type="text"/>	<input style="width: 100px; height: 25px; border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;" type="text"/>
Participant Role:	<input style="width: 100%; height: 25px; border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;" type="text"/>	

**SEARCH**

**Capacity Building Details** X

<b>Start Date:</b> 03/02/2014 <b>Description:</b> Meeting <b>Activity Title:</b> Annual Steering Committee Review and Planning Meeting (ECABREN) <b>Duration:</b> 4 days	<b>End Date:</b> 07/02/2014 <b>Location:</b> KAMPALA <b>Activity Theme:</b> PABRA Review and planning  <b>Participant Role:</b> Participant
---	---

**Contact Details**

<b>e-mail:</b> e.katungi@cgiar.org	<b>Address:</b> CIAT Uganda, Kawanda Research Institute, 13Km Bombo Road, P.O. Box 6247, kampala
<b>First Name:</b> Enid <b>Gender:</b> Female	<b>Last Name:</b> Katungi <b>Nationality:</b> N/A

**TABULATE** ▾

<b>End Date:</b> N/A <b>Location:</b> KAMPALA	<b>End Date:</b> 07/02/2014 <b>Location:</b> KAMPALA
--	---

**Detailed participant and activity information**

**Figure 8: Capacity building page**

## 2.5 Nutrition/ Products

The nutrition and products tabs are grouped together, these 2 aspects have linkage to the breeding information. Products developed are linked to a bean variety that has been developed and promoted in the PABRA network. Hovering your mouse cursor over the nutrition tab will show a dropdown menu for products giving the user an option to select either of the 2 depending on the area of interest.

**Note:** Section 2.1 to 2.4 present a detailed account on how to access and navigate along pages of interest, those steps to apply to Nutrition and products pages.



**Figure 9:** tab option to access either Nutrition or Products page

A screenshot of the 'Nutrition' page. At the top, there is a search form with fields for Variety Official Name, Biofortified status, Bean Taste, Protein (%), Iron Raw, Zinc Raw, Product Name, Product Type, Prod. Year Promoted, Prod. Dissem. Method, Product Partner, Product Location, and Number of Beneficiaries. A 'SEARCH' button is located at the bottom right of the search form. Below the search form is a 'Seed Details Brief' modal window. This window contains sections for 'Seed Details Brief', 'Quality Details', and 'Other Details'. The 'Seed Details Brief' section shows Size: Large, Colour: Pink, and Shape: N/A. The 'Quality Details' section shows Biofortified: N/A, Pedigree: N/A, Cooking Speed: N/A, Fiber Content (mg): N/A, Protein (%): N/A, Cooking Time Dry: N/A, Phytate (ug/g): N/A, Bean Taste: N/A, and Cooked Soak: N/A. The 'Other Details' section shows a dropdown for 'Select Parameter' and a text field for 'Name: N/A' with 'Of Release: 1961' below it.

**Figure 10:** Nutrition page

Search Total count: 109

Product Name:	Year Of Developed From:	Year Of Developed To:
<input type="text"/>	<input type="button" value="Select year"/>	<input type="button" value="Select year"/>
Product Type:	Variety Official Name:	Variety Local Name:
<input type="button"/>	<input type="text"/>	<input type="text"/>
Partner Name:	Product Location:	
<input type="button"/>	<input type="button"/>	
<input type="button" value="SEARCH"/>		

**Product Details** X

<b>Variety Official Name:</b> SUG-131	<b>Variety Local Name:</b> MALEPA
<b>Location Name:</b> Rauce-Mozambique	<b>Country Name:</b> MOZAMBIQUE
<b>Dissemination Method:</b> Fairs	<b>Number of Beneficiaries:</b> 156
<b>Number of Beneficiaries</b>	<b>Number of Beneficiaries</b>
<b>Male:</b> N/A	<b>Female:</b> N/A

<b>Product Name:</b> Bean + yam + roasted groundnut paste	<b>Product Type:</b> Dish
<b>Year of Development:</b> 2014	<b>Product Partner:</b> IIAM
<b>Product Name:</b> Bean Bagia	<b>Product Type:</b> Snack
<b>Year of Development:</b> 2012	<b>Product Partner:</b> IIAM

**Figure 11:** Product page showing detailed information of selected product

### 3. Other pages

The pages explained in section 2 are the core pages related to the thematic areas of PABRA, the pages explained in this section are supplementary pages to the database and they include reports, Others (Admin and Contact), about us and Help.

#### 3.1 Reports

The reports page shows summary reports in form of tables and graphs, this information could be a result of information found in the database and from other sources compiled by the M&E unit. The information on this page will be changing depending on the relevance of the information needed by the end user or deemed important by the M&E unit.

To access this page, click the reports tab at the menu bar, the page is displayed with the current/most up to date information.

The screenshot shows the 'Reports' tab selected in the top navigation bar. The main content area displays a summary report titled 'Summary Report(s)' and a note that detailed information can be found in the 'Annual report 2013'. Below this, a section titled 'Capacity Building' contains a table for 'Training 2009-2014-Male & Female %' and a bar chart titled 'Gender % training for categories (Students, farmers and scientists/ partners)'. The table data is as follows:

# Group	Total	Male	Female
1 Scientists & Partners	6565	59.35	40.25
2 Farmers & extension Workers	91188	48.1	51.37
3 Students	150	66.8	33.21

Source: PABRA database and Reports

The bar chart shows the percentage of training for different gender and category groups across the years 2009 to 2014. The categories on the y-axis are Female Students, Male Students, Female Farmers, Male Farmers, Female Scientists & Partners, and Male Scientists & Partners. The x-axis represents the percentage from 0 to 90. The legend indicates the years: 2014 (orange), 2013 (blue), 2012 (purple), 2011 (green), 2010 (red), and 2009 (dark blue).

**Breeding**

Niche market bean varieties over the years

Figure 12: Sample reports page

#### 3.2 Admin

The admin tab which is under the other tab provides a link to the admin page that is used by only authorized users to access the back end of the system. Authorized users will be required to provide a valid user and password to gain access to that section of the system.

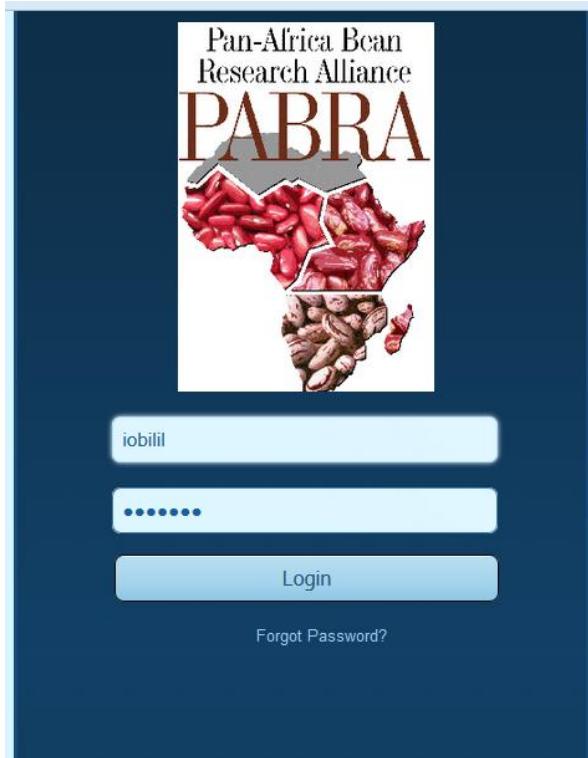


Figure 12: Admin access page after clicking the admin tab under others tab.

### 3.3 Contact

The contact page is accessed under the others tab, it gives information on whom the user can contact in case they need more information related to the database. It also has a feedback form that the user can use to contact person responsible for information on the database.

Contact Us

First Name\*:

Last Name\*:

Email\*:

Message\*:

Pan African Bean Research Alliance (PABRA)  
 International Center for Tropical Agriculture (CIAT)  
 c/o National Agricultural Research Laboratories, Kawanda, P. O. Box 6247, Kampala,  
 Uganda  
[www.ciat.cgiar.org](http://www.ciat.cgiar.org)  
[www.pabra-africa.org](http://www.pabra-africa.org)

For content information and clarifications  
 Please contact:

**Rachel Muthoni Andriatsithaina**  
[r.muthoni@ciat.cgiar.org](mailto:r.muthoni@ciat.cgiar.org)  
 Pan African Bean Research Alliance (PABRA)  
 International Center for Tropical Agriculture (CIAT)  
 c/o National Agricultural Research Laboratories, Kawanda, P. O. Box 6247, Kampala,  
 Uganda  
[www.ciat.cgiar.org](http://www.ciat.cgiar.org)  
[www.pabra-africa.org](http://www.pabra-africa.org)

**For Site design and development**  
 Contact:  
**Akinwale N. Akitunde, Assoc. Prof. of Informatics**  
 Coordinator of Post Graduate Institute,  
 Faculty of Computer Technology and Engineering, International Black Sea University,  
 No.2 13 Km, D. Aghmashenebeli Alley, Tbilisi/Georgia  
 Email:[gakintunde@ibsu.edu.ge](mailto:gakintunde@ibsu.edu.ge)

and  
**Innocent Obili, Database Manager Pan African Bean Research Alliance (PABRA)** .  
 International Center for Tropical Agriculture (CIAT)  
 C/O National Agricultural Research Laboratories, Kawanda, P. O. Box 6247, Kampala, Uganda,  
 Email:[i.obili@ciat.cgiar.org](mailto:i.obili@ciat.cgiar.org)

Figure 13: *the contact us page*

### 3.4 About Us

The about us page provides a highlight of what the PA BRA network is all about, it also gives an overview of the rationale behind the database. Persons/ institutions that have been instrumental in providing information for the database are acknowledged in this section.

A supporting African Map showing all these Countries are displayed. Please note that Maps relating to the individual Countries are displayed when the Country tabs are clicked along with the primary tabs information like (Breeding, Seed Systems, ICM, ....etc)

### 3.5 Help

Clicking help provides an online link to this document. This allows you to make an online reference to a set of hints. The help panel provides the opportunity for the users to access download documentation. It requires one to click at the download documentation to access the PA BRA database user manual which acts as guide and be able to follow the steps while using the database.

This User manual is downloadable and can be saved in other places for easy accessibility if the user does not have internet.