

# DIGITIZED COLLECTIONS DATABASE SOFTWARE COMPARISON

This document is meant to serve as a resource to compare three popular collections management software programs: BRAHMS - http://herbaria.plants.ox.ac.uk/bol/brahms/software/v8 BG-BASE - http://www.bg-base.com/ IrisBG - https://www.irisbg.com/

*These comparisons were modified from content provided by the manufacturer of the product. ArbNet does not endorse any specific product.* 

# Questions addressed in this document:

- 1. Are there different versions of the software program? How does this work for smaller collections (fewer than 100 species) as compared to larger gardens/arboreta?
- 2. Are there different pricing schedules for different versions?
- 3. Why should arboreta use this software instead of a similar product?
- 4. How does this software make arboreta more efficient and effective?
- 5. What is the level of expertise required for the different versions? Does the user need an IT professional to set it up?
- 6. How easy would it be to convert an existing database to this software platform?
- 7. My data is really specialized and it doesn't fit into the commercially available schema. What if my existing data doesn't fit into the system?
- 8. Is this software available in different languages?
- 9. What's in it for arboreta to digitize their databases or change software?



**1.** Are there different versions of the software program? How does this work for smaller collections (fewer than 100 species) as compared to larger gardens/arboreta?

#### Summary

#### **BRAHMS**

- Simple system
- Able to grow system as needed
- Select appropriate modules
- **BG-BASE** One version
- Able to turn off fields

**Details** 

#### IrisBG

- Modularized
- Able to manage several gardens with shared taxonomy

#### BRAHMS

BRAHMS is a single software system that is simple to use. The user is able to switch modules on or off to configure projects. As projects get increasingly ambitious, the user can gradually extend the system to manage additional categories of data (*i.e.* literature, images and botanical survey data.) The system also has a 'WebConnect' module to make the system available online. Small gardens may have only a few species, but BRAHMS provides functionality as the garden grows. The system can be as simple or as complex as the user needs.

#### **BG-BASE**

There is one version that can then be simplified by turning off fields or entire entry windows that are not being used. There are different modules all under one system. No single installation of BG-BASE uses all of its modules or functionality; rather, each uses a different subset of the whole.

#### **IrisBG**

The IrisBG software is highly modular. New users can configure their own combination of modules based on the number of concurrent user licenses they need. IrisBG can also be configured to manage several separate gardens with shared taxonomy. The software can be installed on a single PC, in a large network with hundreds of users, or a dispersed global network with the plant collection stored on a cloud-based database service.

# 2. Are there different pricing schedules for different versions?

#### Summary

### **BRAHMS**

- Price is based on scale of use
- Free version available

BG-BASE Price is based on different modules selected

### IrisBG

 Price is based on number of users

# Details

#### BRAHMS

Pricing is linked to scale of use. BRAHMS v7 is the most popularly used software, and it has been available for 25 years. It may be free for temporary, small, and/or research projects. As a rule, costs are related to scale of use. A focus with v8 is sustainability; therefore, there is only one costing scheme to ensure the project is financially sound. If projects wish to install BRAHMS online (BOL) on their own server, usually there is a separate charge.

#### **BG-BASE**

There are different modules within the system:

- Living Collections
- Preserved Collections
- Conservation
- Web
- ArcGIS Connector

Pricing depends on which modules you use, use on a single computer or a network, whether there is any data to convert from other systems and any technical support agreement needed.

#### **IrisBG**

IrisBG pricing is based on the number of concurrent users, as well as the features and services required. All prices are available on their website: (<u>http://www.irisbg.com/p\_pricelist.aspx</u>.) The community of users ranges from smaller gardens using IrisBG on a single PC to very large institutions that manage hundreds of sites in one database.

# 3. Why should arboreta use this software instead of a similar product?

#### **Summary**

**BG-BASE** 

# **BRAHMS**

- Flexible
- Great for research
- Latest platform

• 30 + years experience

• Easy to use

### IrisBG

- High level of support
- Comprehensive system

# **Details**

### BRAHMS

BRAHMS is substantially more flexible than other management systems. It supports a wide range of uses, from curation/management to research. The system prioritizes research use when possible, and connects projects when relevant. The system integrates data, such as garden plants, seed data, images, and herbarium material (see diagram: <u>http://herbaria.plants.ox.ac.uk/bol/</u>.) The management system is designed around user feedback and collaborative development inputs. BRAHMS is developed using the latest software platforms. Users can add their own components as needed.

#### **BG-BASE**

BG-BASE has been in development for 30+ years. It is used in many of the premier botanical gardens and arboreta in the world. They implemented 'best practices' based on this experience. The developers of BG-BASE have worked in public garden horticulture, and they understand the issues and complexity of collections documentation that many other systems have historically ignored. This software is fully supported and well documented. The cost compares feature-to-feature favorably with the other systems that are currently available on the market. As far as connectivity is concerned, this product can be linked to labelers, embossers, mapping (ArcGis, AutoCad, BG-Map), MS SQL, and others. And BG-BASE can be individually configured to do as much (or as little) as an institution needs to do. Features can be turned back on as needed.

#### Iris BG

IrisBG is designed by a team with a background in professional software engineering and botany. This combination ensures solutions for complex aspects of managing a plant collection. IrisBG is a comprehensive management solution available to botanic gardens. It offers integrated mapping, a website for visitors, support for living and preserved material, a mobile solution, a powerful report engine, a cloud database hosting option, and more. There is additional support available for users, and they have a high user satisfaction rating.

# 4. How does this software make gardens more efficient and effective?

### BRAHMS

- Streamlined system
- Wide range of data outputs
- User can design own outputs

# Summary

### **BG-BASE**

- Standardization
  - Minimal programming required

### IrisBG

- Efficient
- Easy to organize

### **Details**

#### BRAHMS

A BRAHMS database provides perspective on an institution's data, as the user can see what they have or do not have. Curation is streamlined, and there are opportunities for data outputs. For example, BRAHMS can produce a species checklist for the garden. Or, for each species, the database will summarize its known wild range, conservation status and key species characteristics. It could also assist by mapping garden plants and highlighting native species. Another example would be helping create plant transaction lists for garden exchanges. Users are in control of their data, and they are able to design their own outputs.

#### **BG BASE**

BG-Base leads to consistent and standardized documentation practices. It is a turn-key system (staff no longer have to program their own databases) and the software can help facilitate accreditation and lead to additional institution funding.

#### IrisBG

IrisBG is a collection management tool that helps you be efficient and accurate. With IrisBG, we want you to feel that keeping your plant collection data up to date is not a chore, but a very worthwhile effort that enhances the value and enjoyment of the plant collection for staff and visitors alike.

5. What is the level of expertise required for the different versions? Does the user need an IT type person to set it up?

### Summary

### **BRAHMS**

 No IT necessary with small projects **BG-BASE** 

• No IT necessary

## IrisBG

- If own database, IT would be helpful
- Cloud database, little IT experience

# Details

### BRAHMS

With v7, no IT backup is needed. One of the key challenges in developing v8 has been to deploy the latest technologies, yet ensure that a small project with no IT backup can get up and running almost immediately. V8 has been successful in this endeavour. If enterprise systems wish to use more complex data store or server farms, the user would need IT knowledge to do that. V8 is scripted with MS SQL for the installation of DBMS. V8 was developed using standard ribbon user interface, as seen on some screen examples here: <u>http://herbaria.plants.ox.ac.uk/bol/brahms/software/v8</u>. It looks like Word or Excel. Standard features make it easy to use.

#### **BG BASE**

No IT experience is necessary to use the system.

#### IrisBG

The cloud database hosting requires very little IT experience. Installations can be carried out by anyone with medium range computer skills. If the user is hosting the database, assistance or advice from IT professionals may be needed to ensure that a robust backup solution is in place. For smaller institutions with a single PC installation, there are video tutorials available on the forum to help with the installation.

## 6. How easy would it be to convert an existing database?

### **Summary**

# **BRAHMS**

• Use Rapid Data Entry (RDA) BG-BASE
 Case-by-case situation

### IrisBG

• Modularized

### **Details**

#### BRAHMS

The ease of switching an existing database to BRAHMS depends on how the data is stored. In general, exported data from the original database to flat files can be transferred through the BRAHMS Rapid Data Entry (RDE). Then they can be imported to BRAHMS. BRAHMS can be configured to adapt to different accession and plant numbering systems.

#### **BG-BASE**

Data conversion is a case-by-case situation. Data can be migrated into BG-BASE, but sometimes additional, manual post-migration editing is necessary.

#### **IrisBG**

Converting the data can be straightforward if the current dataset is relatively basic. In some cases, this work can also be carried out by the staff at the garden using the optional Data Import feature. For more complex databases, IRIS offers a data migration service. For more information: http://www.irisbg.com/p\_datamigration.aspx

7. My data is really specialized, and it doesn't fit into the commercially available schema. What if my existing data doesn't fit into the system?

#### **Summary**

### **BRAHMS**

• Flexible

• Can add own fields

BG-BASE 100 user-defined fields

## IrisBG

- Flexible
- Support custom fields (attributes)

## **Details**

#### BRAHMS

As with v7, the new system allows the user to add non-standard fields. Thus, if the project has data that does not fit into the default BRAHMS data schema, the structure can be extended, and new fields can be defined and registered as needed. These data fields become a permanent part of the database – unless the user opts to remove them.



#### **BG BASE**

BG-BASE contains over 100 user-defined fields across multiple tables for an institution to define and use as they see fit.

#### **IrisBG**

Over 60 databases have been transferred so far and, to date, there has not been a situation where significant data cannot be transferred due to incompatibilities. Not only is the data structure in Iris very flexible, but it supports custom fields (attributes) related to accessions and taxa. If there is a good argument for having support for a specific type of data, the company will certainly investigate it.

### 8. Is this software available in different languages?

	·	
<b>BRAHMS</b>	<b>BG-BASE</b>	IrisBG
• Yes, several	• Yes, several	<ul> <li>Desktop version -</li> </ul>
		English

Summarv

### Details

#### BRAHMS

BRAHMS v8 is available in any language, as all text strings are held in resources files. In addition to the default English, there are language settings including Spanish, Portuguese, Chinese and German. To further translate, there is a new language column to select as a resource file, which will translate the strings.

#### **BG BASE**

The user interface is in English; the Quick Start guides have been translated into Spanish, French, and Russian. The end-user has the ability to create language-specific help linked to each field in the system

#### **IrisBG**

The user interface of the main desktop software is currently available in English only. However, the Garden Explorer website is available in a number of languages. To complement this, IrisBG can be also be enabled to support the recording of data in multiple languages. Combined with the visitor website "Garden Explorer", visitors can explore the collection in their own language. For example, visit the website from Jerusalem Botanic Garden in Israel, Mainz in Germany or Stellenbosch University in South Africa: <u>http://www.gardenexplorer.org</u>.

# 9. What's in it for the garden/arboreta to digitize or change software?

# BRAHMS

- Optimize use
- Integration
- Share data
- Safe data

### Summary

### BG BASE

- Consistent & standardized system
- Turn-key system

# Details

# IrisBG

- Data kept at high level of quality
- Share data

#### BRAHMS

The developers are working to expand horizons and optimise the use of garden data. This is done by gradually integrating different types of data and images scattered across different file systems into a central store. BRAHMS is effective at improving record keeping, thus management costs, and ensuring data are safe. BRAHMS gives the user flexibility in the ability to create/design websites and post/update data and images online directly from BRAHMS. This allows for easy data share with other systems, such as Symbiota. BRAHMS provides support for users.

#### **BG BASE**

This software leads to consistent and standardized documentation practices. It is a turn-key system (staff no longer have to program their own databases) and it can help facilitate accreditation and lead to additional institution funding

#### **IrisBG**

IrisBG is a perfect tool for plant collection holders who want to keep their plant collection data at a high level of quality. With this system, information is easily shared and at a predictable cost.